

# Lower Bucks County Joint Municipal Authority

PWSID # 1090026

## 2023 Water Quality Report

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

Lower Bucks County Joint Municipal Authority (LBCJMA) is pleased to present to you its 2023 Water Quality Report. This report is a snapshot of last year's water quality report. Included are details about where your water comes from, what it contains, and how it compares to EPA & State standards. We are committed to providing you with information because informed customers are our best allies. If you need more information or have questions about the information in this report, please contact us at 215-547-9581.

### **SOURCE(S) OF WATER:**

LBCJMA draws surface water from the Delaware River and groundwater from five (5) wells. The Delaware River is the primary source of our water. LBCJMA is allocated 15.0 million gallons of water per day by the Delaware River Basin Commission and the Department of Environmental Protection. The wells have a capacity to provide approximately three (3) million gallons of water per day. The average depth of the wells is approximately 45 feet. Raw surface water withdrawn from the river and groundwater withdrawn from the wells are mixed prior to treatment at our Water Treatment Plant. We produce an approximate annual average of 6.37 million gallons per day of high-quality drinking water to our customers daily.

### **SOURCE WATER ASSESSMENT:**

The Pennsylvania Department of Environmental Protection (Pa. DEP) has conducted a source water assessment of the Delaware River. The assessment found that overall, the sources were found to have a moderate risk of significant contamination. A summary report of the assessment is available on the *Source Water Assessment & Protection Web* page at (<http://www.depgreenport.state.pa.us/elibrary/Getfolder?FolderID=4490>). Copies of the complete report are available for review at the Pa. DEP Southeast Regional Office, Records Management Unit at 484-250-5910.

### **LBCJMA WATER SYSTEM:**

LBCJMA owns, operates, and maintains a system whose area is approximately 9.86 square miles serving the Levittown portions of Bristol Township, Falls Township, Middletown Township, and the Borough of Tullytown. The total customer base served in the area is approximately 19,638. Our drinking water supply consists of a raw water intake pump station, well field, Water Treatment Plant, drinking water distribution and water storage throughout the system.

We use a multi-step treatment process at our Water Treatment Plant. The treatment process consists of disinfection, coagulation, flocculation, activated carbon adsorption, sedimentation, and filtration. Under final treatment, fluoride is added to help prevent tooth decay and zinc polyphosphate is added to minimize corrosion activity between the water and piping material.

Finished drinking water is pumped under high pressure into the distribution system. The distribution system consists of approximately 180 miles of cast iron and ductile iron pipe ranging from 6" to 24" in diameter and approximately 1,172 fire hydrants for the purpose of fire protection. Storage throughout the system includes two aboveground water storage tanks, one with a capacity of 4.0 million gallons and one 3.0-million-gallon storage tank and pumping station.

## HEALTH INFORMATION:

To ensure that tap water is safe to drink, EPA and DEP prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. FDA and DEP 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 Environmental Protection Agency's (EPA) Safe Drinking Water Hotline at 1-800-426-4791. The sources of drinking water (both tap 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 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 virus 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 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, stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organics, which are by-products 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.

## DEFINITIONS AND ABBREVIATIONS:

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

**Alkalinity:** A measure of the water's ability to resist changes in pH level and a good indicator of overall water quality. Although there is no health risk from alkalinity, we monitor it to check our treatment process.

**Detected Compounds:** Listed are compounds detected in LBCJMA's drinking water calendar year 2023. All amounts detected are below allowed levels. Not listed are the many other compounds for which LBCJMA tested that were not detected.

**Hardness:** Hardness defines the quantity of minerals such as calcium and magnesium in a gallon of water. These minerals react with soap to form insoluble precipitates and can affect common household chores such as cooking and washing. Hardness also affects other water qualities such as corrosiveness, with soft water being more corrosive.

**Inorganic Compounds:** The mineral-type compounds, such as metals and salts, found in drinking water.

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

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

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risks to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**N/A:** Not applicable

**ND:** Not detected

**NR:** Not regulated

**Nephelometric Turbidity Unit (NTU):** A measure of very small particulate matter in drinking water.

**pCi/L:** A measure of radioactivity

**ppb:** A unit of concentration equal to one part per billion

**ppm:** A unit of concentration equal to one part per million

**SMCL:** Secondary Maximum Contaminant Level

**Sources:** The major sources of the compounds detected in the finished water.

**Turbidity:** A measure of the clarity of water related to its particles content.

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

**Trihalomethanes (THM):** Compounds formed during the chlorination (disinfection) of drinking water.

**Total Haloacetic Acids (HAA):** A group of chemicals called disinfection by-products, which form during chlorination. Similar, but unregulated by-products include: haloaceto-nitrils, haloketones, chloropicrin, chloral hydrate and total organic halides.

**MONITORING YOUR WATER:**

We routinely monitor for contaminants in your drinking water according to federal and state laws. The following table shows the results of our monitoring for the period of January 1 to December 31, 2023.

