

2023

Daphne Utilities Water Quality
**CONSUMER
CONFIDENCE REPORT**

2023 ANNUAL WATER QUALITY DATA | TESTING PERFORMED JANUARY - DECEMBER 2022



**CONSUMER
CONFIDENCE REPORT**

Members of Daphne Utilities
Water Quality Department (left to right)
Bryan Adams, Eric Callaway, Larry English,
Mark Brown and Mark Thomas
PHOTOGRAPHY BY MATTHEW COUGHLIN



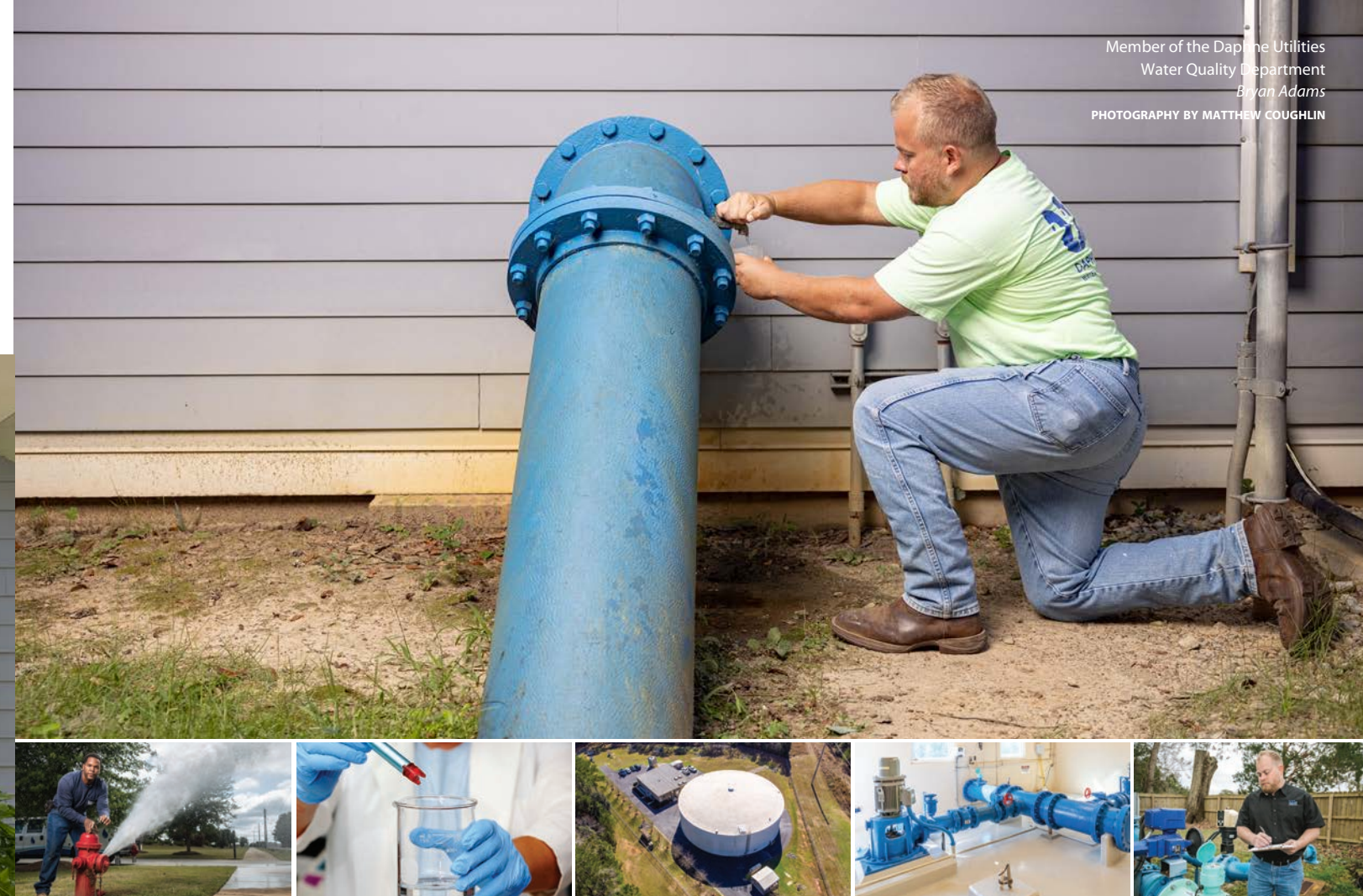
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2023 ANNUAL WATER QUALITY DATA | TESTING PERFORMED JANUARY - DECEMBER 2022

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Member of the Daphne Utilities
Water Quality Department
Bryan Adams
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Welcome!

