



ANNUAL WATER QUALITY REPORT

REPORTING YEAR 2019

Dear Valued Customer:

The Water Works and Sewer Board of the City of Prichard is proud to be your local water service provider, and we are pleased to share some good news about the quality of your drinking water. As you read through our Annual Water Quality Report, you will see that we continue to supply water that meets or surpasses all state and federal water quality standards.

The Water Works and Sewer Board of the City of Prichard (PWWS&SB) is issuing this report describing the quality of drinking water supplied to customers of our water system. This report provides an overview of water quality testing data between January and December 2019. Included are details about where your water comes from, what it contains, and how it compares to State and Federal standards.

Because water is essential for public health, fire protection, economic development, and overall quality of life, PWWS&SB's employees are committed to ensuring that quality water keeps flowing, not only today but well into the future.

Please take the time to review this report. Thank you for allowing us to serve you.

V/R,
Nia M. Bradley Water & Sewer Operations Manager

WE KEEP LIFE FLOWING.

If you have any questions about this report or concerns about your drinking water, please contact us:

125 E. Clark Avenue, Prichard, AL 36610

PO Box 10455, Prichard, AL 36610

Customer Call Center: (251) 457-3396

Website: www.prichardwater.com



Where Does My Water Come From?

The water supplied to The Water Works and Sewer Board of the City of Prichard (PWW&SB) comes from the Mobile Area Water and Sewer System (MAWSS) Converse Reservoir, also known as Big Creek Lake. The Water Works and Sewer Board of the City of Prichard has five water storage tanks, cleaned and inspected annually. Over 2,000 fire hydrants are inspected, exercised, and repaired as needed annually. Line flushing, to eliminate aged or discolored water, is done throughout the system in a systematic method to improve water quality. System pressures are checked and maintained to a level that provides satisfactory usage to customers.

Public Meetings

The Water Works and Sewer Board of the City of Prichard has regularly scheduled Board meetings held on the 2nd Monday of each month, promptly at 4:30 p.m. at 125 E. Clark Avenue Prichard, AL 36610, inside our Board Room.

The Board of Directors are:

Nathaniel R. Inge III, Chairperson

John H. Johnson Jr., Vice-Chairperson

Ayanna R. Payton, Secretary

Beverly P. Bunch, Member

Russell J. Heidelberg, Member

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines

on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/hotline>.



Source Water Assessment

A Source Water Assessment Plan (SWAP) is now available. If you would like to review the Source Water Assessment Plan, please feel free to contact our office at (251) 457-3396 during regular office hours.

Lead in Home Plumbing

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. We are responsible for providing high-quality drinking water, but we 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 at (800) 426-4791 or at www.epa.gov/safewater/lead.



QUESTIONS?

The Water Works & Sewer Board of The City of Prichard is committed to providing you with high-quality water. We also understand that occasional concerns may arise. At times, the water may appear cloudy or rusty, or may have an unusual odor. This change in water quality could be caused by various reasons. Construction in the area, in-house water filtration, water system maintenance, recent plumbing work done in your home/business, or seasonal weather-related changes are just a few possibilities. Whatever the reason, we want to address those concerns, which may be conveyed by calling the Water Works and Sewer Board of the City of Prichard Customer Service at (251) 457-3396.

Substances That Could Be in Water

To ensure that tap water is safe to drink, U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which 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.

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. Substances 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, or wildlife; Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may 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 may also come from gas stations, urban storm-water runoff, and septic systems; Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.



Non-detected Contaminants

All primary contaminants are tested by MAWSS, which include microbiological contaminants, radionuclides, inorganic chemicals, organic chemicals (synthetic and volatile), and disinfection by-products. In addition, MAWSS tests for secondary contaminants, unregulated synthetic and volatile organic chemicals, and PCBs.

1,1-Dichloroethane. 4-Chlorotoluene. Isopropylbenzene. 1,1-Dichloropropene. Aldicarb. Manganese. 1,1,2,2-Tetrachloroethane. Aldicarb sulfone. Methyl-tert-butyl ether. Aldicarb sulfoxide. Methomyl. trans-1,3-Dichloropropene. Bromobenzene. Metribuzin. 1,2,3-Trichlorobenzene. Bromochloromethane. Naphthalene. 1,2,3-Trichloropropane. Bromoform. n-Butylbenzene. 1,2,4-Trimethylbenzene. Bromomethane(Methyl bromide). Nickel. Butachlor. n-Propylbenzene. 1,3-Dichlorobenzene. Carbaryl. 1,3,5-Trimethylbenzene. Chloroethane. p-Isopropyltoluene. 1,3-Dichloropropane. Chloromethane. Propachlor. sec-Butylbenzene. Dicamba. Silver. Dibromomethane. tert-Butylbenzene. cis-1,3-Dichloropropene. Dichlorodifluoromethane. Trichlorofluoromethane. 2,2-Dichloropropane. Dieldren. 2-Chlorotoluene. Hexachlorobutadiene. Zinc. 3-Hydroxycarbofuran. Iron. Metolachlor. Aldrin. alpha-Chlordane. Dibromochloromethane. Tetrachloroethene.

