

2025 Annual Water Quality Report
(Testing Performed January through December 2024)

KUSHLA WATER DISTRICT

PWSID AL0000993

6210 Hwy 45
Eight Mile, AL 36613
251-675-2297

Office hours: Monday – Thursday 8:00 AM – 4:30 PM
kushlawater.com

As a convenience to you, payments are now being accepted on our website! Just click the "PAY NOW" button on our home page and follow instructions. Alternatively, you may mail your remittance and bill to the office or use the after-hours depository box, located at the left of the drive-up window. Current office hours are 8:00 a.m. - 4:30 p.m. Monday through Thursday.

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply, we continually need to make improvements that will benefit all of our customers. Some of those improvements include extending our water lines to new customers, replacing old or damaged water lines, cleaning and painting our storage tanks, replacing old or defective water meters, and upgrading our pumping stations. These improvements sometimes require interruptions in service. We are committed to ensuring the quality of your water. Thank you for understanding.

Water Source	Two (2) groundwater wells producing from the Miocene series	
Water Treatment	Chlorination for disinfection	
Number of Customers	Approximately 2212	
Superintendent	Chad Hennis	
Water Board	Place 1: Richard L. Nelson County Commission Appointee - At Large	Place 5: Jennie Reese County Commission Appointee - Chunchula
	Place 2: William B. Andrews – Chairman County Commission Appointee - Kali Oka District	Place 6: Nathaniel Cotton County Commission Appointee - Kushla
	Place 3: Daryl T. Taylor County Commission Appointee - Smithtown/Oak Grove	Place 7: Earl Hudson Saraland Appointee – Saraland
	Place 4: Erica J. Massey County Commission Appointee – Mauvilla	Place 8: Nannie Joy Rolison Prichard Appointee - Prichard

Source Water Protection

In compliance with the Alabama Department of Environmental Management (ADEM), Kushla Water District has developed a Wellhead Protection Plan that assists in protecting our water sources. This plan provides 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. A copy of the report is available in our office for review during normal business hours with prior request.

We routinely complete water storage facility inspections, and we utilize a Bacteriological Monitoring Plan. Chlorine residual is routinely tested by our technicians, and results show that the required minimum free chlorine residual level of 0.2 mg/L is maintained. To further ensure safe drinking water for our customers, we have also established a Cross-Connection Policy.

Please help us make these efforts 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.

Information about Lead

As required by ADEM, we conducted a Lead Service Line Inventory during 2024: Lead service lines were not found in our distribution system, nor are there any records of Lead service lines ever being in our system. The Lead Service Line Inventory report and results from our latest round of Lead/Copper sampling are available for review in our office upon request. Lead is rarely found in source water but is primarily from corrosion of materials and components in 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. As required by federal and state agencies, we utilize an outside laboratory to analyze the samples we monitor for Lead. If present, elevated levels of Lead can cause serious health problems, especially for pregnant women and young children.

The Environmental Protection Agency (EPA) and the Center for Disease Control (CDC) make the following recommendations:

- Before using any tap water for drinking or cooking, flush your water system by running the kitchen tap (or any other tap you use for drinking or cooking) on COLD for 1–2 minutes. Flushing can minimize the potential for lead exposure, especially if the water has been sitting undisturbed for several hours, as in overnight.
- In all situations, especially for making baby formula, drink or cook only with water that comes out of the cold tap. Warm or hot tap water is more likely to cause lead to leach from plumbing materials.
- Periodically remove the aerator on the tip of the faucet and wash out any debris such as metal particles.
- Remember - Boiling will NOT reduce the amount of lead in your water.

The actions recommended above are likely to be effective in reducing lead levels because most of the lead in household water usually comes from the plumbing in your house. 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 www.epa.gov/safewater or by calling the EPA Safe Drinking Water Hotline at 1-800-426-4791. Water systems are required to sample for lead in schools and licensed child care facilities as requested by the facility. Contact your school or child care facility for further information about potential sampling results.

General Drinking Water Information

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).

MCLs are set at very stringent levels. 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. In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the levels of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water.

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.

Radon can move up through the ground into a home through cracks and holes in the foundation. It may also get into indoor air when released from tap water. Compared to radon entering the home through soil, radon entering the home through tap water will, in most cases, be a small source of radon in indoor air. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home consider having the home tested. Testing is easy and inexpensive. For more information call EPA's Radon Hotline at (800-SOS-RADON).