Welcome to the 2023 Consumer Confidence Report (CCR) for Daphne Utilities. Once again, we are proud to present this annual report of our water quality to the residents of our Eastern Shore community.

For more than 60 years, Daphne Utilities has been serving this Daphne Community and surrounding areas on the Eastern Shore. We are committed to delivering an exceptional level of service while providing you with reliable, safe, and high-quality utility services. We are able to meet your needs and exceed your expectations only through the remarkable efforts of a dedicated team of employees and our passionate pursuit of excellence.

This CCR explains where your drinking water comes from, how it is treated and tested to ensure it is safe for you and your family, and the ongoing steps we take to protect our valuable natural resources. It provides information on water quality and the results of the hundreds of tests we perform every day of the year from sampling locations throughout our service area. These daily tests ensure your water is safe, clean, and healthy.

Where Does Our Water Come From?

The source of our drinking water is a natural underground reservoir called the Miocene Aquifer that encompasses an area of about 6,500 square miles in southwest Alabama and western Florida. This aquifer is recharged primarily through precipitation and discharge is primarily to streams, bays, sounds, and wells. At Daphne Utilities, we pump water from this aquifer through a series of twelve wells ranging in depth from 250-450 feet. We have the capacity to pump nearly 9 million gallons per day with an average daily withdrawal of approximately 3 million gallons of safe and clean drinking water.



Monitoring Schedule

We routinely monitor for contaminants in your drinking water according to Federal and State laws, using EPA approved methods and a State certified laboratory. The Alabama Department of Environmental Management (ADEM) allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. This report contains results from the most recent monitoring which was performed in accordance with the regulatory schedule. All test results were well within state and federal standards.

Based on a study conducted by ADEM with the approval of the EPA a statewide waiver for the monitoring of asbestos and dioxin was issued. Thus, monitoring for these contaminants was not required.

MONITORING SCHEDULE	
Inorganic Contaminants	2022
Lead/Copper	2020
Microbiological Contaminants	current
Nitrates	2022
Radiological Contaminants	2022
Synthetic Organic Contaminants (includes pesticides and herbicides)	2022
Volatile Organic Contaminants	2022
Disinfection By-products	2022
Unregulated Contaminant Monitoring Rule 4 (UCMR4) contaminants	2020
PFAS Contaminants	2022



**YOU HAVE
A VOICE.**

Our board of directors meets once a month at Daphne City Hall. We welcome you to join in!

Water Treatment Process

In our water treatment process, raw water is pumped from underground aquifers into an aeration chamber. Aeration the raw water adds Oxygen to it and helps eliminate certain naturally-occurring contaminants, such as Iron. After aeration, Fluoride is added to promote good dental health, Lime is added to adjust the pH of the water to an optimum level and a Disinfectant is added to keep the water safe in the water lines all the way to the customer's home. The water and additives are mixed thoroughly inside a Clearwell, a large tank that allows mixing to be completed before entering the distribution system.

Once the water meets or exceeds all of the EPA and Water Quality standards at the Water Treatment Plants, High Service Pumps are used to move the water into the distribution system where it travels through various piping to reach the customers home. Any excess water made and unused during this process is then stored in various water storage containers like Elevated Water Towers or Ground Storage tanks.



Our meetings are held on the last Wednesday of every month at 5:00 pm at 1705 Main Street, Daphne, AL 36526. You can also stop by our main office at 900 Daphne Avenue or call 251-626-2628.

www.daphneutilities.com
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GENERAL INFORMATION

All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. MCL's, defined in a **LIST OF DEFINITIONS** in this report, are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

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 radioactive material, and it 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 run-off, 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, storm water run-off, 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.

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 (FDA) regulations establish limits for contaminants in bottled water.

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. People at risk should seek advice about drinking water from their health care providers.

More information about contaminants to drinking water and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (1-800-426-4791).

INFORMATION ABOUT LEAD: Elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. However, lead is rarely found in source water. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Your water system 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.**

Most of the lead in household water usually comes from the plumbing in your house, not from the local water supply, and hot water is more likely to cause lead to leach from plumbing materials. 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 www.epa.gov/safewater

QUICK TIP FOR POOL OWNERS: Use a Pool Cover. Evaporation will be reduced by 50%!

PFAS Contaminants

Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals that were used in the manufacture of nonstick cookware, stain-resistant carpet and textiles, firefighting foams, food wrappers, and other industrial and consumer applications.

