

# ANNUAL DRINKING WATER QUALITY REPORT JANUARY-DECEMBER 2023

## IRONDALE WATER SYSTEM

### CITY OF IRONDALE

#### IS MY WATER SAFE?

Last year, your tap water met all U.S. Environmental Protection Agency (EPA) and Alabama Department of Environmental Management (ADEM) drinking water health requirements.

The City of Irondale has a total of 4 wells that serve the city. We have 4 storage tanks with the capacity of 4,105,000 gallons of water. The water system pumps around 32 million gallons of water per month and serves an average of 3,700 customers.



**James D. Stewart, Jr. , Mayor/  
Superintendent**

**John London, Council Member**

**Robert Box, Council Member**

**Aaron Sims, Council Member**

**David Spivey, Council Member**

**Cindy Cuellar, Council Member**

#### Important Drinking Water Definitions:

**Disinfection Byproducts** - contaminants formed when chlorine is used as a disinfectant.

**Non-Detects (ND)** - laboratory analysis indicates that the constituent is not present.

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

**Parts per billion (ppb) or Micrograms per liter** - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

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

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

**Picocuries per liter (pCi/L)** - picocuries per liter is a measure of the radioactivity in water.

**Millirems per year (mrem/yr)** - measure of radiation absorbed by the body.

**Nephelometric Turbidity Unit (NTU)** - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**Variations & Exemptions** - ADEM or EPA permission not to meet an MCL or a treatment technique under certain conditions.

**Maximum Contaminant Level Goal or 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 Contaminant Level or 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 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 the addition of a disinfectant is necessary for control of microbial contaminants.

**Treatment Technique** - A required process intended to reduce the level of a contaminant in drinking water.

**Action Level** - The concentration of a contaminant that triggers treatment or other requirements a water system must follow.

**Unregulated contaminants** - are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

The Irondale Water System routinely monitors for contaminants in your drinking water according to federal and state laws. This table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2023. 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).

Irondale Water System utilizes a Bacteriological Monitoring Plan, and a Cross Connection Policy is in place to ensure the best drinking water for our customers. The Irondale Water System has completed a Source Water Assessment Plan which is available for review at our office. A Source Water Assessment Plan provides information about potential sources of contamination and is set up to help protect our multiple water sources.

Please attend the regularly scheduled Council Meetings!

Every 1st & 3rd Tuesday of each month at 6:00 p.m. at the Irondale City Hall located at 101 20th Street South Irondale, Alabama 35210.

Hope to See You There!

## Table of Primary Contaminants

At high levels some primary contaminants are known to pose a health risks to humans. This table provides a quick glance of any primary contaminant detections.

