



IRONDALE WATER SYSTEM

Mayor James D. Stewart, Jr.
Superintendent

Councilor
John London
District 1

Council President
David Spivey
District 2

Councilor
Cindy Cuellar
District 3

Councilor
Robert Box
District 4

Council Pro-Tempore
Bobby Joe Wilson
District 5

Is My Water Safe?

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. Your Local Water officials vigilantly safeguard its water supplies and once again we are proud to report that our system has not violated a maximum contaminant level or any other water quality standards.

Irondale Water System has a total of 4 wells that serve the entire city. We have 4 storage tanks with the capacity to store 4,105,000 gallons of water. Irondale water system pumps around 32 million gallons of water monthly. We currently serve 3,390 customers.

The Irondale Water System routinely monitors for contaminants in your drinking water according to Federal and State laws. The table on the following pages shows the results of our monitoring for the period of January 1, 2020 to December 31, 2020. 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 EPA'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 good safe 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 source.

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 one 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 addition of a disinfectant is necessary for control of microbial contaminants.

Variations and Exemptions - The Department or EPA permission not to meet an MCL or a treatment technique under certain conditions

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 requirement a water system shall 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.

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
Bacteriological			Selenium(ppb)	50	ND	Epichlorohydrin	TT	ND
Total Coliform Bacteria	< 5%	ND	Thallium(ppb)	2	ND	Ethylbenzene(ppb)	700	ND
Turbidity	TT	0.13	Organic Chemicals			Ethylene dibromide(ppt)	50	ND
Fecal Coliform & E. coli	0	ND	Acrylamide	TT	ND	Glyphosate(ppb)	700	ND
Radiological			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	ND	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
Inorganic			Carbon Tetrachloride(ppb)	5	ND	Lindane(ppt)	200	ND
Antimony (ppb)	6	ND	Chlordane(ppb)	2	ND	Methoxychlor(ppb)	40	ND
Arsenic (ppb)	10	0.00	Chlorobenzene(ppb)	100	ND	Oxamyl [Vydax](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	0.00
Chlorine (ppm)	4	2.05	1,1-Dichloroethylene(ppb)	7	ND	Toluene (ppm)	1	ND
Chlorine dioxide(ppb)	800	ND	Cis-1,2-Dichloroethylene(ppb)	70	0.00	TOC	TT	0.40
Chlorite(ppm)	1	ND	trans-1,2-Dichloroethylene(ppb)	100	ND	TTHM(ppb)	80	7.00
Chromium (ppb)	100	0.01	Dichloromethane(ppb)	5	ND	Toxaphene(ppb)	3	ND
Copper (ppm)	AL=1.3	1.18	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	3.00	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	1.12	Diquat(ppb)	20	ND	Vinyl Chloride(ppb)	2	ND
Nitrite (ppm)	1	ND	Endothal(ppb)	100	ND	Xylenes(ppm)	10	ND
Total Nitrate & Nitrite	10	1.12	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
Secondary								
Aluminum	0.2	0.00	Foaming Agents	0.5	ND	Silver	7	ND
Chloride	250	11.00	Iron	0.3	0.32	Sulfate	70	19.6
Color (PCU)	15	ND	Magnesium	75	2.82	Total Dissolved Solids	500	320
Copper	1	0.064	Odor (T.O.N.)	5	ND	Zinc	5	ND
Special								
Calcium	N/A	72.60	pH (SU)	N/A	7.45	Temperature (*C)	N/A	ND
Carbon Dioxide	N/A	28	Sodium	N/A	3.81	Total Alkalinity	N/A	204
Manganese	0.05	ND	Specific Conductance (umhos)	<500	421.00	Total Hardness (as CaCO3)	N/A	230
Unregulated								
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	0.00	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	0.00	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	Fluorotrichloromethane	N/A	ND	Tert - Butylbenzene	N/A	ND
PFAS Compounds								
CONTAMINANT	RESULTS	UNITS	CONTAMINANT	RESULTS	UNITS	CONTAMINANT	RESULTS	UNITS
11Cl-PF3OUds	ND	ug/L	Perfluorodecanoic Acid	ND	ug/L	Perfluorooctanoic Acid	0.0027	ug/L
9Cl-PF3ONS	ND	ug/L	Perfluorohexanoic Acid	0.0022	ug/L	Perfluorotetradecanoic Acid	ND	ug/L
ADONA	ND	ug/L	Perfluorododecanoic Acid	0.0013	ug/L	Perfluorotridecanoic Acid	ND	ug/L
HFPO-DA	ND	ug/L	Perfluoroheptanoic Acid	0.00099	ug/L	Perfluoroundecanoic Acid	ND	ug/L
NEIFOSAA	ND	ug/L	Perfluorohexanesulfonic Acid	0.0023	ug/L	Total PFAS	ND	ug/L
NMeFOSAA	ND	ug/L	Perfluorononanoic Acid	ND	ug/L			ug/L
Perfluorobutanesulfonic Acid	0.0016	ug/L	Perfluorooctanesulfonic Acid	0.019	ug/L			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			Detected		Likely Source of Contamination
Bacteriological Contaminants January - December 2020								
Total Coliform Bacteria	0	< 5%				ND	Present or Absent	Naturally present in the environment
Turbidity	0	TT				0.13	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
Radiological Contaminants January - December 2018								
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
Inorganic Contaminants January - December 2018-2020								
Antimony	6	6	ND	-	ND	ND	ppb	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic	0	10	ND	-	ND	ND	ppb	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Asbestos	7	7	ND	-	ND	ND	MFL	Decay of asbestos cement water mains; Erosion of natural deposits
