Irondale Water System

Irondale, Alabama

PWSID: 0000751

205-951-1410

2013 Annual Drinking Water Quality Report

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 amount 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.

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. 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.

Notes:

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.

**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, is more than one year old.

Table of Primary Contaminants

At high levels, primary contaminants are known to pose health risks to humans. This table includes results of all primary contaminant monitoring

CONTAMINANT	MCL	Amount Detected	CONTAMINANT	MCL	Amount Detected
Bacteriological			Endothall	100 ppb	ND
Total Coliform Bacteria	< 5%	ND	Endrin	2 ppb	ND
Turbidity	TT	1.1	Epichlorohydrin	TT	ND
Radiological			Glyphosate	700 ppb	ND
Beta/photon emitters (mrem/yr)	4	ND	Heptachlor	400 ppt	ND
Alpha emitters (pCi/L)	15	1.3	Heptachlor epoxide	200 ppt	ND
Combined radium (pCi/L)	5	0.4	Hexachlorobenzene	1 ppb	ND
Inorganic			Lindane	200 ppt	ND
Antimony (ppb)	6 ppb	ND	Methoxychlor	40 ppb	ND
Arsenic (ppb)	10 ppb	ND	Oxamyl [Vydate]	200 ppb	ND
Barium (ppm)	2 ppm	0.024	PCBs	500 ppt	ND
Beryllium (ppb)	4 ppb	ND	Pentachlorophenol	1 ppb	ND
Cadmium	5 ppb	ND	Picloram	500 ppb	ND
Chromium	100 ppb	0.003	Simazine	4 ppb	ND
Copper *	AL = 1.3 ppm	0.46	Toxaphene	3 ppb	ND
Cyanide	200 ppb	ND	Benzene	5 ppb	ND
Fluoride	4 ppm	ND	Carbon Tetrachloride	5 ppb	ND
Lead (ppb) *	AL = 15	3	Chlorobenzene	100 ppb	ND
Mercury	2 ppb	ND	Dibromochloropropane	200 ppt	ND
Nitrate	10 ppm	1.18	0-Dichlorobenzene	600 ppb	ND
Nitrite	1 ppm	ND	p-Dichlorobenzene	75 ppb	ND
Selenium	50 ppb	ND	1,2-Dichloroethane	5 ppb	ND
Thallium	2 ppb	ND	1,1-Dichloroethylene	7 ppb	ND
*90th percentile of the most recent sampling event. 3 sampling sites exceeded the Copper action level.			Cis-1,2-Dichloroethylene	70 ppb	1.1
Organic Chemicals			trans-1,2-Dichloroethylene	100 ppb	ND
2,4-D	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	1.3
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	1.5
Di-(2-ethylhexyl)phthalates	6 ppb	ND	TTHM	80 ppb	18.3
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	0.5
HAA5(ppb)	60 ppb	ND	Chlorine	4 ppm	2.01

Unregulated Contaminants Table

CONTAMINANT	Low Result, PPM	High Result, PPM	CONTAMINANT, PPM	Low Result, PPM	High Result, PPM
1,1 - Dichloropropene	ND	ND	Chloroform	ND	0.0074
1,1,1,2-Tetrachloroethane	ND	ND	Chloromethane	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	Dibromochloromethane	ND	0.0037
1,1-Dichloroethane	ND	ND	Dibromomethane	ND	ND
1,2,3 - Trichlorobenzene	ND	ND	Dicamba	ND	ND
1,2,3 - Trichloropropane	ND	ND	Dichlorodifluoromethane	ND	ND
1,2,4 - Trimethylbenzene	ND	ND	Dieldrin	ND	ND
1,3 - Dichloropropane	ND	ND	Hexachlorobutadiene	ND	ND
1,3 - Dichloropropene	ND	ND	p-Isoprpylbenzene	ND	ND
1,3,5 - Trimethylbenzene	ND	ND	M-Dichlorobenzene	ND	ND
2,2 - Dichloropropane	ND	ND	Methomyl	ND	ND
3-Hydroxycarbofuran	ND	ND	MTBE	ND	ND
Aldicarb	ND	ND	Metolachlor	ND	ND
Aldicarb Sulfone	ND	ND	Metribuzin	ND	ND
Aldicarb Sulfoxide	ND	ND	N - Butylbenzene	ND	ND
Aldrin	ND	ND	Naphthalene	ND	ND
Bromobenzene	ND	ND	N-Propylbenzene	ND	ND
Bromochloromethane	ND	ND	O-Chlorotoluene	ND	ND
Bromodichloromethane	ND	0.0062	P-Chlorotoluene	ND	ND
Bromoform	ND	0.0019	P-Isopropyltoluene	ND	ND
Bromomethane	ND	ND	Propachlor	ND	ND
Butachlor	ND	ND	Sec - Butylbenzene	ND	ND
Carbaryl	ND	ND	Tert - Butylbenzene	ND	ND
Chloroethane	ND	ND	Trichlorfluoromethane	ND	ND