CONTAMINANT	MCL	AMOUNT DETECTED	CONTAMINANT	MCL	AMOUNT DETECTED	CONTAMINANT	MCL	AMOUNT DETECTED
<b>Bacteriological</b>			Selenium(ppb)	50	ND	Epichlorohydrin	TT	ND
Total Coliform Bacteria	< 5%	ND	Thallium(ppb)	2	ND	Ethylbenzene(ppb)	700	ND
Turbidity	TT	0.12	<b>Organic Chemicals</b>			Ethylene dibromide(ppt)	50	ND
Fecal Coliform & E. coli	0	ND	Acrylamide	TT	ND	Glyphosate(ppb)	700	ND
<b>Radiological</b>			Alachlor(ppb)	2	ND	Haloacetic Acids(ppb)	60	ND
Beta/Photon emitters (mrem/yr)	4	ND	Atrazine(ppb)	3	ND	Heptachlor(ppt)	400	ND
Alpha emitters (pci/l)	15	3.40	Benzene(ppb)	5	ND	Heptachlor epoxide(ppt)	200	ND
Combined radium (pci/l)	5	0.70	Benzo(a)pyrene[PHAs](ppt)	200	ND	Hexachlorobenzene(ppb)	1	ND
Uranium(pci/l)	30	ND	Carbofuran(ppb)	40	ND	Hexachlorocyclopentadiene(ppb)	50	ND
<b>Inorganic</b>			Carbon Tetrachloride(ppb)	5	ND	Lindane(ppt)	200	ND
Antimony (ppb)	6	ND	Chlordane(ppb)	2	ND	Methoxychlor(ppb)	40	ND
Arsenic (ppb)	10	ND	Chlorobenzene(ppb)	100	ND	Oxamyl [Vydate](ppb)	200	ND
Asbestos (MFL)	7	ND	2,4-D	70	ND	Pentachlorophenol(ppb)	1	ND
Barium (ppm)	2	0.02	Dalapon(ppb)	200	ND	Picloram(ppb)	500	ND
Beryllium (ppb)	4	ND	Dibromochloropropane(ppt)	200	ND	PCBs(ppt)	500	ND
Bromate(ppb)	10	ND	0-Dichlorobenzene(ppb)	600	ND	Simazine(ppb)	4	ND
Cadmium (ppb)	5	ND	p-Dichlorobenzene(ppb)	75	ND	Styrene(ppb)	100	ND
Chloramines(ppm)	4	ND	1,2-Dichloroethane(ppb)	5	ND	Tetrachloroethylene(ppb)	5	0.90
Chlorine(ppm)	4	1.90-2.03	1,1-Dichloroethylene(ppb)	7	ND	Toluene(ppm)	1	ND
Chlorine dioxide(ppb)	800	ND	Cis-1,2-Dichloroethylene(ppb)	70	0.90	TOC	TT	9.20
Chlorite(ppm)	1	ND	trans-1,2-Dichloroethylene(ppb)	100	ND	TTHM(ppb)	80	17.70
Chromium (ppb)	100	0.01	Dichloromethane(ppb)	5	ND	Toxaphene(ppb)	3	ND
Copper (ppm)	AL=1.3	1.09	1,2-Dichloropropane(ppb)	5	ND	2,4,5-TP (Silvex)(ppb)	50	ND
Cyanide (ppb)	200	ND	Di-(2-ethylhexyl)adipate(ppb)	400	ND	1,2,4-Trichlorobenzene(ppb)	70	ND
Fluoride (ppm)	4	ND	Di(2-ethylhexyl)phthalates(ppb)	6	ND	1,1,1-Trichloroethane(ppb)	200	ND
Lead (ppb)	AL=15	0.005	Dinoseb(ppb)	7	ND	1,1,2-Trichloroethane(ppb)	5	ND
Mercury (ppb)	2	ND	Dioxin[2,3,7,8-TCDD](ppq)	30	ND	Trichloroethylene(ppb)	5	ND
Nitrate (ppm)	10	0.48	Diquat(ppb)	20	ND	Vinyl Chloride(ppb)	2	ND
Nitrite (ppm)	1	ND	Endothall(ppb)	100	ND	Xylenes(ppm)	10	ND
Total Nitrate & Nitrite	10	0.48	Endrin(ppb)	2	ND			

## Table of Secondary and Unregulated Contaminants

**Secondary Drinking Water Standards** are guidelines regulating contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water. ADEM has Secondary Drinking Water Standards established in state regulations applicable to water systems required to monitor for the various components. **Unregulated contaminants** are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