Barium	2	2	ND	-	0.02	0.02	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Bromate	0	10	ND	-	ND	ND	ppb	By-product of drinking water chlorination
Chloramines	MRDL G 4	MRDL 4	ND	-	ND	ND	ppm	Water additive used to control microbes
Chlorine	MRDL G 4	MRDL 4	1.70	-	2.05	2.05	ppm	Water additive used to control microbes
Chlorine Dioxide	MRDL G 800	MRDL 800	ND	-	ND	ND	ppb	Water additive used to control microbes
Chlorite	0.8	1	ND	-	ND	ND	ppm	By-product of drinking water chlorination
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			1.18	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Cyanide	200	200	ND	-	ND	ND	ppb	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Fluoride	4	4	ND	-	ND	ND	ppm	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Lead	0	10 Sites AL=15	No. of Sites above action level 0			3.00	ppb	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as N)	10	10	0.64	-	1.12	1.12	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	0.64	-	1.12	1.12	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	50	50	ND	-	ND	ND	ppb	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Organic Contaminants January - December 2020								
cis-1,2-Dichloroethylene	70	70	ND	-	0.00	0.00	ppb	Discharge from industrial chemical factories
Haloacetic Acids (HAA5)	0	60	ND	-	ND	ND	ppb	By-product of drinking water chlorination
Tetrachloroethylene	0	5	ND	-	0.00	0.00	ppb	Leaching from PVC pipes; discharge from factories and dry cleaners
Total Organic Carbon (TOC)	N/A	TT	ND	-	0.40	0.40	TT	Naturally present in the environment
Total trihalomethanes (TTHM)	0	80	2.90	-	10.30	7.0avg	ppb	By-product of drinking water chlorination
Secondary Contaminants January - December 2020								
Aluminum	N/A	0.2	ND	-	0.00	0.00	ppm	Erosion of natural deposits or as a result of treatment with water additives
Chloride	N/A	250	3.70	-	11.00	11.00	ppm	Naturally occurring in the environment or as a result of agricultural runoff
Color	N/A	15	ND	-	ND	ND	PCU	Naturally occurring in the environment or as a result of treatment with water additives
Copper	N/A	1	0.07	-	0.06	0.06	ppm	Erosion of natural deposits; leaching from pipes
Foaming Agents	N/A	0.5	ND	-	ND	ND	ppm	Naturally occurring in the environment
Iron	N/A	0.3	ND	-	0.32	0.32	ppm	Erosion of natural deposits
Magnesium	N/A	0.05	ND	-	ND	ND	ppm	Erosion of natural deposits
Odor	N/A	3	ND	-	ND	ND	T.O.N.	Naturally occurring in the environment or as a result of treatment with water additives
Silver	N/A	0.1	ND	-	ND	ND	ppm	Erosion of natural deposits
Sulfate	N/A	250	ND	-	19.60	19.60	ppm	Naturally occurring in the environment
Total Dissolved Solids	N/A	500	ND	-	320.00	320.00	ppm	Erosion of natural deposits
Zinc	N/A	5	ND	-	ND	ND	ppm	Erosion of natural deposits
Special Contaminants January - December 2020								
Calcium	N/A	N/A	ND	-	72.60	72.60	ppm	Erosion of natural deposits
Carbon Dioxide	N/A	N/A	ND	-	28.00	28.00	ppm	Erosion of natural deposits
Manganese	N/A	N/A	ND	-	ND	ND	ppm	Erosion of natural deposits
pH	N/A	N/A	ND	-	7.45	7.45	SU	Naturally occurring in the environment or as a result of treatment with water additives
Sodium	N/A	N/A	ND	-	3.81	3.81	ppm	Naturally occurring in the environment
Specific Conductance	N/A	<500	ND	-	421.00	421.00	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	ND	-	204.00	204.00	ppm	Erosion of natural deposits
Total Hardness (as CaCO3)	N/A	N/A	ND	-	230.00	230.00	ppm	Naturally occurring in the environment or as a result of treatment with water additives
Unregulated Contaminants January - December 2020								
TCE - Trichloroethene	N/A	N/A	ND	-	0.00	0.00	ppm	Discharge from textile-finishing factories
Bromodichloromethane	N/A	N/A	ND	-	0.01	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
5415 Beacon Drive Suite 123
Irondale, AL 35210

Phone: (205) 951-1410
Hours: 8:00am - 5:00pm
Monday - Friday

Thank you!

MCLs are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water everyday at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.



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 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).

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 your Utilities Manager:

Providing you with a dependable supply of the best water available is our main priority. We work diligently to ensure that our system is operating at an optimal level. Therefore, if you see any standing water around your meter box or in the street, please contact Irondale Water System at (205) 951-1410. We appreciate any and all assistance from you, the customer. The sooner we can repair leaks in our system, the more efficient our wells can perform.

Thank You,
Jared Morris

Message from the Mayor

Dear Citizen,

Thank you for allowing us to continue providing your family with clean, quality water. Providing you with this Annual Report on our water quality is an important part of our mission to keep citizens informed and engaged. Our employees work diligently every day to provide you with highest quality water while being fiscally responsible and passing cost savings along to you. Please visit www.CityofIrondaleAL.gov to sign up to receive email updates and help us to build community in the City of Irondale.

Mayor James D. Stewart, Jr.



The City of Irondale's water was ranked 2nd Overall in the State of Alabama for water taste.