Secondary Contaminants Table

Contaminant	Violation Y/N	Level Detected	Unit Measure-ment	MCLG	MCL
Aluminum	N	Values Ranged BMDL to 0.035 ppm	ppm	0.2 ppm	0.2 ppm
Chloride	N	Values Ranged 5.5 to 9 ppm	ppm	250 ppm	250 ppm
Color	N	All The Values Were 0 Units	Units	15 Units	15 Units
Copper	N	Values Ranged BMDL to 0.04 ppm	ppm	1 ppm	1 ppm
Foaming Agents	N	The Single Value Was 0	ppm	0.5 ppm	0.5 ppm
Iron	N	All The Values Were 0	ppm	0.3 ppm	0.3 ppm
Manganese	N	Values Ranged BMDL to 0.01 ppm	ppm	0.05 ppm	0.05 ppm
Silver	N	The Single Value Was 0	ppm	0.1 ppm	0.1 ppm
Zinc	N	Values Ranged BMDL to 0.0069 ppm	ppm	5 ppm	5 ppm
Sulfate	N	Values Ranged BMDL to 21 ppm	ppm	250 ppm	250 ppm
Total Dissolved Solids	N	Values Ranged 57 to 216 ppm	ppm	500 ppm	500 ppm

Report Summary

As you can see by the enclosed tables, our system had no MCL violations. The Utilities Board did incur a Volatile Organic Chemicals reporting non-compliance. The non-compliance resulted from a failure to submit the January - March results to the state by April 10, 2020. We have learned through our monitoring and testing that some constituents have been detected at levels that are deemed safe by the EPA (Environmental Protection Agency)

Waiver

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.

Additional Monitoring

As required by EPA's Long Term 2 Surface Water Treatment Rule, The Utilities Board starts a new sampling cycle every 7 years for Cryptosporidium. We started our sampling period in October 2016, and we pulled a raw sample every month for two years. The sampling period ended in September 2018, and we had no detects. We also completed our sampling for the EPA's fourth unregulated containments rule in 2019. This sampling helps the EPA determine if an MCL will be set for a specific contaminant. The detected values are listed under the unregulated detected containments table.

Educational Information

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 (Environmental Protection Agency)/CDC (Center of Disease Control) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

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 the 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 at 1-800-426-4791.

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.

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 Sylacauga Utilities Board 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.

Source Water Assessment

The Sylacauga Utilities Board in association with the Alabama Geological Survey has completed an extensive source water assessment to identify potential contaminants sites that could pose a risk to the water supply. With the aid of the Alabama Department Of Environmental Management and The Geological Survey Of Alabama, a susceptibility analysis has been performed. The study concluded that the water supply has a low susceptibility to contamination. The public may review the report during normal business hours at the Utilities Board Operations Center located at 1414 Edwards Street. Copies are available upon request for a fee. To purchase a copy call 256-249-0372.

Water Treatment Process

Lake Howard surface water is coagulated, flocculated and settled to remove microbial and suspended solids. It is filtered by sand filtration. Fluoride is added for dental health. The PH is adjusted to prevent plumbing corrosion and chlorine is added to prevent microbial contamination.

The Utilities Board of the City of Sylacauga ("the Board") owns, maintains and operates a water system consisting of two (2) wells, two water supply reservoirs (Lake Howard and Lake Virginia), a conventional surface water treatment plant, water transmission and distribution mains, six (6) water booster pumping stations and ten (10) water storage tanks.

The Board currently supplies an average of 3.1 million gallons of potable water per day to 7,550 residential, commercial and industrial customers in and contiguous to the City of Sylacauga. The maximum peak demand for potable water during 2020 was 4.97 million gallons per day.

The primary source of potable water is the Pine Grove Well. This well was constructed in 2009 and placed in service on January 12, 2010. The Pine Grove Well has a capacity of 2.16 million gallons per day or 1500 gallons per minute. Park Well located behind the Chamber of Commerce near the tennis courts has a capacity of .5 million gallons per day or 300 gallons per minute.

