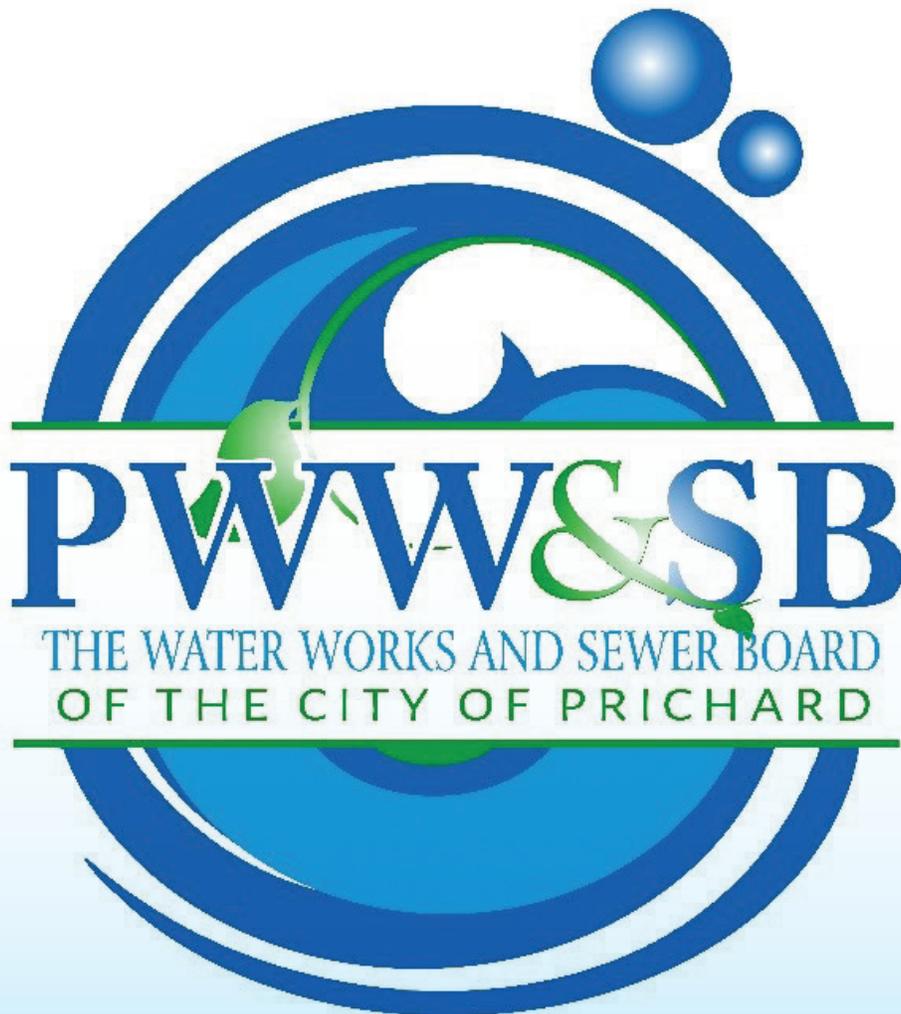


ANNUAL WATER QUALITY REPORT

WATER TESTING PERFORMED IN 2017

Presented By



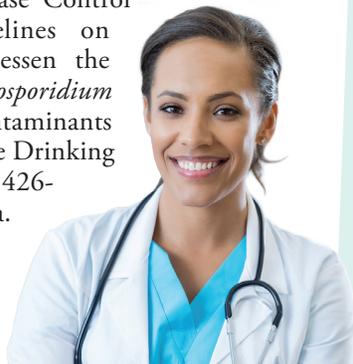
Meeting the Challenge

The Water Works and Sewer Board of Prichard is proud to present our annual Water Quality Report. This report provides important information about your drinking water. We have continued to meet the challenge of providing safe, quality water which meets or exceeds the requirements set forth by the Environmental Protection Agency (EPA) and the Alabama Department of Environmental Management (ADEM).

The Board of the Water Works and Sewer Board of The City of Prichard, Nathaniel Inge III.; Chairperson, John H. Johnson Jr.; Vice-Chairperson, Ayanna R. Payton; Secretary-Treasurer, Beverly P. Bunch; Member, Russel J. Heidelberg; Water and Sewer Operation Manager, Nia Bradley. For more information about your water quality, write: The Water Works and Sewer Board of The City of Prichard, PO Box 10455, Prichard AL 36610. Street address: 125 E. Clark Ave., Prichard AL 36610; telephone: (251) 457-3396; website: www.prichardwater.com.

Important Health Information

The EPA advises: "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>."



