Annual Drinking Water Quality Report

2021 (2020 Data)

Lacey Municipal Utilities Authority
PWSID# NJ1512001

People and Resources Working Together

Because water quality is your business the Lacey Municipal Utilities Authority is pleased to present our Annual Water Quality Report. This report is designed to keep you informed about the quality of your drinking water and the services we deliver to you every day. We are committed to providing you with a safe and dependable supply of drinking water and water pollution control services. We want you to understand the efforts we make to continually improve the water treatment process and protect your natural water resources.

Lacey Municipal Utilities Authority's goal is to provide you with water that meets or surpasses all the standards for safe drinking water.

These health and safety standards are set by the United States Environmental Protection Agency (EPA) and the New Jersey Department of Environmental Protection (NJDEP). We're at work 24 hours a day, 365 days a year to provide you and your family with top quality water. We regularly test water samples to be sure that your water meets the safety standards. All the test results are on file with the NJDEP, the agency that monitors and regulates drinking water quality in our state. Both the EPA and the NJDEP require water suppliers to send a Consumer Confidence Report (CCR) to customers on an annual basis.

This CCR provides important information about your drinking water. It shows how your drinking water measured up to government standards during 2020. Please read it carefully and feel free to call Lacey Municipal Utilities Authority or the EPA Safe Drinking Water Hotline at 800-426-4791 with any questions. If you have specific questions about water as it relates to your personal health we suggest that you contact your health care provider.

YOUR WATER SUPPLY

Lacey Township's sole source of drinking water supply is groundwater (well water). Groundwater is formed when rain filters through the soil and creates a vast underground reservoir (aquifer). Lacey Township's water is drawn from the Kirkwood-Cohansey, Atlantic City 800-Foot Sand and Potomac-Raritan-Magothy Aquifers by seven supply wells, processed at three treatment plants and delivered to our customers through the Lacey MUA's 144 miles of distribution system. Some of the approximately 2 million gallons of water produced each day is temporarily stored in water towers. The water held in these storage towers helps maintain pressure and serves as a back-up supply during periods of heavy demand and emergencies.

Lead Notice

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. Lacey MUA 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 is available from the Safe Drinking Water Hotline or at

http://www.epa.gov/safewater/lead.

Contact Information

Lacey Municipal Utilities Authority
34 R. Kennedy Blvd., P.O. Box 205
Forked River, New Jersey 08731

Monthly meetings are held on the first Wednesday of each month at 6:30 PM

Waived Requirements

The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for asbestos, volatile organic chemicals, and synthetic organic chemicals. Our system has been granted a waiver for asbestos and synthetic organic chemicals.

How do drinking water sources become polluted?

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. Food and Drug Administration regulations establish limits for contaminants in bottled water which 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 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 **EPA's Safe Drinking Water Hotline (800-426-4791)**.

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 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 byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

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

Source Water Assessments

The NJDEP has completed and issued the Source Water Assessment Report and Summary for public water systems, which are available at **http://www.state.nj.us/dep/swap** or by contacting the NJDEP's Bureau of Safe Drinking Water at **609-292-5550**.

If a system is rated highly susceptible for a contaminant category, it does not mean a customer is or will be consuming contaminated drinking water. The rating reflects the potential for contamination of source water, not the existence of contamination. Public water systems are required to monitor for regulated contaminants and to install treatment if any contaminants are detected at frequencies and concentrations above allowable levels. As a result of the assessments, NJDEP may customize or change existing monitoring schedules based on the susceptibility ratings.

If you have questions regarding the source water assessment report or summary please contact the Bureau of Safe Drinking Water at **watersupply@dep.state.nj.us** or **609-292-5550**.

Pathogens: Disease-causing organisms such as bacteria and viruses. Common sources are animal and human fecal wastes.

Nutrients: Compounds, minerals and elements (both naturally occurring and man-made) that aid plant growth. Examples include nitrogen and phosphorus.

Pesticides: Man-made chemicals used to control pests, weeds and fungus. Common sources include land application and manufacturing of pesticides. Examples include herbicides such as atrazine, and insecticides such as chlorodane.

Radionuclides: Radioactive substances that are both naturally occurring and man-made. Examples include radium and uranium.

Volatile Organic Compounds: Man-made chemicals used as solvents, degreasers, and gasoline components. Examples include benzene, methyl tertiary butyl ether (MTBE), and vinyl chloride.