The Lake Howard Water Treatment Plant is now operated as a peaking plant and is used when the water demand exceeds the capacity of the wells.

Lake Howard has a water storage capacity of 1,075 million gallons while Lake Virginia has a storage capacity of 552 million gallons. The "safe" combined yield of Lake Howard and Lake Virginia is approximately 9.944 million gallons per day during extreme 120-days drought conditions.

The ten storage tanks in the system have a combined storage capacity of 7.68 million gallons. The distribution system consists of approximately 255 miles of pipe ranging in size from 2 inch to 24 inch in diameter. There are 763 fire hydrants located within the system.

Annual Water Quality Report

January 1, 2020— December 31, 2020

Office
301 N. Elm Avenue
Sylacauga, Alabama 35150

Operations Center
1414 Edwards Street
Sylacauga, Alabama 35150

Utilities Board Members

Dale Baker * Brad Porch * Mark Tapley

Water Quality Report

In 1974 the Safe Drinking Water Act (SDWA) was signed into law requiring all water systems that serve the public to meet national standards for water quality. These standards set limits for certain contaminants and require all public water systems to monitor for these contaminants. The Utilities Board routinely tests for these constituents in your drinking water according to federal and state laws. These tests have shown that your water meets and exceeds all state and federal requirements. The tables in this report show the monitoring results beginning January 1, 2020 thru December 31, 2020. If you have any questions concerning water quality please contact Water Quality Supervisor David Green at 256-249-0372. You may also attend the monthly Board meeting held at 9:00 AM on the third Tuesday of each month at the board office located at 301 N. Elm Ave.

Sources Of Water

Operating under permit by the (ADEM) Alabama Department of Environmental Management, the Utilities Board operated the following facilities during 2020:

1. **Lake Howard Surface Treatment Plant.** This plant is located on Water Plant Road. Lake Howard is an impoundment on Tallasseehatchee Creek, which flows out of the Talladega National Forest.
2. **Park Well** - Located on Spring and Norton near the post office.
3. **Pinegrove Well** - This well is located on Pine Grove Road in Odena

Definitions

In the following table you will find many terms and abbreviations that may not be familiar to you. To help you better understand these terms, we've provided the following definitions.

1. **Maximum Contaminant Level Goal** - The "Goal" (MCLG) is 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.
2. **Maximum Contaminant Level** - The "Maximum Allowed" (MCL) is 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.
3. **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 contamination.
4. **Maximum Residual Disinfectant Level MRDL** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of disinfectant is necessary to control microbial contamination.
5. **Treatment Technique (TT)** - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
6. **Action Level (AL)** - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
7. **Parts per million (ppm) or Milligrams per liter (mg/l)** - One part per million corresponds to one minute in two years or a single penny in $10,000.
8. **Parts per billion (ppb) or Micrograms per liter** - One part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.
9. **Picocuries per liter (Pci/l)** - a measure of radiation absorbed by the body.
10. **Nephelometric Turbidity Unit (NTU)** - Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
11. **Variances and Exemptions** - The department or EPA permission not to meet an MCL or a treatment technique under certain conditions.
12. **ND** = Not Detected
13. **DBP** = Disinfection Byproducts
14. **PPT** = Parts per trillion or nanograms per liter
15. **PPQ** = Parts per quadrillion or pictograms per liter
16. **DSE** = Distribution System Evaluation
17. **CASRN** = Chemical Abstracts Service Registry Number
18. **MRL** = Minimum Reporting Level
19. **ASTM** = ASTM International; SM - Standard Methods
20. **BMDL** = Below Minimum Detection Limit
21. **N/A** = Not Applicable
22. **UCMR 4** = Fourth Unregulated Containments Rule
23. **MFL** = Million Fibers / Liter

