

Pelham Water Works Board
P.O. Box 1479 | Pelham, AL 35124
PWS ID #:AL0001163

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Pelham, AL 35124

2023 Annual Drinking Water Quality Report (For the 2022 Drinking Water Period)

The U.S. Environmental Protection Agency (EPA) wants you to know:

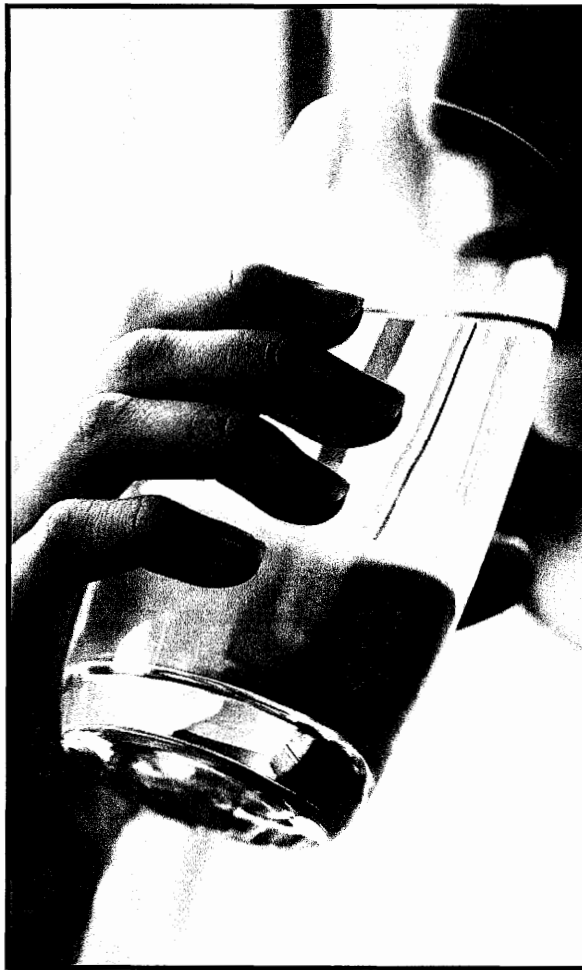
In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amounts of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that must provide the same protection for public health. All 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 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 radioactive material, and it can pick up substances resulting from the presence of animals or from human activity.

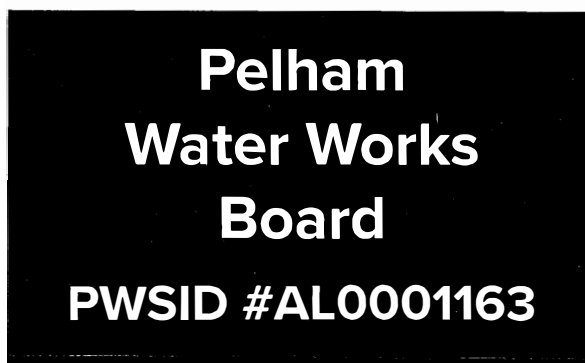
Contaminants that may be present in source water include:
Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife. Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water 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 storm water runoff, 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. We are required to monitor for each of these contaminants according to a schedule set by the EPA and the State.

Important Information About Lead:

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. Utilities Board of the Town of Odenville 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, 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 Annual Drinking Water Quality Report (For the 2022 Drinking Water Period)



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205-620-6420

2023 Annual Drinking Water Quality Report (For the 2022 Drinking Water Period)

What's the Quality of My Water?

We are pleased to provide you with the 2023 Annual Drinking Water Quality Report. This report shows the results of our monitoring for the period of January 1st to December 31st of 2022. We want to keep you informed about the excellent water and services we deliver to you each year. Our goal is and always has been, to provide you a safe, clean and dependable supply of drinking water.

Pelham Water Works routinely monitors for contaminants in our drinking water in accordance of Federal and State Laws. As you can see by the table, our system had no violations. We are pleased to report that our drinking water is safe and meets Federal and State requirements.

Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (EPA) and the Alabama Department of Environmental Management (ADEM) drinking water health standards. We are proud to report that our system has not violated a maximum contaminant level or any other water quality standards.