Inorganics: Mineral-based compounds that are both naturally occur-ring and man-made. Examples include arsenic, asbestos, copper, lead, and nitrate.

Radon: Colorless, odorless, cancer-causing gas that occurs naturally in the environment. For more information go to http://www.nj.gov/dep/rpp/radon/index.htm or call 800-648-0394.

Disinfection Byproduct Precursors: A common source is naturally occurring organic matter in surface water. Disinfection byproducts are formed when the disinfectants used to kill pathogens (usually chlorine) react with dissolved organic material (leaves, etc.) in surface water.

	Pathogens			Nutrients			Pesticides			Volatile Organic Compounds			Inorganics			Radio-nuclides			Radon			Disinfection Byproduct Precursors		
Sources	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L
Wells – 7			7	5		2			7	5		2	7			5	2			2	5		7	

People with Special Health Concerns

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemo-therapy, 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).

2020 Water Quality Results

Radioactive Contaminants	MCLG	MCL	Level Detected	Violation	Likely Source
Combined Radium-228 & 226 Test Results Year 2017	0 pCi/L	5 pCi/L	Range: ND-1.32 RAA: 0.66	N	Erosion of natural deposits
Inorganic Chemicals	**MCLG**	**MCL**	**Level Detected**	**Violation**	**Likely Source**
Barium Test Results Year 2020	2 ppm	2 ppm	Range: 0.01—0.05 Highest: 0.05	N	Discharge of drilling wastes, metal refineries, and erosion of natural deposits
Beryllium Test Results Year 2020	4 ppb	4 ppb	Range: ND Highest: ND	N	Discharge from metal refineries and coal-burning factories or electrical, aerospace, and defense industries
Cadmium Test Results Year 2020	5 ppb	5 ppb	Range: ND Highest: ND	N	Corrosion of galvanized pipes; erosion of natural deposits
Nickel Test Results Year 2020	n/a	none	Range: ND—0.0012 Highest: 0.0012	N	Runoff from fertilizer, leaching from septic tanks, sewage, and erosion of natural deposits
Nitrate (as Nitrogen) Test Results Year 2020	10 ppm	10 ppm	Range: ND Highest: ND	N	Corrosion of household plumbing systems and erosion of natural deposits
Selenium Test Results Year 2020	50 ppb	50 ppb	Range: ND Highest: ND	N	Discharge from petroleum and metal refineries, erosion of natural deposits, discharge from mines
Copper & Lead	**MCLG**	**AL**	**Level Detected**	**Violation**	**Likely Source**
Copper *Test Results 2018*	*1.3 ppm*	*1.3 ppm*	*90th Percentile: 0.094* *Samples > AL: 0 of 40*	*N*	*Corrosion of household plumbing systems and erosion of natural deposits*
Lead *Test Results 2018*	*0 ppb*	*15 ppb*	*90th Percentile: 0.0009* *Samples > AL: 0 of 40*	***N***	*Corrosion of household plumbing systems and erosion of natural deposits*
Regulated Disinfectants		**MRDL**	**Level Detected**	**Violation**	**Likely Source**
Chlorine *Test Results Year 2020*		*4.0 ppm*	*Range: 0.49—1.41* *RAA: 1.12*	*N*	*Treatment process*
Volatile Organic Compounds / Disinfection By-products	**MCLG**	**MCL**	**Level Detected**	**Violation**	**Likely Source**
HAA5 Haloacetic Acids *Test Results Year 2020*	*n/a*	*60 ppb*	*Range: 4.64-21.8* *Highest: 13.3 LRAA*	*N*	*Byproduct of drinking water disinfection*
TTHM Total Trihalomethanes *Test Results Year 2020*	*n/a*	*80 ppb*	*Range: 0—14.69* *Highest: 5.77 LRAA*	*N*	*Byproduct of drinking water disinfection*
Individual Contaminants	**MCLG**	**MCL**	**Level Detected**	**Violation**	**Likely Source**
Ethylene Dibromide Test Results Year 2020	0 ppb	0.05 ppb	Range: ND Highest: ND	N	Discharge from industrial processes and petroleum production

The State allows monitoring for some contaminants every three years, since the concentrations do not change frequently. The latest sample dates are shown for these contaminants.