Primary List Of Drinking Water Contaminants

Contaminant	MCL	Amount Detected	Contaminant	MCL	Amount Detected
Bacteriological			o-Dichlorobenzene	600 ppb	ND
Total Coliform Bacteria	< 5 %	2 detects	p-Dichlorobenzene	75 ppb	ND
Turbidity	TT	0.01 to 0.13 NTU	1,2-Dichloroethane	5 ppb	ND
Fecal coliform and E. coli	0	ND	1,1-Dichloroethylene	7 ppb	ND
Fecal Indicators (enterococci or coliphage)	0	ND	cis-1,2-Dichloroethylene	70 ppb	ND
Beta/photon emitters (mrem/yr)	4 mrem/yr	ND	trans-1,2-Dichloroethylene	100 ppb	ND
Alpha emitters (Pci/l)	15 Pci/l	1.8 to 2.1 pCi/l	Dichloromethane	5 ppb	ND
Combined radium (Pci/l)	5 Pci/l	0.67 to 0.69 pCi/l	1,2-Dichloropropane	5 ppb	ND
Uranium	30 Pci/l	ND	Di (2-ethylhexyl) adipate	400 ppb	ND
Inorganic Chemicals			Di (2-ethylhexyl) phthalates	6 ppb	BMDL to
Antimony	6 ppb	ND	Dinoseb	7 ppb	ND
Arsenic	10 ppb	BMDL to 0.67 ppb	Dioxin [2,3,7,8-TCDD]	30 ppq	ND
Asbestos (MFL)	7 MFL	ND	Diquat	20 ppb	ND
Barium	2 ppm	0.01 to 0.025 ppm	Endothall	100 ppb	ND
Beryllium	4 ppb	ND	Endrin	2 ppb	ND
Bromate	10 ppb	ND	Epichlorohydrin	TT	ND
Cadmium	5 ppb	ND	Ethylbenzene	700 ppb	ND
Chloramines	4 ppm	ND	Ethylene dibromide	50 ppt	ND
Chlorine	4 ppm	1.6 to 2.4 ppm	Glyphosate	700 ppb	ND
Chlorine dioxide	800 ppb	ND	HAA5 (haloacetic acids 5)	60 ppb running average	0 to 58.5 ppb
Chlorite	1 ppm	ND	Heptachlor	400 ppt	ND
Chromium	100 ppb	ND	Heptachlor epoxide	200 ppt	ND
Copper	AL=1.3 ppm	See Lead and Copper Monitoring Table	Hexachlorobenzene	1 ppb	ND
Cyanide	200 ppb	ND	Hexachlorocyclopentadiene	50 ppb	ND
Fluoride	4 ppm	0.70 to 1.0 ppm	Lindane	200 ppt	ND
Lead	AL=15 ppb	See Lead and Copper Monitoring Table	Methoxychlor	40 ppb	ND
Mercury	2 ppb	ND	Oxamyl [Vydate]	200 ppb	ND
Nitrate	10 ppm	BMDL to 1.48 ppm	Pentachlorophenol	1 ppb	ND
Nitrite	1 ppm	ND	Picloram	500 ppb	ND
Total Nitrate and Nitrite	10 ppm	BMDL to 1.48 ppm	Polychlorinated biphenyls (PCBs)	500 ppt	ND
Selenium	50 ppb	BMDL to 0.77 ppb	Simazine	4 ppb	ND
Thallium	2 ppb	ND	Styrene	100 ppb	ND
Organic Chemicals			Tetrachloroethylene	5 ppb	BMDL to 2.89 ppb
Acrylamide	TT	ND	Toluene	1 ppm	ND
Alachlor	2 ppb	ND	TOC (Total Organic Carbon)	TT	0.84 to 1.73 ppm
Atrazine	3 ppb	ND	TTHMs [Total trihalomethanes]	80 ppb running average	0 to 76 ppb
Benzene	5 ppb	ND	Toxaphene	3 ppb	ND
Benzo(a)pyrene [PAHs]	200 ppt	ND	2,4,5-TP (Silvex)	50 ppb	ND
Carbofuran	40 ppb	ND	1,2,4-Trichlorobenzene	70 ppb	ND
Carbon tetrachloride	5 ppb	ND	1,1,1-Trichloroethane	200 ppb	ND
Chlordane	2 ppb	ND	1,1,2-Trichloroethane	5 ppb	ND
Chlorobenzene	100 ppb	ND	Trichlorethylene	5 ppb	BMDL to 0.28 ppb
2,4-D	70 ppb	ND	Vinyl Chloride	2 ppb	ND
Dalapon	200 ppb	ND	Xylenes	10 ppm	ND
Dibromochloropropane	200 ppb	ND			

