



Scottsboro Waterworks, Sewer and Gas Board Scottsboro, Alabama

2015 Water Quality Report

We are once again proud to provide this water quality report for the customers of the Scottsboro Waterworks, Sewer & Gas Board. This is a summary report for hundreds of water samples taken between January 1st and December 31st, 2015. This report meets the Federal Safe Drinking Water Act (SDWA) requirement for "Consumer Confidence Reports" and contains information on the source of our water, its constituents, and the health risks associated with any contaminants. Safe water is a vital part of our community. Please read this report carefully and, if you have questions, call the numbers listed below. We would be pleased to hear your thoughts on the information in this report.

Scottsboro Waterworks, Sewer and Gas Board's drinking water meets or surpasses all federal and state drinking-water standards.

Call us for information about the next opportunity for public participation in decisions about our drinking water at 256.574.1515. More information is available on the World Wide Web at www.epa.gov/drink or the Safe Drinking Water Hotline (800.426.4791)

The Scottsboro Waterworks, Sewer and Gas Board of Directors are Mr. William J. Parks, Chairman; Mr. Tommy Crumbly, Vice-Chairman; Mr. Reid Henshaw, Member; Mrs. Elna Matthews, Member; Mr. Charles Yarbrough, Member; and Mr. Roy E. Light, Secretary/Treasurer. Regular scheduled meetings are every second Tuesday of each month at 4:00 PM held at the Board's business office located at 404 East Willow Street, Scottsboro, Alabama. You are welcome to attend.

OVERVIEW

Water Source

Scottsboro Waterworks, Sewer and Gas Board is supplied by surface water from the Tennessee River and Lake Guntersville Reservoir. The Jones Water Filtration Plant is located at 3001 Veterans Drive (Highway 35) and the North Sauty Creek Water Treatment Plant is located at 5800 Alabama Highway 79.

An Explanation of the Water-Quality Data Table

This report is based upon tests conducted in the year 2015 by the Scottsboro Waterworks, Sewer and Gas Board. Terms used in the Water-Quality Table and in other parts of this report are defined here.

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 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.

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.

KEY TO TABLE

AL = Action Level

CP = Total Coliform Present

MCLG = Maximum Contaminant Level Goal

mrem/year = millirems per year (a measure of radiation absorbed by the body)

pCi/l = picocuries per liter (a measure of radioactivity)

MCL = Maximum Contaminant Level

MDL = Minimum Detection Level

NTU = Nephelometric Turbidity Unit

MFL = million fibers per liter

ppm = part per million or milligrams per liter (mg/l)



Table of Detected Contaminants

Contaminant	Date Tested	Unit	MCL	MCLG	Detected Level	Range	Major Source	Violation
<u>Inorganic Contaminants</u>								
Fluoride	2015	ppm	4.00	4.00	1.28	0.54 - 1.28	Erosion of natural deposits; Water additive which	NO
Nitrate/Nitrite	2015	ppm	10.00	10.00	0.34	0.19 - 0.34	Runoff from fertilizer use; Leaching from Septic tanks, sewage; Erosion of natural deposits.	NO
Chloride	2015	ppm	250.00	N/A	20.50	13.2 - 20.5		NO
Sulfate	2015	ppm	250.00	N/A	20.70	11.6 - 20.7	Erosion of natural deposits	NO
Total Dissolved Solids	2015	ppm	500.00	N/A	152.00	132 - 152		NO
Chlorine	2015	ppm	4.00	4.00	2.20	0.20 - 2.20	Water Additive Used to Control Microbes	NO
Aluminum	2015	ppm	0.20	N/A	0.100	0.070 - 0.100		NO
<u>Microbiological Contaminants</u>								
Turbidity (Footnote 2)	2015	NTU	TT/ 0.300	N/A	0.108	0.014 - 0.108	Soil runoff	NO
<u>Volatile Organic Contaminants</u>								
Total Trihalomethanes [TTHMs]	2015	ppb	80	----	49.70	32.10 - 49.70	By-product of drinking water disinfection	NO
Chloroform	2015	ppb	----	----	49.10	6.29 - 49.10		
Bromodichloromethane	2015	ppb	----	----	13.60	2.96 - 13.60		
Dibromochloromethane	2015	ppb	----	----	3.7	1.04 - 3.70		
Bromoform	2015	ppb	----	----	<1.00	<1.00		
Haloacetic Acids 5 [HAA5s]	2015	ppb	60	----	29.50	17.30 - 29.50	By-product of drinking water disinfection	NO
Monochloroacetic Acid	2015	ppb	----	----	2.69	<2.00 - 2.69		
Monobromoacetic Acid	2015	ppb	----	----	<1.00	<1.00		
Dichloroacetic Acid	2015	ppb	----	----	20.60	3.79 - 20.60		
Trichloroacetic Acid	2015	ppb	----	----	17.70	3.30 - 17.70		
Dibromoacetic Acid	2015	ppb	----	----	<1.00	<1.00		
<u>Additional Sampling</u>								
Calcium	2015	ppm	----	----	25.80	21.9 - 25.8	Erosion of natural deposits	
Sodium	2015	ppm	----	----	9.43	4.90 - 9.43	Erosion of natural deposits	
pH	2015	su	----	----	7.84	7.70 - 7.84	pH identifies the presence of acid or base in water	
Hardness	2015	ppm	----	----	85.10	78.2 - 85.1	Calcium carbonate occurs as erosion of natural deposits	
Magnesium	2015	ppm	----	----	5.71	5.05 - 5.71	Erosion of natural deposits	
Total Alkalinity	2015	ppm	----	----	72.20	61.9 - 72.2	Alkalinity comes from the bicarbonate, hydroxide components of a natural or treated water supply	
Carbon Dioxide	2015	ppm	----	----	2.80	1.4 - 2.8		
Specific Conductance	2015	mhos@25	----	----	220.00	203 - 220		