The U.S. Environmental Protection Agency (EPA) has not established primary drinking water MCLs for PFAS substances. Below is a list of PFAS contaminants for which our system monitored in 2022 and the results of that monitoring. For more information on PFA's contaminants, please consult www.epa.gov/pfas.

TABLE OF DETECTED DRINKING WATER CONTAMINANTS			
CONTAMINANTS	VIOLATION Y/N	LEVEL DETECTED	
		LOW	HIGH
11CI-PF3OUdS (11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid)	ND		
9CI-PF3ONS (9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid)	ND		
ADONA (4,8-dioxa-3H-perfluorononanoic acid)	ND		
HFPO-DA (Hexafluoropropylene oxide dimer acidA)	ND		
NEtFOSAA (N-ethylperfluorooctanesulfonamidoacetic acid)	ND		
NMeFOSAA (N-methylperfluorooctanesulfonamidoacetic acid)	ND		
Perfluorobutanesulfonic acid	ND		
TTMH [Total trihalomethanes]	ND		
Perfluorodecanoic acid	ND		
Perfluorohexanoic acid	ND-0.0029		
Perfluorodecanoic acid	ND		
Perfluoroheptanoic acid	ND-0.0020		
Perfluorohexanesulfonic acid	ND		
Perfluorononanoic acid	ND		
Perfluorooctanesulfonic acid	ND		
Perfluorooctanoic acid	ND-0.0023		
Perfluorotetradecanoic acid	ND		
Perfluorotridecanoic acid	ND		
Perfluoroundecanoic acid	ND		
Total PFAS	ND-0.0052		

Source Water Assessment

In compliance with the Alabama Department of Environmental Management (ADEM), **Daphne Utilities** has developed a Source Water Assessment plan that will assist in protecting our water sources. This plan provides additional information such as potential sources of contamination. It includes a susceptibility analysis, which classifies potential contaminants as high, moderate, or non-susceptible to contaminating the water source. The assessment was performed, public notification was completed, and the plan was approved by ADEM. A copy of the report is available in our office for review during normal business hours.

Please help us make this effort worthwhile by protecting our source water. Carefully follow instructions on pesticides and herbicides you use for your lawn and garden, and properly dispose of household chemicals, paints and waste oil.



Table of Detected Contaminants

This 2023 Consumer Confidence Report contains results from the most recent monitoring (testing performed January - December 2022) which was performed in accordance with the regulatory schedule. We have learned through our monitoring and testing that some constituents have been detected.

We are pleased to report that our drinking water meets or exceeds all federal and state requirements!

TABLE OF DETECTED DRINKING WATER CONTAMINANTS							
CONTAMINANTS	VIOLATION Y/N	LEVEL DETECTED		UNIT MSMT	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
		LOW	HIGH				
Alpha emitters	NO (Avg. 2.25)	0.08	2.69	PCI/l	0	15	Erosion of natural deposits
Combined radium 226 & 228	NO (Avg. 2.46)	ND	3.06	PCI/l	0	5	Erosion of natural deposits
Barium	NO	0.02-0.03		ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper (consumer tap)	NO	0.360*		ppm	1.3	AL = 1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood
Fluoride	NO	0.09-0.75		ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer
Lead (consumer tap)	NO	0.002*		ppb	0	AL = 15	Corrosion of household plumbing systems; erosion of natural deposits
Nitrate (as Nitrogen)	NO	ND-2.6**		ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
TTMH [Total trihalomethanes]	NO	ND	4.00	ppb	0	80	By-product of drinking water chlorination
HAA5 [Haloacetic Acids]	NO	ND	0.55	ppb	0	60	By-product of drinking water chlorination
SECONDARY CONTAMINANTS	VIOLATION Y/N	LEVEL DETECTED		UNIT MSMT	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
Aluminum	NO	ND-0.05		ppm	NA	0.2	Erosion of natural deposits or as a result of treatment with water additives.
Chloride	NO	5.3-8.8		ppm	none	250	Naturally occurring in the environment or as a result of agricultural runoff
Hardness	NO	10.9-53.5		ppm	none	none	Naturally occurring in the environment or as a result of treatment with water additives
Iron	NO	ND-0.59		ppm	none	0.30	Naturally occurring in the environment; erosion of natural deposits; leaching from pipes
Manganese	NO	ND-0.03		ppm	none	0.05	Erosion of natural deposits; leaching from pipes
pH	NO	6.3-7.4		S.U.	none	none	Naturally occurring in the environment or as a result of treatment with water additives
Sodium	NO	2.8-6.9		ppm	none	none	Naturally occurring in the environment
Sulfate	NO	ND-84.0		ppm	none	250	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff
Total Dissolved Solids	NO	ND-0.27		ppm	none	500	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff
Zinc	NO	ND-0.27		ppm	NA	5	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills

* Figure shown is 90th percentile and number of sites above the Action Level (AL) = 0

** A delay in submitting tests results by the contracted testing laboratory resulted in a reporting non-compliance in NO3. Testing was conducted on time and is within acceptable levels.