Secondary Contaminants	RUL	Level Found	Violation	Likely Source
Iron *Test Results Year 2020*	*0.3 ppm*	*Range: 0.06-0.09* *Highest: 0.09*	*N*	*Erosion of natural deposits*
Manganese *Test Results Year 2020*	*0.05 ppm*	*Range: 0.004—0.006* *Highest: 0.006*	*N*	*Erosion of natural deposits*
Chloride *Test Results Year 2020*	*250 ppm*	*Range: 1.29-10.5* *Highest: 10.5*	*N*	*Erosion of natural deposits*
pH *Test Results Year 2020*	*6.5-8.5 Units*	*Range: 6.7—8.2* *Highest: 8.2*	*N*	*Naturally present in the environment*
Sulfate *Test Results Year 2020*	*250 ppm*	*Range: 4.67—10.2* *Highest: 10.2*	*N*	*Erosion from natural deposits; Industrial wastes*
Hardness, Carbonate *Test Results Year 2020*	*250 ppm*	*Range: 19.9* *Highest: 48.2*	*N*	*Naturally present in the environment*

Secondary Contaminants	RUL	Level Found	Violation	Likely Source
Total Dissolved Solids (TDS) Test Results Year 2020	500 ppm	Range: 107—122 Highest: 122	N	Erosion from natural deposits
Aluminum Test Year 2020	0.2 ppm	Range: 0.10—0.12 Highest: 0.12	N	Erosion of natural deposits
Color Test Results Year 2020	10 CU	Range: ND—5 Highest: 5	N	Naturally present in the environment

[+]The recommended upper limit for manganese is based on staining of laundry. manganese is an essential nutrient, and toxicity is not expected from high levels which would not be encountered in drinking water.

Microbiologicals-Revised Total Coliform Rule (RTCR)	Number Required	Number Completed	Corrective Actions Required	Corrective Actions Completed
Level 1 Assessment - Total Coliform	0	0	0	0

Total coliform bacteria are generally not harmful themselves. Coliforms are bacteria which are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present. 0 of 361 samples tested positive for coliform bacteria.

Unregulated Substances for which the EPA requires monitoring	Reference Concentration	Level Detected	Violation	
Manganese Test Results Year 2018	300 ppb	Range: 33.4—48.7 ppb Highest : 48.7 ppb	N	
HAA5 Haloaecetic Acids Test Results Year 2018	60 ppb	Range: ND—0.8 ppb Highest : 0.8 ppb	N	
HAA6Br Test Results Year 2018	N/A	Range: ND-1.1 ppb Average: 1.1 ppb	N	
HAA9 Test Results Year 2018	N/A	Range: ND—1.6 ppb Highest: 1.6 ppb	N	
Bromide Test Results Year 2018	N/A	Range: 23—37 ppb Average: 37 ppb	N	

Footnotes

The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

Definitions

ppm **Parts Per Million**: equivalent of one second in 12 days

ppb **Parts Per Billion**: equivalent of one second in 32 years

ppt **Parts Per Trillion:** equivalent of one second in 32,000 years

NA **Not Applicable**

RUL **Recommended Upper Limit**

ND **Not Detected**

RAA **Running Annual Average**

LRAA **Locational Running Annual Average**

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

MCL **Maximum Contaminant Level**: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary for control of microbial contaminants.

MCLG **Maximum Contaminant 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 disinfectant to control microbial contamination.

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

CU **Color Unit**

pCi/L **Picocuries Per Liter**: equivalent of one second in 32 million years

MRDL **Maximum Residual Disinfection Level** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disnfectant is necessary for control of microbial contaminants.

MRDLG **Maximum Residual Disinfection Level Goal** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefit of the use of disinfectants to control microbial contamination.

Primary Standards: Federal drinking water regulations for substances that are health-related. Water suppliers must meet all primary drinking water standards.

Secondary Standards: Federal drinking water measurements for substances that do not have an impact on health. These reflect aesthetic qualities such as taste, odor and appearance. Secondary standards are recommendations, not mandates.

Violations

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. Lacey MUA received a violation for TTHM's for the monitoring period April—June 2020. The samples were taken at the correct time but the results were submitted late. The water quality is known for this period and no MCL's were exceeded. There is no further action required for this violation.