<i>Chemical Contaminants</i>								
Contaminants	MCL	MCLG	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Source of Contaminants
Barium	2	2	0.016	NA	ppm	2/15/2023	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium	100	100	1.4	NA	ppb	2/15/2023	N	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride	2	2	0.59*	0.19-0.82	ppm	2023	N	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nickel	NR	NR	0.0022	NA	ppm	2/15/2023	N	Erosion of natural deposits
Total Trihalomethanes	80	N/A	37.6*	11.1-81.1	ppb	2023	N	By product of drinking water chlorination
Chloroform	NR	N/A	30.7*	5.7-77.1	ppb	2023	N	By product of drinking water chlorination
Bromodichloromethane	NR	N/A	6.9*	2.7-12.0	ppb	2023	N	By product of drinking water chlorination
Dibromochloromethane	NR	N/A	1.0*	0.0-1.5	ppb	2023	N	By product of drinking water chlorination
Bromoform	NR	N/A	0.0*	0.0-0.5	ppb	2023	N	By product of drinking water chlorination
Haloaceticacids five	60	N/A	37.6*	14.8-69.5	ppb	2023	N	By product of drinking water chlorination
Monochloroacetic Acid	NR	N/A	0.5*	0.0-2.4	ppb	2023	N	By product of drinking water chlorination
Dichloroacetic Acid	NR	N/A	16.3*	0.0-29.3	ppb	2023	N	By product of drinking water chlorination
Trichloroacetic Acid	NR	N/A	20.3*	6.8-42.4	ppb	2023	N	By product of drinking water chlorination
Alkalinity, ppm (as calcium carbonate)	NR	NR	42*	22-66	ppm	2023	N	Erosion of natural deposits

Note: EPA’s MCL for fluoride is 4ppm. However, Pennsylvania has set a lower MCL to better protect human health

<i>Turbidity</i>						
Contaminant	MCL	MCLG	Level Detected	Sample Date	Violation Y/N	Source of Contamination
Turbidity	TT-1 NTU for a single measurement	0	0.07* NTU	2023	N	Erosion of Natural deposit; soil runoff
	TT=at least 95% of monthly samples < 0.3		100%			

<i>Total Organic Carbon (TOC)</i>						
Contaminant	Range of % Removal required	Range of percent removal achieved	Number of quarters out of compliance	Sample Date	Violation Y/N	Source of Contamination
TOC	25-35%	43.59-100.00	0	2023	N	Naturally present in the environment

<i>Entry Point Disinfectant Residual</i>							
Contaminant	Minimum Disinfectant Residual	Lowest Level detected	Range of Detections	Units	Sample Date	Violation Y/N	Source of Contamination
Total Residual Chlorine	0.2	2.2	2.2-4.4	ppm	2023	N	Drinking water chlorination

\* Annual Average

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons undergoing chemotherapy, persons who have undergone 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).

**ADVISORY ON LEAD IN DRINKING WATER:**

Although water in our distribution system does not contain lead, you need to be aware of the possibility that lead materials in your home plumbing could leach into your drinking water. Infants and young children are typically more vulnerable to lead in drinking water than the general population. Infants who drink water containing lead in excess of the action level could experience delays in their physical or mental development. It is possible that lead levels in your home may be higher than levels in other homes in the community as a result of materials used in your home’s plumbing. If you are concerned about elevated levels in your home’s water, you may wish to have your water tested. In the meantime, as a precaution, flush your tap for 30 seconds to 2 minutes before using tap water for drinking purposes. Additional information is available from the Environmental Protection Agency’s Safe Drinking Water Hotline, at 1-800-426-4791.

**FOR MORE INFORMATION:**

Meetings of Lower Bucks County Joint Municipal Authority (LBCJMA) Board of Directors are held on the fourth Thursday of each month and are open to the public. Meetings are held at the Administration office located at 7811 New Falls Road in Levittown and begin at 7:00 PM. Public participation is provided on the agenda at each meeting.

If you need more information regarding the quality or reliability of your drinking water, call us at 215-547-9581. Technical and regulatory information can be obtained from the Bucks County Health Department (215-345-3318).

Learn more about LBCJMA at [www.lbcjma.com](http://www.lbcjma.com).

This 2023 annual Water Quality Report (WQR), also referred to as Consumer Confidence Report (CCR), is available on our website at [www.lbcjma.com/wp-content/uploads/2024/06/WQR.pdf](http://www.lbcjma.com/wp-content/uploads/2024/06/WQR.pdf). A paper copy may be requested by contacting our administration office in writing at our mailing address listed below:  
7811 New Falls Road, Levittown, Pennsylvania 19055

**WATER CONSERVATION IDEAS**

Turn the water off while brushing your teeth.

Use the dishwasher to do the dishes. Using a dishwasher can help reduce the amount of water used.

Repair leaks! One drip every second doesn’t seem like much but can add up to five gallons a day!

Leaks only get worse if they go unrepaired.

Remember when you save water, you save money! Saving water is something anyone can do with minimal effort!

Share water conservation ideas with family, friends, and neighbors - it really is a precious resource!

**AUTHORITY BOARD OF DIRECTORS**

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- Cynthia Murphy.....Assistant Treasurer
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- Vijay S. Rajput, Ph.D.,P.E. .... Managing Director
- Frederick Walcott.... Supt. Water Treatment Plant
- Michael Hoelzle.... Asst. Supt. Water Treatment Plant