Some people may be more vulnerable to contaminants in drinking water than the general population. People who are immunocompromised such as cancer patients undergoing chemotherapy, organ transplant recipients, HIV/AIDS positive 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. EPA/CDC 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) or on EPA's website epa.gov/safewater.

Questions?

If you have any questions about this report or concerning your water utility, please contact Chad Hennis, Superintendent, at 251-675-2297 or via email at chad.kushlawater@gmail.com. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held the last Tuesday of each month at the water office at 4:00 p.m. at the water office at 6210 Hwy 45, Eight Mile. Please call the water office for the exact day of the month.

Monitoring Schedule and Results

Our water system monitors for contaminants according to a schedule assigned to us by the Alabama Department of Environmental Management (ADEM), using EPA approved methods and a State certified laboratory. This report contains results from the most recent monitoring performed in accordance with the State and Federal regulatory schedule. ADEM allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently.

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.

Constituents Monitored	Date Monitored
Inorganic Contaminants	2023
Lead/Copper	2022
Microbiological Contaminants	current
Nitrates	2024
Radioactive Contaminants	2020
Synthetic Organic Contaminants	2023
Volatile Organic Contaminants	2024
Disinfection By-products	2024
PFAS Contaminants	2020

As you can see by the table below, our system had no MCL violations. 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 federal and state requirements.

TABLE OF DETECTED DRINKING WATER CONTAMINANTS						
Contaminants	Violation Y/N	Level Detected	Unit Msmt	MCLG	MCL	Likely Source of Contamination
Barium	NO	0.016	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper	NO	0.239 ¹ (0.007-0.380)	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	NO	0.0015 ² (ND-0.0.007)	ppm	0	AL=0.015	Corrosion of household plumbing systems, erosion of natural deposits
TTHM [Total trihalomethanes]	NO	LRAA Range 52.3-62.3	ppb	0	80	By-product of drinking water chlorination
HAA5 [Total haloacetic acids]	NO	LRAA Range 19.0-25.0	ppb	0	60	By-product of drinking water chlorination
Secondary Contaminants						
Chloride	NO	146	ppm	n/a	250	Naturally occurring; agricultural runoff
Hardness	NO	7.2	ppm	n/a	n/a	Naturally occurring or from treatment with water additives
Iron	NO	ND	ppm	n/a	0.30	Naturally occurring; erosion; leaching from pipes
pH	NO	7.5-8.0	S.U.	n/a	n/a	Naturally occurring or from treatment with water additives
Sodium	NO	140	ppm	n/a	n/a	Naturally occurring in the environment
Total Dissolved Solids	NO	433	ppm	n/a	500	Naturally occurring; industrial discharge; agricultural runoff
Zinc	NO	0.02	ppm	n/a	5	Erosion; factory & refinery discharge; landfill runoff

¹ Figure shown is 90th percentile of latest round of sampling, and zero sites exceeded the Action Level (AL).

² Figure shown is 90th percentile of latest round of sampling, and one site exceeded the Action Level (AL).

PFAS: Below is a list of PFAS contaminants for which our system monitored in 2020 as required and the results of that monitoring. *PFAS was not detected in our drinking water.*

PFAS Contaminants						
Contaminant	Unit Msmt	Level Detected		Contaminant	Unit Msmt	Level Detected
11Cl-PF3OUdS (11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid)	ppb	ND		Perfluoroheptanoic acid	ppb	ND
9Cl-PF3ONS (9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid)	ppb	ND		Perfluorohexanesulfonic acid	ppb	ND
ADONA (4,8-dioxa-3H-perfluorononanoic acid)	ppb	ND		Perfluorononanoic acid	ppb	ND
HFPO-DA (Hexafluoropropylene oxide dimer acidA)	ppb	ND		Perfluorooctanesulfonic acid	ppb	ND
NEtFOSAA (N-ethylperfluorooctanesulfonamidoacetic acid)	ppb	ND		Perfluorooctanoic acid	ppb	ND
NMeFOSAA (N-methylperfluorooctanesulfonamidoacetic acid)	ppb	ND		Perfluorotetradecanoic acid	ppb	ND
Perfluorobutanesulfonic acid	ppb	ND		Perfluorotridecanoic acid	ppb	ND
Perfluorodecanoic acid	ppb	ND		Perfluoroundecanoic acid	ppb	ND
Perfluorohexanoic acid	ppb	ND		Total PFAS	ppb	ND
Perfluorododecanoic acid	ppb	ND				

For more information on PFAS contaminants, please consult www.epa.gov/pfas

Plain Language Definitions

Action Level: the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.