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 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 www.epa.gov/lead.

Where Does My Water Come From?

The water supplied to the Water Works and Sewer Board of the City of Prichard (WW&SBP) comes from the Mobile Area Water and Sewer System (MAWSS). 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.

QUESTIONS?

The Water Works and 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 Waterworks 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.

Nondetected Contaminants

MAWSS tests all primary contaminants, 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.

The following were tested for and not detected in our water:

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, Acrylamide, Alachlor, Antimony, Arsenic, Asbestos, Atrazine, Benzene, Benzo(a)pyrene [PAH], Beryllium, Beta/Photon Emitters, Bromate, Cadmium, Carbofuran, Carbon Tetrachloride, Chloramines, Chlordane, Chlorobenzene, Chromium, Cyanide, Dalapon, Di(2-ethylhexyl) Adipate, Di(2-ethylhexyl) Phthalate, Dibromochloropropanem, Dichloromethane, Dinoseb, Dioxin [2,3,7,8-TCDD], Diquat, Endothall, Endrin, Epichlorohydrin, Ethylbenzene, Ethylene Dibromide, Fecal Indicators, Glyphosate, Heptachlor, Epoxide, Heptachlor, Hexachlorobenzene, Hexachlorocyclopentadiene, Lindane, Mercury [inorganic], Methoxychlor, Nitrite, Oxamyl [Vydate], PCBs [Polychlorinated biphenyls], Pentachlorophenol, Picloram, Selenium, Simazine, Styrene, TTHMs [Total Trihalomethanes], Tetrachloroethylene, Thallium, Toluene, Total Coliform Bacteria, Total Organic Carbon, Toxaphene, Trichloroethylene, Turbidity, Uranium, Vinyl Chloride, Xylenes, cis-1,2-Dichloroethylene, o-Dichlorobenzene, p-Dichlorobenzene, trans-1,2-Dichloroethylene, 1,1-Dichloroethane, 4-Chlorotoluene, Isopropylbenzene, 1,1-Dichloropropene, Aldicarb, Manganese, 1,1,1,2-Tetrachloroethane, Idicard, sulfone, Methyl-tert-butyl ether, 1,1,2,2-Tetrachloroethane, Aldicarb, sulfoxide, Methomyl, trans-1,2-Dichloropropene, Bromobenzene, Metribuzin, 1,2,3-Trichlorobenzene, Bromochloromethane, Naphthalene, 1,2,3-Trihalopropane, Bromoform, n-Butylbenzene, 1,2,4-Trimethylbenzene, Bromomethane (Methyl bromide), Nickel, 1,2-Dichloroethane, Butachlor, n-Propylbenzene, 1,2-Dichlorobenzene, Carbaryl o-Xylene, 1,3,5-Trimethylbenzene, Chloroethane, p-Isopropyltoluene, 1,3-Dichlorobenzene, Chloromethane, Propachlor, 1,3-Dichloropropane, Dalapon, sec-Butylbenzene, 1,3-dimethyl-2-nitrobenzene, Dicamba, Silver, 1,4-Dichloropropene, Dibromomethane, tert-Butylbenzene, cis-1,3-Dichloropropene, Dichlorodifluoromethane, Trichlorofluoromethane, 2,2-Dichloropropane, Dieldren, Triphenylphosphate, 2-Chlorotoluene, Hexachlorobutadiene, Zinc, 3-Hydroxycarbofuran, Iron.

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule. The information in the data tables shows only those substances that were detected between January 1 and December 31, 2017. Remember that detecting a substance does not necessarily 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 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.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Barium (ppm)	2017	2	2	0.03	0.1–0.03	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorine Dioxide (ppb)	2017	[800]	[800]	440	0–440	No	Water additive used to control microbes
Chlorine (ppm)	2017	[4]	[4]	1.81	0.53–1.81	No	Water additive used to control microbes
Chlorite (ppm)	2017	1	0.8	0.76	0–0.76	No	By-product of drinking water disinfection
Combined Radium (pCi/L)	2017	5	0	0.99	ND–0.99	No	Erosion of natural deposits
Fluoride (ppm)	2017	4	4	0.60	<0.2–0.6	No	Water additive promoting strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Gross Alpha ¹ (pCi/L)	2017	15	0	1.3	ND–1.3	No	Erosion of natural deposits
Gross Beta ² (pCi/L)	2017	50	0	1.4	ND–1.4	No	Erosion of natural deposits
Haloacetic Acids [HAA] (ppb)	2017	60	NA	38.95	8.3–43.6	No	By-product of drinking water disinfection
Nitrate (ppm)	2017	10	10	0.2	<0.1–0.2	No	Runoff from fertilizer use; Leaching from septic tanks, sewage, Erosion of natural deposits
Total Nitrate and Nitrite (ppm)	2017	10	NA	0.2	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