The Water Works and Sewer Board of the City of Prichard also tests for:

Dibromoacetic Acid, Monobromoacetic Acid, Bromoform, Dibromochloromethane, alpha-Hexachlorocyclohexane, Butylated Hydroxyl Anisole, Anatoxin-a, Chlorpyrifos, Cyindrospermopsin, Dimethipin, Ethoprop, Microsystin-Total, o-Toluidine, Oxyfluorfen, Permethrins-Total, Profenofos, Quinoline, Tebuconazole, Tribufos, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, 1,1-Dichloroethylene, 1,2,4-Trichlorobenzene, 1,2-Dichloroethane, 1,2-Dichloropropane, 2,4,5-TP [Silvex], 2,4-D, Acrylamide1, Alachlor, Antimony), Arsenic, Asbestos2, Atrazine, Benzene, Benzo(a)pyrene [PAH], Beryllium, Bromate4, Cadmium, Carbofuran, Carbon Tetrachloride, Chloramines4, Chlordane, Chlorobenzene, Chromium, Cyanide, Dalapon, Di(2-ethylhexyl) Adipate, Di(2-ethylhexyl) Phthalate, Dibromochloropropane, Dichloromethane, Dinoseb, Dioxin [2,3,7,8-TCDD]5, Diquat, Endothall, Endrin, Epichlorohydrin6, Ethylbenzene, Ethylene Dibromide, Glyphosate, Heptachlor Epoxide, Heptachlor, Hexachlorobenzene, Hexachlorocyclopentadiene, Lindane, Mercury [inorganic], Methoxychlor, Nitrate, Oxamyl [Vydate], PCBs [Polychlorinated biphenyls], Pentachlorophenol, Picloram, Selenium, Simazine, Styrene, Tetrachloroethylene, Thallium, Toluene, Total Nitrate + Nitrite, Toxaphene, Trichloroethylene, Uranium8, Vinyl Chloride, Xylenes, cis-1,2-Dichloroethylene, o-Dichlorobenzene, p-Dichlorobenzene, trans-1,2-Dichloroethylene



Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule. And, the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels. The State recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

Based on a study conducted by the Department with the approval of the U.S. EPA, a statewide waiver for the monitoring of asbestos and dioxin was issued. Thus, monitoring for any of these contaminants was not required.

We participated in the 4th stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR4) program by performing additional tests on our drinking water. UCMR4 sampling benefits the environment and public health by providing the U.S. EPA with data on the occurrence of contaminants suspected to be in drinking water, in order to determine if U.S. EPA needs to introduce new regulatory standards to improve drinking water quality. Unregulated contaminant monitoring data are available to the public, so please feel free to contact us if you are interested in obtaining that information. If you would like more information on the U.S. EPA's Unregulated Contaminants Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Alpha Emitters (pCi/L)	2019	15	0	0.96	NA	No	NA
Barium (ppm)	2019	2	2	0.03	0.02–0.03	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beta/Photon Emitters ¹ (pCi/L)	2019	50	0	2.14 (See Note 3)	NA	No	NA
Chlorine Dioxide (ppb)	2019	[800]	[800]	310	0–310	No	Water additive used to control microbes
Chlorine (ppm)	2019	[4]	[4]	1.94	0.66–1.94	No	Water additive used to control microbes
Chlorite (ppm)	2019	1	0.8	0.73	0.05–0.73	No	Disinfection by-product
Combined Radium (pCi/L)	2019	5	0	2.51	ND–2.51	No	Erosion of natural deposits
Fluoride (ppm)	2019	4	4	0.64	0.00–1.08	No	Water additive, promoting strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Nitrite (ppm)	2019	1	1	<0.05	NA	No	NA
Total Organic Carbon [TOC] ² (ppm)	2019	TT	NA	1.24	1.24–1.86	No	Naturally present in the environment

Tap Water Samples Collected for Copper and Lead Analyses from Sample Sites throughout the Community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper ³ (ppm)	2019	1.3	1.3	0.013	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservations
Lead ⁴ (ppb)	2019	15	0	<0.005	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2019	250	NA	7.1	7.1–7.1	No	Secondary contaminant
Corrosivity (Units)	2019	Non-corrosive	NA	-2.37	-1.56–-2.37	No	Special Corrosivity Monitoring (MAWSS has implemented a corrosion control program)
pH (Units)	2019	6.5–8.5	NA	8.20	6.50–8.20	No	Special Corrosivity Monitoring (MAWSS has implemented a corrosion control program)
Sulfate (ppm)	2019	250	NA	25.1	19.7–25.1	No	Special Corrosivity Monitoring (MAWSS has implemented a corrosion control program)
Total Dissolved Solids [TDS] (ppm)	2019	500	NA	67	50–67	No	Secondary contaminant