CONTAMINANT	MCL	DETECT	CONTAMINANT	MCL	DETECT	CONTAMINANT	MCL	DETECT
<b>Secondary</b>								
Aluminum	0.2	..004	Foaming Agents	0.5	ND	Silver	7	ND
Chloride	250	11.00	Iron	0.3	ND	Sulfate	70	16.2
Color (PCU)	15	ND	Magnesium	75	2.73	Total Dissolved Solids	500	212
Copper	1	0.013	Odor (T.O.N.)	5	ND	Zinc	5	ND
<b>Special</b>								
Calcium	N/A	66.50	pH (SU)	N/A	7.21	Temperature (*C)	N/A	ND
Carbon Dioxide	N/A	71	Sodium	N/A	2.69	Total Alkalinity	N/A	180
Manganese	0.05	ND	Specific Conductance (umhos)	<500	330.00	Total Hardness (as CaCO3)	N/A	177
<b>Unregulated</b>								
1,1 - Dichloropropene	N/A	ND	Bromobenzene	N/A	ND	Hexachlorobutadiene	N/A	ND
1,1,2,2-Tetrachloroethane	N/A	ND	Bromochloromethane	N/A	ND	Isopropylbenzene	N/A	ND
1,1-Dichloroethane	N/A	ND	Bromodichloromethane	N/A	0.01	M-Dichlorobenzene	N/A	ND
TCE - Trichloroethene	N/A	0.00	Bromoform	N/A	ND	Methomyl	N/A	ND
1,2,3 - Trichloropropane	N/A	ND	Bromomethane	N/A	ND	Metolachlor	N/A	ND
1,2,4 - Trimethylbenzene	N/A	ND	Butachlor	N/A	ND	Metribuzin	N/A	ND
1,2,4-Trichlorobenzene	N/A	ND	Carbaryl	N/A	ND	MTBE	N/A	ND
1,3 - Dichloropropane	N/A	ND	Chloroethane	N/A	ND	N - Butylbenzene	N/A	ND
1,3 - Dichloropropene	N/A	ND	Chlorodibromomethane	N/A	ND	Naphthalene	N/A	ND
1,3,5 - Trimethylbenzene	N/A	ND	Chloroform	N/A	0.02	N-Propylbenzene	N/A	ND
2,2 - Dichloropropane	N/A	ND	Chloromethane	N/A	ND	O-Chlorotoluene	N/A	ND
3-Hydroxycarbofuran	N/A	ND	Dibromochloromethane	N/A	ND	P-Chlorotoluene	N/A	ND
Aldicarb	N/A	ND	Dibromomethane	N/A	ND	P-Isopropyltoluene	N/A	ND
Aldicarb Sulfone	N/A	ND	Dichlorodifluoromethane	N/A	ND	Propachlor	N/A	ND
Aldicarb Sulfoxide	N/A	ND	Dieldrin	N/A	ND	Sec - Butylbenzene	N/A	ND
Aldrin	N/A	ND	Fluorotrichloromethan	N/A	ND	Tert - Butylbenzene	N/A	ND

### UCMR-5

11Cl-PF3OUds	ug/L	BMDL	BMDL	PFHps	ug/L	BMDL	BMDL	NMeFOSAA	ug/L	BMDL	BMDL
4:2 FTS	ug/L	BMDL	BMDL	PFMBA	ug/L	BMDL	BMDL	PFTA	ug/L	BMDL	BMDL
6:2 FTS	ug/L	BMDL	BMDL	PFMPA	ug/L	BMDL	BMDL	PFTrDA	ug/L	BMDL	BMDL
8:2 FTS	ug/L	BMDL	BMDL	PFPeA	ug/L	0.0037	BMDL	Lithium	ug/L	BMDL	BMDL
9Cl-PF3ONS	ug/L	BMDL	BMDL	PFPeS	ug/L	BMDL	BMDL				
ADONA	ug/L	BMDL	BMDL	PFDoA	ug/L	BMDL	BMDL				
HFPO-DA	ug/L	BMDL	BMDL	PFHpA	ug/L	BMDL	BMDL				
NFDHA	ug/L	BMDL	BMDL	PFHxS	ug/L	BMDL	BMDL				
PFBS	ug/L	BMDL	BMDL	PFNA	ug/L	BMDL	BMDL				
PFDA	ug/L	BMDL	BMDL	PFOS	ug/L	0.0156	BMDL				
PFHxA	ug/L	BMDL	BMDL	PFOA	ug/L	BMDL	BMDL				
PFBA	ug/L	BMDL	BMDL	PFUnA	ug/L	BMDL	BMDL				
PFESAA	ug/L	BMDL	BMDL	NETFOSAA	ug/L	BMDL	BMDL				