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%TILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper ³ (ppm)	2017	1.3	1.3	0.03	0/50	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead ⁴ (ppb)	2017	15	0	ND	0/50	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
Aluminum (ppm)	2017	0.2	N/A	0.24	0.14–0.24	No	Secondary contaminant; May cause colored water
Chloride (ppm)	2017	250	NA	8	8–8	No	Runoff/leaching from natural deposits
Corrosivity	2017	Noncorrosive	NA	1.94	-1.60 to -1.94	No	Natural or industrially influenced balance of hydrogen, carbon, and oxygen in the water; Affected by temperature and other factors
Manganese (ppb)	2017	50	NA	1.1	1.0–1.1	No	Special Corrosivity Monitoring (MAWSS has implemented a corrosion control program)
pH (Units)	2017	6.5–8.5	NA	8.50	6.80–8.50	No	Special Corrosivity Monitoring (MAWSS has implemented a corrosion control program)
Sulfate (ppm)	2017	250	NA	24	22–24	No	Special Corrosivity Monitoring (MAWSS has implemented a corrosion control program)
Total Dissolved Solids [TDS] (ppm)	2017	500	NA	71	65–71	No	Runoff/leaching from natural deposits

OTHER SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Alkalinity as CaCO ₃ (ppm)	2017	10	8–10	Special Corrosivity Monitoring (MAWSS has implemented a corrosion control program)
Calcium (ppm)	2017	15.2	12.8–15.2	Special Corrosivity Monitoring (MAWSS has implemented a corrosion control program)
Hardness as CaCO ₃ (ppm)	2017	42.6	36.2–42.6	Special Corrosivity Monitoring (MAWSS has implemented a corrosion control program)
Orthophosphate as P (ppm)	2017	0.21	0.17–0.21	Special Corrosivity Monitoring (MAWSS has implemented a corrosion control program)
Sodium (ppm)	2017	3.75	3.71–3.75	Special Corrosivity Monitoring (MAWSS has implemented a corrosion control program)
Specific Conductance (µmho/cm)	2017	126	108–126	Special Corrosivity Monitoring (MAWSS has implemented a corrosion control program)
Temperature (C)	2017	25	19–25	Special Corrosivity Monitoring (MAWSS has implemented a corrosion control program)

¹A gross alpha particle activity measurement may be substituted for the required Uranium analyses, provided that the measured gross alpha particle activity does not exceed 15 pCi/L. Gross alpha particle activity was tested for and detected at 1.3 pCi/L.

²ADEM allows compliance with this requirement to be assumed without further analysis if the average annual concentration of the 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 1.4 pCi/L. Sources of the man-made tritium and strontium-90 are not known to exist in the watershed.

³The Action Level (AL) for copper is 1.3 ppm at the 90th percentile. Samples were taken at 50 locations throughout the water distribution system. The concentration of copper at the 90th percentile was 0.03 ppm, which was under the Action Level.

⁴The action Level (AL) for lead is 15 ppb at the 90th percentile. Samples were taken at 50 locations throughout the water distribution system. The concentration of lead at the 90th percentile was not detectable, which was under the Action Level.

Surface Water Testing

CONTAMINANTS FOR THE LONG TERM 2 ENHANCED SURFACE WATER TREATMENT RULE (LT2)*

SUBSTANCE (UNIT OF MEASURE)	MINIMUM REPORTING LEVEL	AMOUNT DETECTED
Cryptosporidium (Organisms/L)	0	0
E. coli (MPN**/100 mL)	0	38
Giardia*** (Organisms/L)	0	0

*MAWSS states, "As an amendment to the Safe Drinking Water Act, EPA now requires public water systems that use surface water to monitor for Cryptosporidium and other microbial pathogens in drinking water for 24 consecutive months to determine if additional treatment is needed. Results are from Big Creek Lake. Although Cryptosporidium, Giardia, and E. coli may be occasionally detected in the raw water, it is not an indicator of treated drinking water quality. MAWSS completed the required for months of LT2 sampling in March 2017. Based in the results, additional treatment is not required, but MAWSS will continue to monitor for Cryptosporidium, Giardia, and E. coli."

**Most Probable Number

***Not required to test, but included in study for additional data.

Definitions

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

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

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.

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).

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

SMCL (Secondary Maximum Contaminant Level): SMCLs are established to regulate the aesthetics of drinking water like appearance, taste and odor.

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