CONTAMINANTS	UNIT MSMT.	LEVEL DETECTED	CONTAMINANTS	UNIT MSMT.	LEVEL DETECTED	CONTAMINANTS	UNIT MSMT.	LEVEL DETECTED
Germanium	ppb	ND	Profenofos	ppb	ND	Butylated hydroxyanisole	ppb	ND
Manganese	ppb	1.70-107	Tebuconazole	ppb	ND	O-toluidine	ppb	ND
Alpha-hexachlorocyclohexane	ppb	ND	Total permethrin (cis- & trans-)	ppb	ND	Quinoline	ppb	ND
Chlorpyrifos	ppb	ND	Tribufos	ppb	ND	Total organic carbon (TOC)	ppb	ND
Dimethipin	ppb	ND	1-butanol	ppb	ND	Bromide	ppb	ND
Ethoprop	ppb	ND	2-methoxyethanol	ppb	ND	HAA9	ppb	ND
Oxyfluorfen	ppb	ND	2-propen-1-ol	ppb	ND	HAA6Br / HAA5	ppb	ND

Standard List of Drinking Water Contaminants

The following is a list of Primary Drinking Water Contaminants, Secondary Contaminants, and Unregulated Contaminants for which our water system routinely monitors. These contaminants were not detected in your drinking water unless they are listed in the Table of Detected Drinking Water Contaminants.

CONTAMINANT	MCL	UNIT OF MSMT
BACTERIOLOGICAL CONTAMINANTS		
Total Coliform Bacteria	<5%	present/absent
Fecal Coliform and E. coli	0	present/absent
Turbidity	TT	NTU
Cryptosporidium	TT	Calculated organisms/liter
RADIOLOGICAL CONTAMINANTS		
Beta/photons emitters	4	mrem/yr
Alpha emitters	15	pCi/l
Combined radium	5	pCi/l
Uranium	30	pCi/l
INORGANIC CHEMICALS		
Antimony	6	ppb
Arsenic	10	ppb
Asbestos	7	MFL
Barium	2	ppm
Beryllium	4	ppb
Cadmium	5	ppb
Chromium	100	ppb
Copper	AL=1.3	ppm
Cyanide	200	ppb
Fluoride	4	ppm
Lead	AL=15	ppb
Mercury	2	ppb
Nitrate	10	ppm
Nitrite	1	ppm
Selenium	.05	ppm
Thallium	.002	ppm
ORGANIC CONTAMINANTS		
2,4-D	70	ppb
Acrylamide	TT	TT
Alachlor	2	ppb
Benzene	5	ppb
Benzo(a)pyrene [PAHs]	200	ppt
Carbofuran	40	ppb
Carbon tetrachloride	5	ppb
Chlordane	2	ppb
Chlorobenzene	100	ppb
Dalapon	200	ppb
Dibromochloropropane	200	ppt
1,2-Dichlorobenzene	1000	ppb
1,4-Dichlorobenzene (para)	75	ppb
o-Dichlorobenzene	600	ppb
1,2-Dichloroethane	5	ppb
1,1-Dichloroethylene	7	ppb

CONTAMINANT	MCL	UNIT OF MSMT
cis-1,2-Dichloroethylene	70	ppb
ORGANIC CONTAMINANTS (CONT.)		
trans-1,2-Dichloroethylene	100	ppb
Dichloromethane	5	ppb
1,2-Dichloropropane	5	ppb
Di (2-ethylhexyl)adipate	400	ppb
Di (2-ethylhexyl)phthalate	6	ppb
Dinoseb	7	ppb
Dioxin [2,3,7,8-TCDD]	30	ppq
Diquat	20	ppb
Endothall	100	ppb
Endrin	2	ppb
Epichlorohydrin	TT	TT
Ethylbenzene	700	ppb
Ethylene dibromide	50	ppt
Glyphosate	700	ppb
Heptachlor	400	ppt
Heptachlor epoxide	200	ppt
Hexachlorobenzene	1	ppb
Hexachlorocyclopentadiene	50	ppb
Lindane	200	ppt
Methoxychlor	40	ppb
Oxamyl [Vydate]	200	ppb
Polychlorinated biphenyls	0.5	ppb
Pentachlorophenol	1	ppb
Picloram	500	ppb
Simazine	4	ppb
Styrene	100	ppb
Tetrachloroethylene	5	ppb
Toluene	1	ppm
Toxaphene	3	ppb
2,4,5-TP(Silvex)	50	ppb
1,2,4-Trichlorobenzene	.07	ppm
1,1,1-Trichloroethane	200	ppb
1,1,2-Trichloroethane	5	ppb
Trichloroethylene	5	ppb
Vinyl Chloride	2	ppb
Xylenes	10	ppm
DISINFECTANTS & DISINFECTION BYPRODUCTS		
Chlorine	4	ppm
Chlorine Dioxide	800	ppb
Chloramines	4	ppm
Bromate	10	ppb
Chlorite	1	ppm
HAA5 (Total haloacetic acids)	60	ppm
TTMH (Total trihalomethanes)	80	ppm

