

# Abbeville Annual Water Quality Report

## City of Abbeville Water and Sewer Board

The City of Abbeville is proud to report to its residents that the drinking water meets and exceeds federal guidelines. This water quality report covers the period January 1, 2023 to December 31, 2023, and is intended to provide everyone who receives water with a detailed explanation of the water quality.

The number one goal of the Abbeville Water and Sewer Board is to provide you with a safe and dependable supply of drinking water. We are constantly working hard to refine and improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. This report will show you how that hard work has paid off for our residents.

### Directors

Jim Giganti, <i>Chairman</i>	Jimmy D Money	Lawrence Rogers
Eddie Dodd	Melissa Wilson, <i>Secretary/ Treasurer</i>	Vince Feggins

The City of Abbeville utilizes ground water taken from three (3) wells that tap into the Ripley and Clayton Aquifers. These wells are distributed throughout the City from locations either inside or within close proximity to the city limits. The water is treated with chlorine, fluoride, and for iron removal before it is made available to you, our customers. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

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 U.S. Environmental Protection Agency’s Safe Drinking Water Hotline (1-800-426-4791).

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 radioactive material, and it can pick up substances resulting from the presence of animals or from human activity. For instance, microbial contaminants may come from sewage treatment plants, septic tanks, livestock operations, and wildlife. Pesticides and herbicides come from agricultural runoff and excess residential use. Other contaminants come from urban runoff, petroleum products, mining, and industrial wastewater. Radioactive materials can occur naturally or come from oil and gas production and mining.

In order to ensure that tap water is safe to drink, the 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.

The public is always welcome and invited to attend Water and Sewer Board meetings, which take place at City Hall on East Washington Street. Regular meetings are held on the 4<sup>th</sup> Monday of each month at 5:00 pm. Water Board Members are: Mr. Jimmy Money, Mr. Lawrence Rogers, Mr. Eddie Dodd, Mr. Vince Feggins, and Ms. Melissa Wilson (Secretary/Treasurer). Mr. Jim Giganti serves the Board as Chairman. For more information about your drinking water and for opportunities to get involved, please contact the Superintendent, Tai Hui Flowers at 334-585-6444.

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. These people should seek advice about drinking water from their health care providers. EPA (Environmental Protection Agency)/CDC (Center of Disease Control) 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).

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. The City of Abbeville 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, testing methods and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

2023 Lead and Copper Monitoring (Select Addresses)				
Contaminant	Number of Samples	Action Limit (AL)	Samples Exceeding AL	90 <sup>th</sup> Percentile
Lead	20	0.015 ppm	0	0.005 ppm
Copper	20	1.3 ppm	0	0.19 ppm

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 is not required.

## Detected Primary Contaminants

Contaminant	Level Detected	Unit	MCLG	MCL	Likely Source of Contamination
Gross Alpha (2023)	3.2	pCi/l	0	15	Erosion of natural deposits
Lead (2022)	2.0	ppb	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits
Copper (2022)	0.022	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride (2022)	0.52	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Barium (2022)	0.024	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Total trihalomethanes (TTHM) (2023)	11.6	ppb	N/A	80	By-product of drinking water chlorination
Combined Radium (2023)	1.5	pCi/L	0	5	Erosion of natural deposits
TOC (Total Organic Carbon) (2022)	2.2	ppm	N/A	TT	Naturally present in environment
Total Haloacetic Acids HAA5	6.9	ppb	N/A	60	By product of drinking water disinfection
Chlorine	1.26	Ppm	4.0	4.0	Water additive used to control microbes

## Detected Secondary and Unregulated Contaminants

Contaminant	Highest Level Detected	Range	MCL
Aluminum (ppm)	0.002	0- 0.002	0.2
Bromodichloromethane (ppm)	3.2	0 - 3.2	N/A
Chloride (ppm)	6.06	5.00 – 6.06	250
Chloroform (ppb)	7.3	1.2 – 7.3	N/A
Calcium (ppm)	27.9	24.9 - 27.9	N/A
Carbon Dioxide (ppm)	7.0	7.0	N/A
Dibromochloromethane (ppb)	1.1	0 - 1.1	N/A
Iron (ppm)	0.14	0.11 – 0.14	0.30
Magnesium (ppm)	4.24	4.19 – 4.24	N/A
Nickel (ppb)	1.0	1.0	100
Sodium (ppm)	29.8	25.4 – 29.8	N/A
Sulfate (ppm)	11.5	10.9 – 11.5	250
Total Dissolved Solids	56	44 - 56	500
Total Alkalinity (ppm)	128	125 - 128	N/A
Total Hardness (CaCO3) (ppm)	87	80 - 87	N/A
Dichloroacetic Acid (ppb)	2.5	1.3 – 2.5	N/A

# Table of Primary Contaminants

At high levels, primary contaminants are known to pose a health risk to humans. This table provides a synopsis of any primary contaminant detections.