### PFAS Compounds

CONTAMINANT	Well 2	Well 5, 6, 7	UNITS	CONTAMINANT	Well 2	Well 5, 6, 7	UNITS	CONTAMINANT	Well 2	Well 5, 6, 7	UNITS
11Cl-PF3OUds	<0.019	<0.019	ug/L	Perfluorodecanoic Acid	<0.019	<0.019	ug/L	Perfluorooctanoic Acid	0.005	0.0058	ug/L
9Cl-PF3ONS	<0.019	<0.019	ug/L	Perfluorohexanoic Acid	0.0039	0.0031	ug/L	Perfluorotetradecanoic Acid	<0.019	<0.019	ug/L
ADONA	<0.019	<0.019	ug/L	Perfluorododecanoic Acid	<0.019	<0.019	ug/L	Perfluorotridecanoic Acid	<0.019	<0.019	ug/L
HFPO-DA	<0.019	<0.019	ug/L	Perfluoroheptanoic Acid	0.0024	0.0021	ug/L	Perfluoroundecanoic Acid	<0.019	<0.019	ug/L
NETFOSAA	<0.019	<0.019	ug/L	Perfluorohexanesulfonic Acid	0.0068	0.0028	ug/L				
NMeFOSAA	<0.019	<0.019	ug/L	Perfluorononanoic Acid	<0.019	<0.019	ug/L				
Perfluorobutanesulfonic Acid	0.052	0.0036	ug/L	Perfluorooctanesulfonic Acid	0.052	0.021	ug/L				

The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or ADEM requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

Table of Detected Drinking Water Contaminants								
CONTAMINANT	MCLG	MCL	Range			Amount Detected		Likely Source of Contamination
<b>Bacteriological Contaminants January - December 2023</b>								
Total Coliform Bacteria	0	< 5%				ND	Present or Absent	Naturally present in the environment
Turbidity	0	TT				0.12	NTU	Soil runoff
Fecal Coliform & E. coli	0	0				ND	Present or Absent	Human and animal fecal waste
Viruses, Giardia	0	TT				0	Present or Absent	Human and animal fecal waste
Legionella	0	TT				0	Present or Absent	Found naturally in water, multiplies in heating systems
<b>Radiological Contaminants January - December 2020</b>								
Beta particle and photon	0	4				ND	mrem/yr	Decay of natural and man-made deposits
Alpha emitters	0	15				3.40	pCi/L	Erosion of natural deposits
Combined Radium 226 & 228	0	5				0.70	pCi/L	Erosion of natural deposits
Uranium	0	30				ND	pCi/L	Erosion of natural deposits
<b>Inorganic Contaminants January - December 2023</b>								
Barium	2	2	ND	-	0.02	0.02	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chlorine	MRDLG 4	MRDL 4	1.90	-	2.03	2.03	ppm	Water additive used to control microbes
Chromium	100	100	ND	-	0.01	0.01	ppb	Discharge from steel and pulp mills erosion of natural deposits
Copper	1.3	10 Sites AL=1.3	No. of Sites above action level 0			1.09	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	0	10 Sites AL=15	No. of Sites above action level 0			0.005	ppb	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as N)	10	10	0.47	-	0.48	0.48	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as N)	1	1	ND	-	ND	ND	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Total Nitrate & Nitrite	10	10	0.47	-	0.48	0.48	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
<b>Organic Contaminants January - December 2023</b>								
cis-1,2-Dichloroethylene	70	70	ND	-	0.90	0.90	ppb	Discharge from industrial chemical factories
Haloacetic Acids (HAA5)	0	60	ND	-	ND	ND	ppb	By-product of drinking water chlorination
Tetrachloroethylene	0	5	0.80	-	0.90	0.90	ppb	Leaching from PVC pipes; discharge from factories and dry cleaners
Total Organic Carbon (TOC)	N/A	TT	ND	-	9.20	9.20	TT	Naturally present in the environment
Total trihalomethanes (TTHM)	0	80	12.30	-	17.70	17.70	ppb	By-product of drinking water chlorination
<b>Secondary Contaminants January - December 2023</b>								
Aluminum	N/A	0.2	ND	-	0.00	.004	ppm	Erosion of natural deposits or as a result of treatment with water additives
Chloride	N/A	250	6.42	-	11.00	11.00	ppm	Naturally occurring in the environment or as a result of agricultural runoff
Copper	N/A	1	0.007	-	0.013	0.013	ppm	Erosion of natural deposits; leaching from pipes
Iron	N/A	0.3	ND	-	ND	ND	ppm	Erosion of natural deposits
Magnesium	N/A	0.05	2.55	-	2.73	2.73	ppm	Erosion of natural deposits
Sulfate	N/A	250	15.00	-	16.20	16.20	ppm	Naturally occurring in the environment
Total Dissolved Solids	N/A	500	96.00	-	212.00	212.00	ppm	Erosion of natural deposits
Zinc	N/A	5	ND	-	ND	ND	ppm	Erosion of natural deposits
<b>Special Contaminants January - December 2023</b>								
Calcium	N/A	N/A	64.50	-	66.50	66.50	ppm	Erosion of natural deposits
Carbon Dioxide	N/A	N/A	60.00	-	71.00	71.00	ppm	Erosion of natural deposits
Manganese	N/A	N/A	ND	-	ND	ND	ppm	Erosion of natural deposits
pH	N/A	N/A	6.84	-	7.21	7.21	SU	Naturally occurring in the environment or as a result of treatment with water additives
Sodium	N/A	N/A	2.48	-	2.69	2.69	ppm	Naturally occurring in the environment
Specific Conductance	N/A	<500	320.00	-	330.00	330.00	umhos	Naturally occurring in the environment or as a result of treatment with water additives
Temperature	N/A	N/A	ND	-	ND	ND	-c	Naturally occurring in the environment
Total Alkalinity	N/A	N/A	150.00	-	180.00	180.00	ppm	Erosion of natural deposits
Total Hardness (as CaCO3)	N/A	N/A	172.00	-	177.00	177.00	ppm	Naturally occurring in the environment or as a result of treatment with water additives
<b>Unregulated Contaminants January - December 2023</b>								
TCE - Trichloroethene	N/A	N/A	ND	-	0.00	0.00	ppm	Discharge from textile-finishing factories
Bromodichloromethane	N/A	N/A	ND	-	0.00	0.00	ppb	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff; by-product of chlorination