These tap water samples were collected from over 30 sites throughout our community (Detected Level Reported for 90th percentile)

Lead	2013	ppm	AL=0.015	----	<0.005	<0.005	Corrosion of household plumbing systems; Erosion of natural deposits.	NO
Copper	2013	ppm	AL=1.3	----	0.072	<0.050 - 0.102	Corrosion of household plumbing systems; Erosion of natural deposits.	NO

Lead in drinking water is primarily from materials and components associated with service lines and household plumbing. Scottsboro Water, Sewer and Gas Board is responsible for providing high quality drinking water, but cannot control the variety of materials used in home plumbing. 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 present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. If you are concerned about lead in your water, you may wish to test it. Information on lead in drinking water testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (800.426.4791) or at <http://www.epa.gov/safewater/lead>.

Water Quality Table Footnotes

1 Treatment Technique (TT): Raw water is chemically treated with sodium permanganate at the raw water pumping station, at the filter plant with poly-aluminum chloride as a coagulant, pre-filter and post chlorination for disinfection, fluoride to promote dental health, an inorganic phosphate to control corrosion of metal pipes, and activated carbon is used to control seasonal taste and odor.

Mechanical treatment process includes flash mixing, flocculation, sedimentation, and rapid sand filtration.

2 Turbidity is a measure of clarity, or cloudiness, of water. Turbidity of water is caused by the presence, in suspension, of materials such as clay, silt and organic matter. For many decades turbidity has been used as an indicator of drinking water quality and as an indicator of the efficiency of drinking water coagulation and filtration processes.



L-R: AWPCA President Keith Yarbrough
WSG Business/Plants Manager, Bradley Chandler
WSG Water Plant Superintendent, Jeff Pendergrass



WSG Water Plant Superintendent
Jeff Pendergrass
with AWPCA Representative



WSG Water Plant Chief Operator
Don Wolf
with AWPCA Representative

Scottsboro WSG Board Receives the State's "Best Operated Water Treatment Plant" Award

On August 5, 2015 the Board's Rudolph Skinny Jones Water Plant was recognized with the Alabama Water and Pollution Control Association's "Best Operated Plant Award". This award recognizes the State of Alabama's top water system for strict compliance with water treatment standards. The Board's North Sauty Creek Water Plant also received the association's "Award of Excellence".



Water Treatment Plant Staff

Front L-R

Bill Anderson, Jackie Bryant, Jeff Pendergrass, Don Wolfe, Gary Wright, Bradley Chandler,

Back Row L-R

Bryan Beckman, Gary Lewis, Josh Potts, not pictured Brian Everett.



**2015
 Best Operated Plant Award
 Skinny Jones**



**2015
 Award of Excellence
 North Sauty Creek
 Water Treatment Plant**



**2014
 Best Operated Plant Award
 North Sauty Creek
 Treatment Plant**



**2014 Award of Excellence
 Skinny Jones Treatment Plant**



**2013 Award of Excellence
 North Sauty Creek Treatment Plant**

The Water Plant Staff at Scottsboro WSG is Committed to Producing the Best Quality Drinking Water for All of Our Customers.



WATER IS

LIFE!