Table of Detected Contaminants

CONTAMINANT	MCLG	MCL	Range Detected			Amount Detected		Likely Source of Contamination
Bacteriological			**min**		**max**			
Turbidity	N/A	TT	0.1	-	1.1	0.6	TT	Soil Runoff
Radiological			**min**		**max**			
Alpha Emitters	0	15	ND	-	1.3	1.3	pCi/L	Erosion of natural deposits
Combined Radium	0	5	ND	-	0.4	0.4	pCi/ L	Erosion of natural deposits
Inorganic Chemicals			**min**		**max**			
Barium	2	2	0.021	-	0.024	0.023	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	100	100	ND	-	0.003	0.002	ppb	Discharge from steel and pulp mills; erosion of natural deposits
Copper	1.3	AL=1.3	0.21	-	0.54	0.38	ppm	Corrosion of household plumbing systems; 90th % value from Pb & Cu study. Erosion of natural deposits; leaching from wood preservatives
Lead	0	AL=15	ND	-	7	4	ppb	Corrosion of household plumbing systems; erosion of natural deposits (90th Percentile Value)
Nitrate	10	10	0.49	-	1.18	0.84	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Organic Chemicals			**min**		**max**			
TTHM ++	0	80	13.4	-	18.3	15.9	ppb	By-product of drinking water chlorination
Cis-1,2-Dichloroethlene	70	70	ND	-	1.1	0.55	ppb	Discharge from chemical factories
Tetrachloroethylene	0	5	ND	-	1.3	0.65	ppb	Leaching from PVC pipes; discharge from factories and dry cleaners
Trichloroethylene	0	5	ND	-	0.15	0.08	ppb	Discharge from metal degreasing sites and other factories
TOC	TT	TT	0.4	-	0.5	0.45	ppm	Runoff from industrial, urban and natural soils; Decomposition of plant material in surface water
Chlorine		4	1.07	-	2.01	1.54	ppm	Drinking water additive for bacterial disinfection

Secondary Drinking Water Standards Table

Parameters (mg/L)	MCLG	MCL	Low Result	High Result	Parameters (mg/L)	MCLG	MCL	Low Result	High Result
pH	7	Monitored	7.1	7.8	Aluminum	0	0.2	0.001	0.004
Color, APHA (units)	N/A	15	ND	ND	Copper	N/A	1	0.04	0.085
Odor	N/A	3	ND	ND	Iron	0	0.3	0.093	0.138
Foaming Agents	N/A	0.5	ND	ND	Manganese	0	0.05	ND	0.001
TDS	0	500	190	270	Silver	0	0.1	ND	ND
Fluoride	N/A	2.0	ND	ND	Zinc	0	5	0.002	0.004
Sulfate	0	250	11.4	18.9	Total Hardness	0	Monitored	183	264
Chloride	N/A	250	5.69	13.3	Corrosivity	N/A	N/A	Corrosive	Non Corrosive

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 micobial 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.

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.

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

ND: Not detectable at testing limits.

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

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

pCi/L (or picocuries per liter): a measure of radioactivity.

FDA: Food and Drug Administration.