Coliform Absent (ca): laboratory analysis indicates that the contaminant is not present.

Disinfection byproducts (DBPs): formed when disinfectants react with bromide or natural organic matter present in the source water.

Distribution System Evaluation (DSE): a 4-quarter study to test for disinfection byproducts in different areas of the distribution

Hazard Index (HI): used to determine health concerns associated with mixtures of certain PFAS in finished drinking water. An HI greater than 1 requires a system to take action.

Locational Running Annual Average (LRAA) – yearly average of all the DPB results at each specific sampling site

Maximum Contaminant Level (MCL): highest level of a contaminant that is allowed in drinking water.

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): highest level of a disinfectant allowed in drinking water. There is convincing evidence that disinfection 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 risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Micrograms per liter (ug/L): equivalent to parts per billion (ppb) since one liter of water is equal in weight to one billion micrograms.

Microsiemens per centimeter (us/cm): unit of measurement for Specific Conductance.

Milligrams per liter (mg/L): equivalent to parts per million

Millirems per year (mrem/yr): a 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.

Not Detected (ND): laboratory analysis indicates that the constituent is not present above detection limits of lab equipment.

Parts per billion (ppb) or Micrograms per liter (ug/l): corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per million (ppm) or Milligrams per liter (mg/l): corresponds to one minute in two years or a single penny in \$10,000.

Parts per quadrillion (ppq) or Picograms per liter (picograms/l): corresponds to one minute in 2,000,000,000 years, or a single penny in \$10,000,000,000,000.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l): corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Picocuries per liter (pCi/L): a measure of the radioactivity in water.

Running Annual Average (RAA): yearly average of all the DPB results at each specific sampling site in the distribution system.

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

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

Unregulated Contaminants: contaminants for which the EPA has not established MCLs.

Variances & Exemptions (V&E): State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Below is a table of contaminants for which we monitor as required on a schedule set by the Environmental Protection Agency and the Alabama Department of Environmental Management.