OTHER SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Alkalinity [as CaCO ₃] (ppm)	2019	N/A	N/A	9.2	6.1–9.2	No	Special Corrosivity Monitoring (MAWSS has implemented a corrosion control program)
Aluminum (ppm)	2019	0.2	N/A	0.27	0.12–0.27	No	Secondary contaminant; May cause colored water
Calcium (ppm)	2019	N/A	N/A	15.5	11.9–15.5	No	Special Corrosivity Monitoring (MAWSS has implemented a corrosion control program)
Carbon Dioxide (ppm)	2019	N/A	N/A	5.8	ND–5.8	No	Special Corrosivity Monitoring (MAWSS has implemented a corrosion control program)
Fecal Coliform and <i>E. Coli</i>	2019	0	NA	0	NA	No	NA
Gross Alpha (pCi/L)	2019	15	0	0.96	ND–0.96	No	Erosion of natural deposits
Gross Beta (pCi/L)	2019	50	0	2.14	ND–2.14	No	Erosion of natural deposits
HAA5 (ppb)	2019	60	N/A	31.30	6.2–40.5	No	Disinfection by-product
Hardness as CaCO ₃ (ppm)	2019	N/A	N/A	43.2	33.5–43.2	No	Special Corrosivity Monitoring (MAWSS has implemented a corrosion control program)
Magnesium (ppm)	2019	N/A	N/A	1.1	0.92–1.1	No	Special Corrosivity Monitoring (MAWSS has implemented a corrosion control program)
Orthophosphate as P (ppm)	2019	N/A	N/A	0.22	0.15–0.22	No	Special Corrosivity Monitoring (MAWSS has implemented a corrosion control program)
Sodium (ppm)	2019	N/A	N/A	3.4	3.4–3.4	No	Special Corrosivity Monitoring (MAWSS has implemented a corrosion control program)
Specific Conductance (µmho/cm)	2019	N/A	N/A	89.9	71.6–89.9	No	Special Corrosivity Monitoring (MAWSS has implemented a corrosion control program)
Temperature (C)	2019	N/A	N/A	31	13–31	No	Special Corrosivity Monitoring (MAWSS has implemented a corrosion control program)
Total Trihalomethanes (ppb)	2019	80	N/A	40.85	12.8–47	No	Disinfection by-product
Turbidity (NTU)	2019	0.3	N/A	0.19	0.00–0.19	No	Soil runoff

¹ ADEM allows compliance with this requirement to be assumed without further analysis if the average annual concentration of gross beta particle activity is less than 50 pCi/L and if the average annual concentrations of tritium and strontium-90 are less than the MCL. Gross beta particle activity was tested for and detected at 2.14 pCi/L. Sources of the man-made tritium and strontium-90 are not known to exist in the watershed.

² The value reported under Amount Detected for TOC is the lowest ratio between the percentage of TOC actually removed to the percentage of TOC required to be removed. A value of greater than one indicates that the water system is in compliance with TOC removal requirements. A value of less than one indicates a violation of the TOC removal requirements.

³ The Action Level (AL) for copper is 1.3 ppm at the 90th percentile. Samples were taken at 30 locations throughout the Prichard Water distribution system during the most recent sampling event in 2019 in accordance with applicable regulations. The concentration of copper at the 90th percentile was 0.013 ppm, which was under the Action Level.

⁴ The action Level (AL) for lead is 15 ppb at the 90th percentile. Samples were taken at 30 locations throughout the Prichard Water distribution system during the most recent sampling event in 2019 in accordance with applicable regulations. The concentration of lead at the 90th percentile was <0.005, which was under the Action Level.

Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

LRAA (Locational Running Annual Average): The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters. Amount Detected values for TTHMs and HAAs are reported as the highest LRAAs.

MCL (Maximum Contaminant Level): 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.

MCLG (Maximum Contaminant Level Goal): 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.

MFL (million fibers per liter): A measure of the presence of asbestos fibers that are longer than 10 micrometers.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

ppq (parts per quadrillion): One part substance per quadrillion parts water (or picograms per liter).

ppt (parts per trillion): One part substance per trillion parts water (or nanograms per liter).

SMCL (Secondary Maximum Contaminant Level): These standards are developed to protect aesthetic qualities of drinking water and are not health based.

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

µmho/cm (micromhos per centimeter): A unit expressing the amount of electrical conductivity of a solution.