CDC: Centers for Disease Control.

EPA: Environmental Protection Agency.

ADEM: Alabama Department of Environmental Management.

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What's the Quality of My Water?

The Irondale Water System provides clean water to your community and helps to keep you and your family healthy. We take this mission very seriously. Our constant goal is to provide you with a safe and dependable supply of drinking water. Each year, the U.S. Environmental Protection Agency (EPA) and the state of Alabama require all water suppliers to prepare reports like this one. This report covers January 1 through December 31, 2013.

A Message from your Mayor

I am pleased to provide this annual report on your water system. Although the United States Environmental Protection Agency requires this annual Consumer Confidence Report. I'd like to take this as an opportunity to update you on our water quality, system improvements and overall condition of the water in the City of Irondale.

We work hard to provide you with safe, dependable water at a fair price. As you will see in this report, your water quality once again meet and exceeds ***ALL*** regulations set by the EPA and the State of Alabama Department of Environmental Management. We are able to use several wells that are tapped deep into the aquifers located throughout Irondale to provide you with clean, fresh water. The ground actually serves as a natural filter removing many of the contaminants normally found in drinking water sources. So we are able to provide you with water without adding most of the chemicals required to treat water in other systems. You can be assured you are getting the cleanest water possible.

As Mayor and Superintendent of your water system, I'm dedicated to making sure you will always have plenty of water for your needs. Irondale's water systems is not a giant utility. We provide water to roughly three thousand customers located in Irondale. However, our aquifers are sound and we can provide more than enough water for our customers. In fact, we have ***NEVER*** asked our customers to restrict your water as a result of a drought or lack of water. Therefore, we are in a position to provide you with continuous water service now and in the future.

I firmly believe that we must provide a ***REAL VALUE*** with the water we serve. To me, value means high quality water, dependable service, outstanding customer care and price. We are fortunate and blessed with a plentiful supply of clean, safe water. And we must work hard on delivering you with outstanding care and low water rates. I am pleased that our prices continue to be among the lowest when compared to other water systems in the area. In fact, a recent survey shows that Irondale is ***lowest*** at several usage levels. We have made many improvements in the area of customer care. These improvements will assure you with state of the art technologies that will allow us to serve you better, faster and efficiently for many years. We all can certainly be proud of our water system here in Irondale.

Your Mayor,
Tommy Joe Alexander

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 insure that our system is operating at its 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.

Our new automated water meter reading system that we installed in 2012 has proven to be of great assistance. It automatically collects consumption, diagnostic, and status data from water meters in Irondale and transfers that data to a central database for billing, troubleshooting, and analyzing. The new system allows us to collect the meter readings more efficiently and effectively.

We hope you have found our new billing format and our new customer information system to be useful. We are working hard to transition the Irondale Water System to a modern and efficient organization. We would like to thank you for your patience and your assistance during this change.

If you have any concerns or questions about water quality, this report, or to report leaks, please contact Ronnie Burns at 205-951-1410. We want our valued customers to be informed about their water quality. If you want to learn more, please attend any of our regularly scheduled meetings. The City Council serves as our water board and holds meetings on the first and third Tuesday of each month at 7:00 PM in the Council Chamber of the Irondale City Hall. Our water offices are located at 5415 Beacon Drive Suite 123, Irondale AL.

Irondale Water System:
Tommy Joe Alexander, Mayor/ Superintendent
John W. London, Board Member
Donna Pike, Board Member
Craig Sanderson, Board Member
Terry Bearden, Board Member
Bobby Joe Wilson, Board Member

Employees:
Ronnie Burns, Water Distribution Supervisor
Suzanne Headley, Administrative Assistant
Kenneth Clough, Pollution Control Technician
Terrell Covington, Service Worker
Timothy Johnson, Service Helper
Willie Williamson, Laborer

The Irondale Water Works has completed a Source Water Assessment (SWA). The SWA is designed to tell us certain information about our source water so that we as a water service and you as a water consumer can better preserve and protect our source water. For more information on the SWA, please contact Ronnie Burns at 205-951-1410.