Our water sources consist of five wells that draw from Copper Ridge Dolomite and Longview Limestone Aquifers and purchase water from Shelby County Water Services whose sources are the Talladega/Shelby Water Treatment Plant (TSWTP) and the Shelby South Water Treatment Plant (SWTP). The water treated at these facilities comes from Coosa River/Lay Lake. We treat our well water by adding chlorine at each well before distribution and treatment of the water purchase from Shelby County Water Services is typical of surface water plants which includes flocculation, sedimentation, filtration and the addition of copper sulfate, potassium permanganate, hydrogen peroxide, powdered activated carbon, chlorine dioxide, alum-based coagulant, ferric-based coagulant, calcium carbonate, granular activated, carbon, chlorine for disinfection and fluoride for dental health.

Pelham Water Works has completed a Source Water Assessment Program as required by the Alabama Department of Environmental Management (ADEM) and a copy is available for viewing at the Water Works office.

Pelham Water Works, works around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

If you have any questions about this report or concerning your water utility, please contact the City of Pelham's Director of Development Services and Public Works, Mr. Andre Bittas at (205) 620-6413. We want our valued customers to be informed about their water utility. If you want to attend any of our regularly scheduled City Council Meetings, they are on the 1st and 3rd Monday of each month.

Mayor Gary W. Waters is the Superintendent of the Water Works and the City Council members serve as the Water Board. The City Council Members include: Maurice Mercer (President), Larry Palmer, Mildred Lanier, David Coram, and Rick Wash.

Note: 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/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 (1-800-426-4791).

Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

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.

Definitions:

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 Goal or MRDLG: 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.

Maximum Residual Disinfectant Level or 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.

Variations and Exemptions: ADEM or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Action Level (or AL): The concentration of a contaminant that triggers treatment or other requirement, a water system shall follow.

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

Nephelometric Turbidity Units (NTU): A measure of clarity.

Non-Detect (ND): Not detectable at testing limits.

Parts per Million (PPM): milligrams per liter (mg/l). One part per million corresponds to a single penny in \$10,000.

Parts per Billion (PPB): micrograms per liter (ug/l). One part per billion corresponds to a single penny in \$10,000,000.

Parts per Trillion (PPT): nanograms per liter (nanograms/l). One part per trillion corresponds to a single penny in \$10,000,000,000.

Picocuries per Liter (pCi/L): A measure of radioactivity.

Millirems per Year (mrem/yr): Measure of radiation absorbed by the body.

Standard Units (S.U.): pH of water measures the water's balances of acids and bases. 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.

N/A: Not applicable

FDA: Food and Drug Administration.

CDC: Centers for Disease Control.

EPA: Environmental Protection Agency.

ADEM: Alabama Department of Environmental Management.

UCMR Definitions:

UCMR Minimum Reporting Level (MRL): The minimum concentration that may be reported by a laboratory as a quantified value for a method analyte following analysis. The MRLs were established based on the capability of the analytical method, not based on a level established as "significant" or "harmful". UCMR Reference Concentration: The reference concentrations are based on publicly-available health information found in the following EPA resources: 2018 Edition of the Drinking Water Standards and Health Advisories Tables [i.e., Health advisories (HA)] and the CCL 4 Contaminant Information Sheets [i.e., Health Reference Levels (HRLs)]. The primary sources of the health information used to derive the guideline values in the resources referenced above are peer-reviewed assessments from EPA or other governmental agencies. The reference concentrations are subject to change as new health assessments are completed. Reference Concentrations are not legally enforceable federal standards.

Health Reference Levels (HRL): The CCL process derives HRLs for screening purposes using available data and can be used in the Regulatory Determination process as risk-derived concentrations against which to evaluate the occurrence data to determine if contaminants may occur at levels of public health concern. HRLs are not final determinations about the level of a contaminant in drinking water that is necessary to protect any particular population and, in some cases, are derived prior to development of a complete exposure assessment using the best available data. HRLs are not legally enforceable federal standards

Health Advisories (HA): Has provide information on contaminants that can cause human health effects and are known or anticipated to occur in drinking water. EPA's health advisories are non-enforceable and non-regulatory and provide technical information to State agencies and other public health officials on health effects, analytical methodologies and treatment technologies to assist with risk management decisions.

Note: EPA has introduced interim health advisory limits for PFOA and PFOS. The interim health advisory limit for PFOS is 0.00002 ug/L. The interim health advisory limit for PFOA is 0.000004 ug/L. The new health advisory limits are lower than the amount which can be detected with current laboratory technology.

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 accurate, are more than one year old. This report contains results from the most recent monitoring which was performed in accordance with the regulatory schedule.