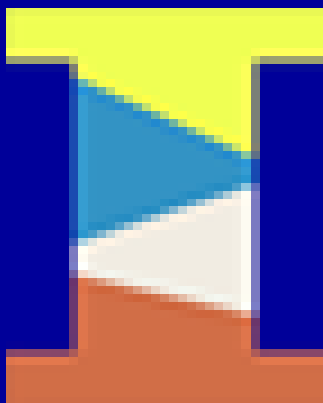
## IRONDALE WATER SYSTEM

Irondale Water System  
1801 Crestwood Blvd.  
Irondale, AL 35210

Phone: (205) 951-1410  
Hours: 7:00am - 5:00pm  
Monday - Thursday

*Thank you,  
our customers!*

Please be sure to download the Irondale mobile app to stay updated on everything happening and the latest news in the City of Irondale.



**Total Coliform:** The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio. To comply with the stricter regulation, we have increased the average amount of chlorine in the distribution system.

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.

Some people may be more vulnerable to contaminants in drinking water than the general population. People who are immuno-compromised 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 for 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).

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 Irondale 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. 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>.

### A Message from the Manager

**It is the mission of the Irondale Water System to provide every customer with a dependable supply of drinking water. We pride ourselves on being good stewards of the community as you have entrusted us with the most valuable resource on earth. If you see any standing water around your meter box or in the street, please contact our office at (205) 951-1410. Standing water can be a sign of a leak or a potential health hazard, so your prompt reporting is crucial. We appreciate your assistance and look forward to serving you.**

**Thank You,  
Jared Morris**

## A MESSAGE FROM YOUR MAYOR

Thank you for allowing us the privilege of providing your family with quality water. It is my pleasure to provide this annual report on the City's Water System.

Our employees work very hard to provide you with the highest quality water available at the best price possible. We at the City of Irondale, work around the clock to provide quality

water to every tap. We ask that all our customers help protect our water sources, which are the heart of our community, way of life, and our children's future.

*James D. Stewart, Jr.*

*Mayor*