# City of Pell City Water Works 1905 First Avenue North \* Pell City, Alabama 35125 PWS ID #0001204

# 2019 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, EPA prescribes regulations that limit the amounts of certain contaminants in water provided by public water systems. Food and Drug Administration 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:

<u>Microbial contaminants</u>, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife. <u>Inorganic contaminants</u>, 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. <u>Pesticides and herbicides</u>, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses. <u>Organic chemical contaminants</u>, 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. <u>Radioactive contaminants</u>, 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. The City of Pell City Water Works 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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

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

accordance with the regulatory schedu	Contaminants Mo	nitored		Date Mo	onitored
Inorganic Compounds		Interou			\$ 2018
Lead and Copper				20	18
Microbiological Contaminants				Cur	
Nitrates					19
Radioactive Contaminants		20			
Synthetic Organic Contaminants (including	2018				
Volatile Organic Contaminants	2018				
Disinfection By-products (TTHM and HAA5)				20	19
		of Primary Drinking W			
CONTAMINANT	MCL	Amount Detected	CONTAMINANT	MCL	Amount Detected
Bacteriological			Endothall	100 ppb	ND
Total Coliform Bacteria	< 5%	ND	Endrin	2 ppb	ND
Turbidity	TT	2.2	Epichlorohydrin	TT	ND
Radiological			Glyphosate	700 ppb	ND
Beta/photon emitters (mrem/yr)	4	ND	Heptachlor	400 ppt	ND
Alpha emitters (pCi/L)	15	ND	Heptachlor epoxide	200 ppt	ND
Combined radium (pCi/L)	5	ND	Hexachlorobenzene	1 ppb	ND
Inorganic			Lindane	200 ppt	ND
Antimony	6 ppb	ND	Methoxychlor	40 ppb	ND
Arsenic	10 ppb	ND	Oxamyl [Vydate]	200 ppb	ND
Barium	2 ppm	0.030	PCBs	500 ppt	ND
Beryllium	4 ppb	ND	Pentachlorophenol	1 ppb	ND
Cadmium	5 ppb	ND	Picloram	500 ppb	ND
Chromium	100 ppb	0.004	Simazine	4 ppb	ND
Copper *	AL=1.3 ppm	0.17	Toxaphene	3 ppb	ND
Cyanide	200 ppb	ND	Benzene	5 ppb	ND
Fluoride Lead *	4 ppm	ND	Carbon Tetrachloride	5 ppb	ND
Mercury	AL=15 ppb	4 ND	Chlorobenzene	100 ppb	ND ND
Nitrate	2 ppb 10 ppm	0.96	Dibromochloropropane 0-Dichlorobenzene	200 ppt 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
	e most recent sampling ev		Cis-1,2-Dichloroethylene	70 ppb	ND
•	e most recent sampling e	vent.			
Organic Chemicals	70.1	ND	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	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
· · · · ·		ND	TTHM		42.8
Di-(2-ethylhexyl)phthalates	6 ppb			80 ppb	
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	2.23
HAA5	60 ppb	38	Chlorine	4 ppm	2.4
	Table of	Unregulated Drinking	Water Contaminants		
CONTAMINANT	Low Result, PPM	High Result, PPM	CONTAMINANT, PPM	Low Result, PPM	High Result, PPM
1,1 - Dichloropropene	ND	ND	Chloroform	0.0103	0.0103
1,1,1,2-Tetrachloroethane	ND	ND	Chloromethane	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	Dibromochloromethane	0.00142	0.00142
1,1-Dichloroethane	ND	ND	Dibromomethane	ND	ND
1,2,3 - Trichlorobenzene 1,2,3 - Trichloropropane	ND ND	ND ND	Dicamba Dichlorodifluoromethane	ND ND	ND ND
1,2,3 - Tricnioropropane 1,2,4 - Trimethylbenzene	ND	ND	Dichlorodifiuorometnane	ND	ND ND
1,2,4 - Trimetnylbenzene 1,3 - Dichloropropane	ND	ND	Hexachlorobutadiene	ND	ND ND
1,3 - Dichloropropane	ND	ND	p-lsoprpylbenzene	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