Contaminants Monitored	Date Monitored
Inorganic Compounds	2021-2022
Lead and Copper	2022
Microbiological Contaminants	Current
Nitrates	2022
Radioactive Contaminants	2017-2021
Synthetic Organic Contaminants (including herbicides and pesticides)	2022
Volatile Organic Contaminants	2020-2022
Disinfection By-products (TTHM and HAA5)	2022

CONTAMINANT	MCL	Amount Detected	CONTAMINANT	MCL	Amount Detected
Bacteriological			Bacteriological		
Total Coliform Bacteria	< 5%	ND	Endothall	100 ppb	ND
Turbidity	TT	0.88	Endrin	2 ppb	ND
Radical			Radical		
Beta/photom emitters (mrem/yr)	4	ND	Epichlorohydrin	TT	ND
Alpha emitters (pCi/L)	15	0.8	Glyphosate	700 ppb	ND
Combined radium (pCi/L)	5	0.5	Heptachlor	400 ppt	ND
Inorganic			Inorganic		
Antimony	6 ppb	ND	Lindane	200 ppt	ND
Arsenic	10 ppb	ND	Methoxychlor	40 ppb	ND
Barium	2 ppm	0.04	Oxamyl [Vydate]	200 ppb	ND
Beryllium	4 ppb	ND	PCBs	500 ppt	ND
Cadmium	5 ppb	ND	Pentachlorophenol	1 ppb	ND
Chromium	100 ppb	ND	Picloram	500 ppb	ND
Copper *	AL=1.3 ppm	0.21	Simazine	4 ppb	ND
Cyanide	200 ppb	ND	Toxaphene	3 ppb	ND
Fluoride	4 ppm	1.0	Benzene	5 ppb	ND
Lead *	AL=15 ppb	2.	Carbon Tetrachloride	5 ppb	ND
Mercury	2 ppb	ND	Chlorobenzene	100 ppb	ND
Nitrate	10 ppm	1.33	Dibromochloropropane	200 ppt	ND
Nitrite	1 ppm	ND	0-Dichlorobenzene	600 ppb	ND
Selenium	50 ppb	ND	p-Dichlorobenzene	75 ppb	ND
Thallium	2 ppb	ND	1,2-Dichloroethane	5 ppb	ND
*90th percentile of the most recent sampling event.					
			Cis-1,2-Dichloroethylene	70 ppb	ND
			trans-1,2-Dichloroethylene	100 ppb	ND

CONTAMINANT	Low Result, PPM	High Result, PPM	CONTAMINANT	Low Result, PPM	High Result, PPM
2,4D	70 ppb	ND	Dichloromethane	5 ppb	ND
2,4,5-TP (Silvex)	50 ppb	ND	1,2-Dichloropropane	5 ppb	ND
Acrylamide	TT	ND	Ethylbenzene	700 ppb	ND
Alachlor	2 ppb	ND	Ethylene dibromide	50 ppt	ND
Atrazine	3 ppb	ND	Styrene	100 ppb	ND
Benzo(a)pyrene(PAHs)	200 ppt	ND	Tetrachloroethylene	5 ppb	ND
Carbofuran	40 ppb	ND	1,2,4-Trichlorobenzene	70 ppb	ND
Chlordane	2 ppb	ND	1,1,1-Trichloroethane	200 ppb	ND
Dalapon	200 ppb	ND	1,1,2-Trichloroethane	5 ppb	ND
Di-(2-ethylhexyl)adipate	400 ppb	ND	Trichloroethylene	5 ppb	ND
Di-(2-ethylhexyl)phthalates	6 ppb	ND	TTHM	80 ppb	79.7
Dinoseb	7 ppb	ND	Toluene	1 ppm	ND
Diquat	20 ppb	ND	Vinyl Chloride	2 ppb	ND
Chloramines	4 ppm	ND	Xylenes	10 ppm	ND
Chlorite	1 ppm	ND	TOC	TT	1.7
HAA5	60 ppb	56.0	Chlorine	4 ppm	2.47