**PROVIDING QUALITY WATER
TREATMENT FOR 66 YEARS!**

TABLE OF UNDETECTED CONTAMINANTS

Contaminants tested in 2015 with results less than the Minimum Detection Level (mdl):

Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Color, Cyanides, E-coli, Iron, Manganese, MBA's, Mercury, Nickel, Selenium, Silver, Thallium, Total Coliform Bacteria, and Zinc

Volatile Organic Contaminants tested in 2015 with results less than the Minimum Detection Level (mdl):

1, 1-Dichloroethane	1, 1, 1, 2-Tetrachloroethane	Hexachlorobutadiene
1, 1-Dichloroethene	1, 1, 2, 2-Tetrachloroethane	Isopropylbenzene
1, 1-Dichloropropene	2, 2-Dichloropropane	Methyl tert-Butyl Ether
1, 2-Dichlorobenzene	2-Chlorotoluene	Methylene Chloride
1, 2-Dichloroethane	4-Chlorotoluene	n-Butylbenzene
1, 2-Dichloropropane	4-Isopropyltoluene	n-Propylbenzene
1, 3-Dichlorobenzene	Benzene	Naphthalene
1, 3-Dichloropropane	Bromobenzene	sec-Buthylbenzene
1, 3-Dichloropropene	Bromochloromethane	Styrene
1, 4-Dichlorobenzene	Bromomethane	tert-Butylbenzene
1, 1, 1-Trichloroethane	Carbon Tetrachloride	Tetrachloroethene
1, 1, 2-Trichloroethane	Chlorobenzene	Toluene
1, 2, 3-Trichlorobenzene	Chloroethane	trans- 1,2-Dichloroethene
1, 2, 3-Trichloropropane	Chloromethane	Trichloroethene
1, 2, 4-Trichlorobenzene	cis- 1,2-Dichloroethene	Trichlorofluoromethane
1, 2, 4-Trimethylbenzene	Dibromomethane	Vinyl Chloride
1, 3, 5-Trimethylbenzene	Dichlorodifluoromethane	Xylenes (ortho-para-meta)
	Ethylbenzene	

Synthetic Organic Chemicals (SOC's) tested in 2015 with results less than the Minimum Detection Level (mdl):

2,4,5-TP (Silvex)	Endothall	Toxaphene
2,4-D	Endrin	3-Hydroxycarbofuran
Alachlor	Glyphosate	Aldicarb
Atrazine	Heptachlor	Aldicarb sulfone
Benzo(a)pyrene	Heptachlor epoxide	Aldicarb sulfoxide
Carbofuran	Hexachlorobenzene	Aldrin
Chlordane	Hexachlorocyclopentadiene	Butachlor
Dalapon	gamma-BHC	Carbaryl
1,2 - Dibromo-3-chloropropane	Methoxychlor	Dicamba
bis(2)-Ethylhexyl)adipate	Oxamyl	Dieldrin
bis(2)-Ethylhexyl)phthalate	Total Polychlorinated Biphenyls	Methomyl
Dinoseb	Pentachlorophenol	Metolachlor
Diquat	Picloram	Metribuzin
1,2-Dibromoethane	Simazine	Propachlor

Additional Water Quality Testing

Scottsboro Waterworks, Sewer and Gas Board tested for the following additional contaminants:

The following were tested in 2003: DCPA mono-acid/di-acid degradate; Nitrobenzene; 4, 4-DDE;

2, 6-dinitrotoluene; 2, 4-dinitrotoluene; Terbacil; Molinate; EPTC; Acetochlor & Perchlorate.

The following were tested in 2008 (EPA 527): 245-HBB; BDE-100; BDE-153; BDE-47; BDE-99; dimethoate; terbufos sulfone; (EPA 529) 1,3-dinitrobenzene; RDX and TNT.

ALPHA, Gross and Radium-228 were tested during 2012 with results <MDL.

UCMR3, including PFAS Substance, Cryptosporidium, and Giardia tests were conducted during 2015.

Required Additional Information

To ensure that tap water is safe to drink, EPA prescribes limits on the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water.

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 materials and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- [A] Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- [B] Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- [C] Pesticides and herbicides, which may come from a variety of sources such as agriculture, stormwater runoff, and residential uses.
- [D] Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.
- [E] Radioactive contaminants, which be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. Some people may be more vulnerable to contaminants in drinking water than is 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 infections by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline 800.426.4791.

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 any of these contaminants was not required.

**National Primary Drinking Water Regulation Compliance
Source Water Assessment**

A source water assessment has been completed for our area to provide baseline data about quality of water before it is treated and distributed to our customers. Information regarding this source water assessment can be obtained from the Scottsboro Waterworks, Sewer and Gas Board or the Alabama Department of Environmental Management (ADEM).

For more information, call the Scottsboro Waterworks, Sewer and Gas Board at 256.574.1515.
Water Quality Data for community water systems throughout the United States is available at www.epa.gov/drink



P.O. Box 550
Scottsboro, Alabama 35768