Bromobenzene

Bromochloromethane

Bromodichloromethane

Bromoform

Bromomethane

Butachlor

Carbaryl

Chloroethane

ND

ND

0.00522

ND

ND

ND

ND

ND

ND

ND

0.00522

ND

ND

ND

ND

ND

N-Propylbenzene

O-Chlorotoluene

P-Chlorotoluene

P-Isopropyltoluene

Propachlor

Sec - Butylbenzene

Tert - Butylbenzene

Trichlorfluoromethane

ND

Table of Secondary Drinking Water Contaminants												
Parameters	MCLG	MCL	Low	Low Result		High Result	Parameters (mg/L)	MCLG	MCL	Low Result	High Result	
рН	7	Monitored	7.0			8.10	Aluminum	0	0.2	ND	ND	
Color, APHA (units)	N/A	15		ND		ND						
Odor	N/A	3	1	١D		ND						
Foaming Agents	N/A	0.5	1	١D		ND	Manganese	0	0.05	ND	ND	
TDS	0	500	1	44		144	Silver	0	0.1	ND	ND	
Fluoride	N/A	2.0		ND		ND	Zinc	0	5	0.18	0.18	
Sulfate	0	250	1	12.1		12.1	Total Hardness	0	Monitored	108	108	
Chloride	N/A	250	14.5			14.5	Corrosivity	N/A	N/A	Non Corrosive	Non Corrosive	
CONTAMINANT	<u> </u>					Primary Drinking Water Contaminants Likely Source of Contamination and Health Affects						
Turbidity	N/A	тт	ND	-	2.2	Soil Runoff.						
Barium	2	2 ppm	0.010	-	0.030	Discharge of drilling wastes; discharge of metal refineries; erosion of natural deposits						
Nitrate	10	10 ppm	0.58	-	0.96	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits						
Copper	1.3	AL= 1.3 ppm	ND	-	0.017	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives						
Lead	15	AL= 15 ppb	ND	-	4	Corrosion of household plumbing systems; erosion of natural deposits						
ТТНМ	N/A	80 ppb	ND	-	42.8	By-product of drinking water chlorination						
HAA5	NA	60 ppb	ND	-	38	By-product of drinking water disinfection						
TOC	N/A	TT	1.47	-	2.23	Naturally present in the environment						
Chlorine	MRDLG=4	MRDL= 4 ppm	0.3	-	2.4	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.

Table of Detected UCMR 4 Contaminants							
Contaminant	Minimum Reporting Level (MRL/ug/L)	Reference Concentration (ug/L)	Range Detected		tected	Additional Information	
Manganese	0.4	300	ND	-	1.4	Naturally occurring element; commercially available in combination with other elements and materials; used in steel production, fertilizer, batteries, and fireworks; drinking water and wastewater treatment chemical; essential nutrient	
Bromochloroacetic Acid	NA	NA	ND	-	2.4	By-products of drinking water chlorination	
Bromodichloroacetic Acid	NA	NA	ND	-	4.0	By-products of drinking water chlorination	
Chlorodibromoacetic Acid	NA	NA	ND	-	0.68	By-products of drinking water chlorination	
Dichloroacetic Acid	NA	NA	ND	-	14.0	By-products of drinking water chlorination	
Monobromoacetic Acid	NA	NA	ND	-	0.57	By-products of drinking water chlorination	
Trichloroacetic Acid	NA	NA	ND	-	14.0	By-products of drinking water chlorination	

#### 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.

Variances 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 peerreviewed 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.

### **City of Pell City Water Works** PWS ID #0001204 www.pell-city.com

## What's the Quality of My Water?

The City of Pell City Water Works has been providing clean water to your community since 1927, helping 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. This report covers January 1 through December 31, 2019. The City of Pell City Water Works drinking water supply surpassed the strict regulations of both the State of Alabama and the U.S. Environmental Protection Agency (EPA), which requires all water suppliers to prepare reports like this every year.

In 2019, our water department distributed 543 million gallons of water to our customers with an average daily pumping of 1.92 million gallons. We sold 543 million gallons of water in 2019. Our water sources are groundwater pumped from four wells that are located throughout the city and surface water from the Coosa Valley Water Authority in Ragland. Both the City of Pell City Water Works and Coosa Valley Water Authority treat your water by using a disinfection process to remove or reduce harmful contaminants that may come from the water sources. The use of zinc-orthophosphate was introduced as a corrosive inhibitor for pipes in the distribution system.

If you have any questions about this report or concerns about your water quality, please contact Joe Harmon at 205-338-3886 during our business hours of 6:00 AM to 2:30 PM. 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. They are held on the second Monday at 6:00 PM and fourth Monday at 6:00 PM of each month at the Pell City, City Hall located at 1905 First Avenue North.

> Mayor, Bill Pruitt City Manager, Brian Muenger **Council President, James McGowan President Pro Tem, Jud Alverson** Council, Jay Jenkins Council. Blaine Henderson Council. Jason Mitcham City Clerk, Penny Isbell

The City of Pell City Water Works has completed a Source Water Assessment Plan (SWAP). The SWAP 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