CONTAMINANT	MCLG	MCL	Low Result	High Result	CONTAMINANT	MCLG	MCL	Low Result	High Result
pH	7	Monitored	6.65	7.8	Aluminum	0	0.2	ND	0.009
Color, APHA (units)	N/A	15	ND	ND	Copper	N/A	1	0.003	0.21
Odor	N/A	3	ND	ND	Iron	0	0.3	ND	ND
Foaming Agents	N/A	0.5	ND	ND	Manganese	0	0.05	ND	ND
TDS	0	500	122	232	Silver	0	0.1	ND	ND
Fluoride	N/A	2.0	ND	1.0	Zinc	0	5	ND	ND
Sulfate	0	250	2.28	11.4	Total Hardness	0	Monitored	131	181
Chloride	N/A	250	4.3	6.71	Corrosivity	N/A	N/A	Non-Corrosive	Non-Corrosive

CONTAMINANT	MCLG	MCL	Range Detected			Likely Source of Contamination
Turbidity	N/A	TT	0.1	-	0.88	Soil Runoff.
Barium	2	2 ppm	0.021	-	0.04	Discharge of drilling wastes; discharge of metal refineries; erosion of natural deposits
Nitrate	10	10 ppm	0.29	-	1.33	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Copper	1.3	AL-1.3ppm	0.003	-	0.21	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead	0	AL-15ppb	ND	-	2.	Corrosion of household plumbing systems; erosion of natural deposits
TOC	N/A	TT	0.2	-	1.7	Naturally present in the environment
Fluoride	4	4 ppm	ND	-	1.0	Erosion of natural deposits; water additives which promotes strong teeth; discharge from fertilizer and aluminum factories.
Alpha Emitters	0	15 pCi/L	ND	-	0.8	Erosion of Natural Deposits
Combined Radium	0	5 pCi/L	ND	-	0.5	Erosion of Natural Deposits
TTHM	80	80 ppb	ND	-	79.7	By-Product of drinking water chlorination
HAA5	60	60 ppb	ND	-	56.0	By-Product of drinking water chlorination
Chlorine	MRDLG=4	MRDL=4 ppm	0.34	-	2.47	Water additive used to control microbes

Water Systems are selected by The Environmental Protection Agency (EPA) to participate in the Unregulated Contaminant Monitoring (UCMR) program to collect nationally representative data for contaminants suspected to be present in drinking water. These contaminants do not have regulatory standards. The monitoring period is between 2018 - 2020. This monitoring is used by the EPA to understand the frequency and level of occurrence of unregulated contaminants in the nation's public water systems. Every five years the EPA develops a new list of UCMR contaminants, largely based on the Contaminant Candidate List (CCL). The detection of a UCMR contaminant does not represent cause for concern, in and of itself.

Pelham Water Works Board has completed additional testing for PFAS in 2022, as required by Alabama Department of Environmental Management (ADEM). Those results are also included in this table.

Contaminant	Minimum Reporting Level (MRL/ug/L)	Reference Concentration (ug/L)	Range Detected			Additional Information
Manganese	0.4	300	3.1	-	3.1	Naturally occurring element; commercially available in combination with other elements and materials; a byproduct of zinc ore processing; used in infrared optics, fiber optic systems, electronics and solar applications
Bromochloroacetic Acid	NA	NA	2.7	-	3.	By-products of drinking water chlorination
Bromodichloroacetic Acid	NA	NA	3.3	-	4.	By-products of drinking water chlorination
Chlorodibromoacetic Acid	NA	NA	ND	-	0.31	By-products of drinking water chlorination
Dichloroacetic Acid	NA	NA	17.4	-	23.3	By-products of drinking water chlorination
Monochloroacetic Acid	NA	NA	ND	-	2.3	By-products of drinking water chlorination
Trichloroacetic Acid	NA	NA	19.1	-	30.2	By-products of drinking water chlorination
Perfluorobutanesulfonic Acid	NA	NA	0.0021	-	0.056	Final Health Advisory Limit for PFBS is 2.0 ug/L
Perfluorohexanoic Acid	NA	NA	ND	-	0.018	No Health Advisory Limit Established
Perfluorohexanesulfonic Acid	NA	NA	0.0015	-	0.0022	No Health Advisory Limit Established
Perfluoroheptanoic Acid	NA	NA	ND	-	0.0071	No Health Advisory Limit Established
Perfluorooctanesulfonic Acid (PFOS)	NA	NA	0.0017	-	0.0065	Interim Health Advisory Limit for PFOS is 0.00002 ug/L
Perfluorooctanoic Acid (PFOA)	NA	NA	0.0013	-	0.012	Interim Health Advisory Limit for PFOA is 0.000004 ug/L