ANNUAL WATER QUALITY REPORT

Reporting Year 2021

Presented By

Lafourche Parish Water District No. 1

PWS ID#: 1057001

Quality First

Once again, Lafourche Parish Water District No. 1 is pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2021. As in years past, we are committed to delivering the best-quality drinking water possible. We remain vigilant in meeting the challenges of new regulations, source water protection, and water conservation, while continuing to serve the needs of all our water users. Thank you for allowing us the opportunity to serve you and your family. Please remember we are always available to assist you should you ever have any questions or concerns about your drinking water.

Source Water Assessment

A Source Water Assessment Plan (SWAP) Report is now available at our office. This plan is an assessment of the delineated area around our listed sources through which contaminants, if present, could migrate and reach our source water. It also includes an inventory of potential sources of contamination within the delineated area and a determination of the water supply's susceptibility to contamination by the identified potential sources.

According to the SWAP, our water system had a susceptibility rating of high. It is important to understand that this susceptibility rating does not imply poor water quality, only the system's potential to become contaminated within the assessment area. If you would like to review the SWAP report, please feel free to contact our office during regular office hours at (800) 344-1580.

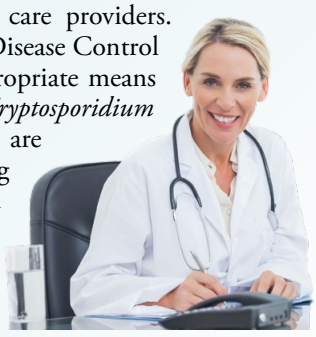
> "When the well is dry, we know the worth of water."
>
> —*Benjamin Franklin*

Where Does My Water Come From?

In 2021, our water department distributed approximately 3.6 billion gallons of clean drinking water to our customers. Our water source is surface water taken from Bayou Lafourche. The district has two water treatment plants. The South Plant, located in Lockport, has been in operation since 1955. It is capable of producing 12 million gallons of drinking water per day and furnishes water primarily to the central and south Lafourche areas. The second plant is the North Plant, located in Thibodaux. It has been in operation since 1989. Its maximum plant production is 6 million gallons per day, and it supplies water to the northern portion of the parish. Both treatment facilities purify your water through disinfection and filtration to remove or reduce harmful contaminants that may come from the source water.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 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 or http://water.epa.gov/drink/hotline.



Public Meetings

We want our valued customers to be informed about their water utility. You are invited to attend regular water district board meetings on the third Thursday of each month, beginning at 6:00 p.m., in the district office, 5753 Highway 308, Lockport, LA 70374.

QUESTIONS? If you have any questions concerning your water utility or this report, please contact Jenny Robichaux by calling (985) 532-6924 or (800) 344-1580 or by writing to this address: P.O. Box 399, Lockport, LA 70374.

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, 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 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.

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 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 that time. 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 two 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.

Test Results

In 2021, our water was monitored for many different kinds of substances on a very strict sampling schedule. The water we deliver must meet specific health standards. The information in the data tables shows only those substances that were DETECTED between January 1 and December 31, 2021. 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.

We are happy to report that your drinking water meets or exceeds all federal and state requirements.

The state recommends monitoring for certain substances less 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.

REGULATED SUBSTANCES

				South Plant		North Plant			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
2,4-D (ppb)	2021	70	70	0.38	ND–0.38	ND	NA	No	Runoff from herbicide used on row crops
Atrazine (ppb)	2021	3	3	0.52	0.071–0.52	0.12	0.094–0.12	No	Runoff from herbicide used on row crops
Beta/Photon Emitters[1] (pCi/L)	2021	50	0	2.60	NA	2.38	NA	No	Decay of natural and human-made deposits
Chloramines[2] (ppm)	2021	[4]	[4]	3.33	0.56–4.90	3.33	1.42–4.40	No	Water additive used to control microbes
Chlorine Dioxide[3] (ppb)	2021	[800]	[800]	500	ND–500	250	ND–250	No	Water additive used to control microbes
Chlorite[4] (ppm)	2021	1	0.8	0.54	0.03–0.62	0.65	0.35–0.68	No	By-product of drinking water disinfection
Fluoride (ppm)	2021	4	4	0.6	NA	0.5	NA	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs]–Stage 2[5] (ppb)	2021	60	NA	35	19–59	35	19–59	No	By-product of drinking water disinfection
Nitrate (ppm)	2021	10	10	0.8	NA	0.8	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Simazine (ppb)	2021	4	4	0.080	ND–0.080	0.079	ND–0.079	No	Herbicide runoff
TTHMs [Total Trihalomethanes]–Stage 2[5] (ppb)	2021	80	NA	23	12–24	23	12–24	No	By-product of drinking water disinfection
Total Organic Carbon[6] (removal ratio)	2021	TT	NA	1.31	0.91–1.99	1.40	0.96–2.10	No	Naturally present in the environment
Turbidity[7] (NTU)	2021	TT	NA	0.14	NA	0.21	NA	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2021	TT = 95% of samples meet the limit	NA	100	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)	2019	1.3	1.3	0.2	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2019	15	0	1	0/30	No	Lead service lines; Corrosion of household plumbing systems, including fittings and fixtures; Erosion of natural deposits

[1] The MCL for beta particles is 4 mrem/year. U.S. EPA considers 50 pCi/L to be the level of concern for beta particles.
[2] The amount detected is the highest annual running average.
[3] The amount detected is the highest level obtained throughout the year.
[4] The amount detected is the highest monthly average.
[5] The amount detected is the highest locational running annual average.
[6] The value reported under Amount Detected for TOC is the lowest ratio between percentage of TOC actually removed to the percentage of TOC required to be removed. A value of greater than 1 indicates that the water system is in compliance with TOC removal requirements. A value of less than 1 indicates a violation of the TOC removal requirements.
[7] Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. A water system is in compliance with the TT when the maximum level is less than 1 NTU and less than or equal to 0.3 NTU 95% of the time.

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 which, if exceeded, triggers treatment or other requirements which 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.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

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.

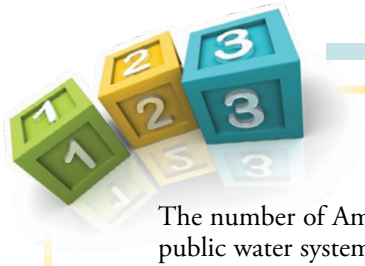
pCi/L (picocuries per liter): A measure of radioactivity.

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).

removal ratio: A ratio between the percentage of a substance actually removed to the percentage of the substance required to be removed.

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



BY THE NUMBERS

The number of Americans who receive water from a public water system. **300 MILLION**

1 MILLION The number of miles of drinking water distribution mains in the U.S.

The number of gallons of water produced daily by public water systems in the U.S. **34 BILLION**

135 BILLION The amount of money spent annually on maintaining the public water infrastructure in the U.S.

The number of active public water systems in the U.S. **151 THOUSAND**

199 THOUSAND The number of highly trained and licensed water professionals serving in the U.S.

The age in years of the world's oldest water, found in a mine at a depth of nearly two miles. **2 BILLION**