STANDARD LIST OF PRIMARY DRINKING WATER CONTAMINANTS								
Contaminant	MCL	Unit of Msmt	Detections	Contaminant	MCL	Unit of Msmt	Detections	
Bacteriological Contaminants				1,1-Dichloroethylene	7	ppb	ND	
Total Coliform Bacteria	<5%	Present or absent	absent	cis-1,2-Dichloroethylene	70	ppb	ND	
Fecal Coliform and E. coli	0	Present or absent	absent	trans-1,2-Dichloroethylene	100	ppb	ND	
Radiological Contaminants				Dichloromethane	5	ppb	ND	
Beta/photon emitters	4	mrem/yr	ND	1,2-Dichloropropane	5	ppb	ND	
Alpha emitters	15	pCi/l	ND	Di (2-ethylhexyl) adipate	400	ppb	ND	
Combined radium	5	pCi/l	ND	Di (2-ethylhexyl) phthalate	6	ppb	ND	
Uranium	30	pCi/l	ND	Dinoseb	7	ppb	ND	
Inorganic Chemicals				Dioxin [2,3,7,8-TCDD]	30	ppb	ND	
Antimony	6	ppb	ND	Diquat	20	ppb	ND	
Arsenic	10	ppb	ND	Endothall	100	ppb	ND	
Asbestos	7	MFL	ND	Endrin	2	ppb	ND	
Barium	2	ppm	0.016	Epichlorohydrin	TT	ppb	ND	
Beryllium	4	ppb	ND	Ethylbenzene	700	ppb	ND	
Cadmium	5	ppb	ND	Ethylene dibromide	50	ppb	ND	
Chromium	100	ppb	ND	Glyphosate	700	ppb	ND	
Copper	AL=1.3	ppm	0.007-0.380	Heptachlor	400	ppb	ND	
Cyanide	200	ppb	ND	Heptachlor epoxide	200	ppb	ND	
Fluoride	4	ppm	ND	Hexachlorobenzene	1	ppb	ND	
Lead	AL=15	ppb	ND-0.0007	Hexachlorocyclopentadiene	50	ppb	ND	
Mercury	2	ppb	ND	Lindane	200	ppb	ND	
Nitrate	10	ppm	ND	Methoxychlor	40	ppb	ND	
Nitrite	1	ppm	ND	Oxamyl [Vydate]	200	ppb	ND	
Selenium	.05	ppm	ND	Polychlorinated biphenyls	0.5	ppb	ND	
Thallium	.002	ppm	ND	Pentachlorophenol	1	ppb	ND	
Organic Contaminants				Picloram	500	ppb	ND	
2,4-D	70	ppb	ND	Simazine	4	ppb	ND	
Acrylamide	TT	TT	ND	Styrene	100	ppb	ND	
Alachlor	2	ppb	ND	Tetrachloroethylene	5	ppb	ND	
Benzene	5	ppb	ND	Toluene	1	ppb	ND	
Benzo(a)pyrene [PAHs]	200	ppt	ND	Toxaphene	3	ppb	ND	
Carbofuran	40	ppb	ND	2,4,5-TP(Silvex)	50	ppb	ND	
Carbon tetrachloride	5	ppb	ND	1,2,4-Trichlorobenzene	.07	ppb	ND	
Chlordane	2	ppb	ND	1,1,1-Trichloroethane	200	ppb	ND	
Chlorobenzene	100	ppb	ND	1,1,2-Trichloroethane	5	ppb	ND	
Dalapon	200	ppb	ND	Trichloroethylene	5	ppb	ND	
Dibromochloropropane	200	ppt	ND	Vinyl Chloride	2	ppb	ND	
1,2-Dichlorobenzene	1000	ppb	ND	Xylenes	10	ppb	ND	
				Disinfection Byproducts				
1,4-Dichlorobenzene (para)	75	ppb	ND	TTHM [Total trihalomethanes]		80	ppb	52.3-62.3
o-Dichlorobenzene	600	ppb	ND	HAA5 [Total haloacetic acids]		60	ppb	19.0-25.0
1,2-Dichloroethane	5	ppb	ND					
LIST OF SECONDARY CONTAMINANTS								
Alkalinity, Total (as CA, Co3)		Copper		Manganese		Specific Conductance		
Aluminum		Corrosivity		Odor		Sulfate		
Calcium, as Ca		Foaming agents (MBAS)		Nickel		Total Dissolved Solids		
Carbon Dioxide		Hardness		pH		Zinc		
Chloride		Iron		Silver				
Color		Magnesium		Sodium				
LIST OF UNREGULATED CONTAMINANTS								
Aldicarb		Chloroethane		Hexachlorobutadiene		Propachlor		
Aldicarb Sulfone		Chloroform		3-Hydroxycarbofuran		N-Propylbenzene		
Aldicarb Sulfoxide		Chloromethane		Isopropylbenzene		Propachlor		
Aldrin		O-Chlorotoluene		p-Isopropyltoluene		1,1,1,2-Tetrachloroethane		
Bromoacetic Acid		P-Chlorotoluene		M-Dichlorobenzene		1,1,2,2-Tetrachloroethane		
Bromobenzene		Dibromochloromethane		Methomyl		Tetrachloroethene		
Bromochloromethane		Dibromomethane		Methomyl		Trichloroacetic Acid		
Bromodichloromethane		1,1-Dichloroethane		Methylene chloride		1,2,3-Trichlorobenzene		
Bromoform		1,3-Dichloropropane		Methyl tert-butyl ether		Trichloroethene		
Bromomethane		2,2-Dichloropropane		Metolachlor		Trichlorofluoromethane		
Butachlor		1,1-Dichloropropene		Metribuzin		1,2,3-Trichloropropane		
N-Butylbenzene		1,3-Dichloropropene		MTBE		1,2,4-Trimethylbenzene		
Sec-Butylbenzene		Dicamba		Naphthalene		1,3,5-Trimethylbenzene		
Tert - Butylbenzene		Dichlorodifluoromethane		1-Naphthol				
Carbaryl		Dieldrin		Paraquat				

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).