Unregulated Contaminants (UCMR - 4)

Contaminant	CASRN	MRL	Amount Detected
Metals: EPA Method 200.8, ASTM D5673-10,SM 3125			
Germanium	7440-56-4	0.3 ppb	ND
Manganese	7439-96-5	0.4 ppb	BMDL to 5 ppb
Pesticides and a Pesticide Manufacturing Byproduct: EPA Method 525.3			
Alpha-hexachlorocyclohexane	319-84-6	0.01 ppb	ND
Chlorpyrifos	2921-88-2	0.03 ppb	ND
Dimethipin	55290-64-7	0.2 ppb	ND
Ethoprop	13194-48-4	0.03 ppb	ND
Oxyfluorfen	42874-03-3	0.05 ppb	ND
Profenofos	41198-08-7	0.3 ppb	ND
Tebuconazole	107534-96-3	0.2 ppb	ND
Total Permethrin (cis- & trans-)	52645-53-1	0.04 ppb	ND
Tribfos	78-48-8	0.07 ppb	ND
Alcohols and Semivolatile Chemicals: EPA Method 541 & 530			
1-Butanol	71-36-3	2.0 ppb	ND
2-Methoxyethanol	109-86-4	0.4 ppb	ND
2-Propen-1-ol	107-18-6	0.5 ppb	ND
Butylated Hydroxyanisole	25013-16-5	0.03 ppb	ND
O-Toluidine	95-53-4	0.007	ND
Quinoline	91-22-5	0.02	ND
Brominated haleoacetic acid (HAA) disinfection by products groups			
HAA5 (haloacetic acids 5)	552.3	N/A	0 to 106.4 ppb
HAA6 (haloacetic acids 6)	552.3	N/A	0 to 108.7 ppb
HAA9 (haloacetic acids 9)	552.3	N/A	0 to 108.7 ppb
(Indicators) TOC	5310 C	1000 ppb	BMDL to 2760 ppb
(Indicators) Bromide	300.0	20 ppb	BMDL to 44.7 ppb
Organic Chemicals			
Bromodichloromthane	524.2	0.2 ppb	BMDL to 3.97 ppb
Chloroform	524.2	0.4 ppb	BMDL to 0.131 ppm
Cynatoxins			
Total Microcystins & Nodularins	546	0.300 ppb	ND
Anatoxin-a	545	0.0300 ppb	ND
Cylindrospermopsin	545	0.0900 ppb	ND