CONTAMINANT	MCL	AMOUNT DETECTED	CONTAMINANT	MCL	AMOUNT DETECTED
<b>Bacteriological</b>			Endothall (ppb)	100	ND
Total Coliform Bacteria	< 5%	ND	Endrin (ppb)	2	ND
Turbidity	TT	ND	Epichlorohydrin (ppb)	TT	ND
<b>Radiological</b>			Glyphosate (ppb)	700	ND
Beta/photon emitters (mrem/yr)	4	ND	Heptachlor (ppt)	400	ND
Alpha emitters (pCi/l)	15	3.2±0.8	Heptachlor Epoxide (ppt)	200	ND
Uranium (ppb)	30	ND	Hexachlorobenzene (ppb)	1	ND
Combined Radium (pCi/L)	5	1.5	Hexachloropentadiene (ppb)	50	ND
			Lindane (ppt)	200	ND
<b>Inorganic</b>			Methoxychlor (ppb)	40	ND
Antimony (ppb)	6	ND	Oxamyl [Vydate] (ppb)	200	ND
Arsenic (ppb)	10	ND	PCBs (ppt)	500	ND
Asbestos (MFL)	7	ND	Pentachlorophenol (ppb)	1	ND
Barium (ppm)	2	0.024	Picloram (ppb)	500	ND
Beryllium (ppb)	4	ND	Simazine (ppb)	4	ND
Cadmium (ppb)	5	ND	Toxaphene (ppb)	3	ND
Chromium (ppb)		ND	Benzene (ppb)	5	ND
Copper (ppm)	AL=1.0	0.022	Carbon Tetrachloride (ppb)	5	ND
Cyanide (ppb)	200	ND	Chlorobenzene (ppb)	100	ND
Fluoride (ppm)	4	0.52	Dibromochloropropane (ppt)	200	ND
Lead (ppb)	AL=15	2.0	0-Dichlorobenzene (ppb)	600	ND
Mercury (ppb)	2	ND	p-Dichlorobenzene (ppb)	75	ND
Nitrate (ppm)	10	ND	1,2-Dichloroethane (ppb)	5	ND
Nitrite (ppm)	1	ND	1,1-Dichloroethylene (ppb)	7	ND
Selenium (ppb)	50	ND	Cis-1,2-Dichloroethylene (ppb)	70	ND
Thallium (ppb)	2	ND	trans-1,2-Dichloroethylene(ppb)	100	ND
<b>Organic Chemicals</b>			Dichloromethane (ppb)	5	ND
2,4-D (ppb)	70	ND	1,2-Dichloropropane (ppb)	5	ND
2,4,5-TP (Silvex) (ppb)	50	ND	Ethylbenzene (ppb)	700	ND
Acrylamide (ppb)	TT	ND	Ethylene dibromide (ppb)	50	ND
Alachlor (ppb)	2	ND	Styrene (ppb)	100	ND
Atrazine (ppb)	3	ND	Tetrachloroethylene (ppb)	5	ND
Benzo(a)pyrene[PAHs] (ppt)	200	ND	1,2,4-Trichlorobenzene (ppb)	70	ND
Carbofuran (ppb)	40	ND	1,1,1-Trichloroethane (ppb)	200	ND
Chlordane (ppb)	2	ND	1,1,2-Trichloroethane (ppb)	5	ND
Dalapon (ppb)	200	ND	Trichloroethylene (ppb)	5	ND
Di-(2-ethylhexyl)adipate (ppb)	400	ND	TTHM (ppb)	80	11.6
Di(2-ethylhexyl)phthalates (ppb)	6	ND	Toluene (ppm)	1	ND
Dinoseb (ppb)	7	ND	Vinyl Chloride (ppb)	2	ND
Diquat (ppb)	20	ND	Xylenes (ppm)	10	ND
Dioxin[2,3,7,8-TCDD] (ppq)	30	ND	Haloacetic Acids (HAA5) (ppb)	60	6.9

The following definitions are used in monitoring the drinking water. You will see their abbreviation in the chart above and on the previous page.

**Maximum Contaminant Level Goal or MCLG:** The level of contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

**Maximum Contaminant Level or MCL:** The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

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

**Mfl:** million fibers per liter

**ppb:** Parts per billion (micrograms per liter (ug/l)).

**ppm:** Parts per million (milligrams per liter (mg/l)).

**ppq:** Parts per quadrillion (pictograms per liter).

**ppt:** Parts per trillion (nanograms per liter (ng/l)).

**pCi/l:** Picocuries per liter, a measure of radioactivity.

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

**NTU:** Nephelometric Turbidity Units, a measure of water clarity.

**N/A:** Not Applicable.

**ND:** Not Detected.

The Water and Sewer Board has completed a Source Water Assessment Program (SWAP) for the water system. A Source Water Assessment Area delineation, contaminant inventory and susceptibility analysis has been completed for each of the system's water sources and is available for review at the Water and Sewer Board office. We are pleased to report that our drinking water is safe and meets federal and state requirements. Anyone who would like additional information may contact the Superintendent, Tai Hui Flowers at 334-585-6444.