Clean Water Doesn't Just Happen

The Lacey MUA takes great pride in its staff of trained professionals that continuously work to ensure that a safe supply of drinking water is available whenever you need it. The quality of your water supply depends on each of us making water-wise choices. Don't wait until it is too late to consider how small changes in your everyday water use can help preserve this resource.

Every day, as individuals, we make decisions that affect the future of our drinking water, whether it's simply turning off the tap while brushing our teeth, disposing of household toxins properly, or supporting land use practices that protect our natural water resources.

Each water-wise decision we make adds up to cleaner, safer drinking water. Single actions multiply into municipal, county and state-wide results when individuals, organizations and businesses work together to clean up our waterways, protect watersheds and curb pollution. We can no longer afford to take our water for granted. Be water-wise, don't waste this life-supporting resource.

If you have any questions about this report or would like to learn more about your water supply and the services the Lacey MUA provides, please contact: **Edward Woolf, Executive Director, at 609-693-8188**.

Water Conservation Tips

- Check your toilets for leaks. Put a few drops of food coloring in your toilet tank. Do not flush the toilet. If color begins to appear in the bowl, you have a leak that should be repaired immediately. Toilet leaks can cause elevated water usage, which will increase both your water and sewer bill.
- Take shorter showers. Long showers can waste five to ten gallons per minute. Install water–saving shower heads to reduce water consumption while showering.
- Don't allow water to run while brushing your teeth or shaving. Wet your toothbrush and fill a cup to rinse. Fill the sink a few inches to rinse your razor instead of letting the faucet run.
- Run full loads in your dishwasher and clothes washer. Partial loads waste water.
- Check faucets and pipes for leaks. Even small leaks over a long period of time can add up to large amounts of water wasted.
- Water your lawn in the early morning to prevent evaporation. Water your lawn long enough to soak down into the roots but less frequently. Watering your lawn frequently without soaking the roots will encourage a shallow root system. Watering your lawn in the evening may cause fungus growth.
- Plant drought resistant trees and plants. There are many beautiful trees and plants that require far less water than other species. Put a layer of mulch around your plants and trees. Mulch will slow evaporation of moisture and discourage weed growth.
- Don't allow your garden hose to run while washing your car. Use the hose only to wet and rinse the car.
- Use a broom to clean driveways and sidewalks. Using a hose to wash driveways and sidewalks will result in wasted water.
- Safe Drinking Water is a valuable resource. Encourage your family and friends to conserve. You may see significant savings in your water and sewer bills as a result of water conservation.

Protecting Our Water Supply

Pollution on streets, parking lots and lawns is washed by rain into storm drains, then directly to our drinking water supplies and the lakes and oceans our children play in. Fertilizer, oil, pesticides, detergents, pet waste, grass clippings and other pollutants end up in our water. Sharing the responsibility and making small, easy changes in our lives, we can keep pollutants out of storm water.

As a resident or business owner in Lacey Township, it is important to know the following things you can do every day to protect our water:

- Limit your use of fertilizers and pesticides. If you use fertilizers and pesticides, follow the instructions on the label on how to correctly apply them. Never apply fertilizers if heavy rains are predicted. Do not over apply fertilizers and pesticides.
- Properly use and dispose of hazardous products. Hazardous products such as household cleaning products, used motor oil, lawn and garden products, antifreeze and paints must be used and disposed of properly. Never dispose of hazardous products on the ground or in storm drains. Contact the Township of Lacey on how and where you can properly dispose of hazardous products.
- Clean up after your pet. Use a plastic bag or pooper-scooper to clean up after your pet. Dispose of wrapped pet waste in the garbage. Never dispose of pet waste in storm drains.
- Dispose of yard waste properly. Keep leaves and grass clippings out of storm drains. Take advantage of Lacey Township's services for disposal of leaves and other yard wastes. Use a mulching mower to recycle grass clippings into your lawn.

Call Lacey MUA First

If your main sewer line becomes blocked, call us before hiring a contractor. All first floor drains will be slow or blocked if your main sewer line is blocked. If only one drain is blocked and others are not, this would indicate an internal plumbing problem. The Authority is only responsible for the main sewer line from the curb to the main line in the street. The Authority will not be responsible for any expenses incurred by you to an outside company unless we are first given notice of a service problem and the opportunity to resolve it. Lacey MUA has service personnel on call 24 hours per day, 7 days per week. Please contact the Lacey Township Police Department at 693-6636 to request service for any water or sewer emergency after normal business hours.