❄ QUICK TIP: Only use water from the COLD-water tap for drinking and cooking. Never use warm or hot tap water for making baby formula.

Most of the lead in household water usually comes from the plumbing in your house, not from the local water supply, and hot water is more likely to cause lead to leach from plumbing materials. 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 www.epa.gov/safewater

LIST OF DEFINITIONS

- Action Level (AL):** The concentration of a contaminant that triggers treatment or other requirements which a water system must follow.
- Coliform Absent (ca):** Laboratory analysis indicates that the contaminant is not present.
- Disinfection byproducts (DBPs):** Formed when disinfectants used in water treatment plants react with bromide and/or natural organic matter (i.e., decaying vegetation) present in the source water. Disinfection byproducts for which regulations have been established include trihalomethanes (THM), haloacetic acids (HAAS), bromate, and chlorite.
- Distribution System Evaluation (IDSE):** A 4 quarter study conducted by water systems to identify distribution system locations with high concentrations of trihalomethanes (THMs) and haloacetic acids (HAAS).
- Locational Running Annual Average (LRAA):** Yearly average of all the DBP results at each specific sampling site in the distribution system. The highest distribution site LRAA is reported in the Table of Detected Contaminants.
- 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 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 (MRDL):** The highest level of disinfectant allowed in drinking water.
- Micrograms per liter (ug/L):** Equivalent to parts per billion (ppb) since one liter of water is equal in weight to one billion micrograms.
- Milligrams per liter (mg/L):** Equivalent to parts per million.
- Millirems per year (mrem/yr):** Measure of radiation absorbed by the body.
- Nephelometric Turbidity Unit (NTU):** A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- Non-Detects (ND):** Laboratory analysis indicates that the constituent is not present above detection limits of lab equipment.
- Not Reported (NR):** Laboratory analysis, usually Secondary Contaminants, not reported by water system. EPA recommends secondary standards to water systems but does not require systems to comply.
- Parts per billion (PPB):** micrograms per liter (ug/l).
- Parts per million (PPM):** milligrams per liter (mg/l).
- Parts per quadrillion (PPQ):** picograms per liter.
- Parts per trillion (PPT):** nanograms per liter.
- Picocuries per liter (pCi/L):** a measure of radioactivity.
- RAA:** Running annual average
- Standard Units (S.U.):** pH of water measures the water's balances of acids and bases and is affected by temperature and carbon dioxide gas. Water with less than 6.5 could be acidic, soft, and corrosive. A pH greater than 8.5 could indicate that the water is hard.
- Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.
- Variances & Exemptions (V&E):** State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Monitoring Non-Compliance:

Daphne utilities is required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether your drinking water meets health standards.

Due to an administrative oversight by our contracted testing laboratory, Daphne Utilities received a monitoring non-compliance notice. Our contracted testing laboratory failed to submit a second sample from one of our testing sites within the required timeframe resulting in a non-compliance.

During the January 2020 – December 2022 monitoring period, we did not monitor for synthetic organic chemicals (soc), and therefore cannot be sure of the quality of your drinking water during that time. Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

Upon learning of the Non Compliance the testing laboratory completed the second required sample and submitted those results. **All tests' results were in compliance with acceptable standards for water quality. This non-compliance derives from not completing requirements in accordance with required timelines by ADEM.**

Daphne Utilities is working with the contracted lab to ensure they take measures to prevent future instances.

Should you have any questions concerning this non-compliance or monitoring requirements, please Contact: Mark Thomas, Water Quality Supervisor, Daphne Utilities, 900 Daphne Avenue, Daphne, AL 36256 ph.: 251-626-2628.

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