Detected Contaminates Table

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Possible Source Of Contamination
Microbiological Contaminants						
Turbidity *	N	Values ranged from 0.01 To 0.13 NTU 100 % Of All Samples Met Turbidity Requirements	NTU	N/A	TT Less Than 5% Of All Filter Samples May Exceed .3 NTU	Soil runoff
Total Coliform Bacteria (including fecal coliform and E. coli)	N	390 samples were collected with 2 detects. (All repeat samples had no detects)	Colonies	MCLG = 0	MCL - presence of coliform bacteria in < 5% of monthly samples or if a routine sample and a follow up repeat sample are total coliform positive and one is also fecal coliform or e-coli positive	Human and animal fecal waste
*** Turbidity is the 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.**						
Inorganic Contaminants						
Arsenic	N	Values ranged from BMDL to 0.67ppb	ppb	10 ppb	10 ppb	Discharge from petroleum refiners; fire retardants; ceramics; electronics; solder
Barium	N	Values ranged from 0.0102 to 0.025 ppm	ppm	2 ppm	2 ppm	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorine	N	Values ranged from 1.6 to 2.4 ppm Highest Running Annual Average is 2.1 ppm	ppm	MRDLG 4 ppm	MRDL 4 ppm	Water Additive To Control Microbes
Fluoride	N	Values ranged from 0.70 to 1.0 ppm	ppm	4 ppm	4 ppm	Erosion Of Natural Deposits; Water Additive Which Promotes Strong Teeth; Discharge From Fertilizer And Aluminum Factories
Nitrates	N	Values ranged from BMDL to 1.48 ppm	ppm	10 ppm	10 ppm	Runoff From fertilizer Use; Leaching From Septic Tanks, Sewage; Erosion Of Natural Deposits
Nitrite and total Nitrates	N	Values ranged from BMDL to 1.48 ppm	ppm	10 ppm	10 ppm	Runoff From fertilizer Use; Leaching From Septic Tanks, Sewage; Erosion Of Natural Deposits
Selenium	N	Values ranged from BMDL to 0.77 ppb	ppb	50 ppb	50 ppb	Discharge from petroleum and metal refiners; Erosion of natural deposits; Discharge from minerals
Synthetic Organic Compounds						
Di-2-ethylhexyl - phthalate	N	Values ranged from BMDL to 0.54 ppb	ppb	0	6 ppb	Discharge from rubber and chemical factories
Radiological						
Gross Alpha	N	Values ranged from 1.8 to 2.9 Pci/l	Pci/l	0	15 Pci/l	Erosion of natural deposits
Radium-228	N	Values ranged from 0.67 to 0.69 Pci/l	Pci/l	0	5 Pci/l	Erosion of natural deposits
Volatile Organic Contaminants						
HAA5	N	Values ranged from 0 to 58.5 ppb Running averages ranged from 0 to 35.6 ppb	ppb	0	60 ppb Running Annual Average	By Product Of Drinking Water Chlorination
Tetrachloro-ethylene	N	Values ranged from BMDL to 2.89 ppb with The Highest Running Average Of 2.45 ppb	ppb	0	5 ppb Running Annual Average	Leaching From PVC Pipes; Discharge From Factories And Dry Cleaners
Trichloro-ethylene	N	Values ranged from BMDL to 0.28 ppb	ppb	0	5 ppb	Discharge from metal degreasing sites and other factories
Total Organic Carbons	N	Values ranged from 0.73 to 1.73 ppm and Treatment 35% removal was obtained	ppm	N/A	TT	Naturally Present In The Environment
Total Trihalome-thanes TTHMs	N	Values ranged from 0 to 76 ppb Running averages ranged from 0 to 35.13 ppb	ppb	0	80 ppb Running Annual Average	By Product Of Drinking Water Chlorination
Unregulated Contaminants - MCLs and MCLGs have not been established for these Contaminants						
Bromodi-chloromethane	N	Values ranged from BMDL to 2.43 ppb	ppb	N/A	N/A	Byproduct of chlorination
HAA5 groups	N	Values ranged from 0 to 20.31 ppb	ppb	N/A	N/A	Byproduct of chlorination
HAA6 groups	N	Values ranged from 0 to 31.1 ppb	ppb	N/A	N/A	Byproduct of chlorination
HAA9 groups	N	Values ranged from 0 to 32.44 ppb	ppb	N/A	N/A	Byproduct of chlorination
Chloroform	N	Values ranged from BMDL to 0.091 ppm	ppm	N/A	N/A	Byproduct of chlorination
Manganese	N	Values ranged from BMDL to 5 ppb	ppb	N/A	N/A	Naturally-occurring element; commercially available in combination with other elements and minerals; used in steel production, fertilizer, batteries and fireworks; drinking water and wastewater treatment chemical; essential nutrient
Lead and Copper Monitoring Table The most recent sampling for lead and copper was July 2019						
Lead	N	Values ranged from Below Detection Limits To 4.8 ppb The 90th Percentile Was 1.7 ppb	ppb	0	AL = 15 ppb	Corrosion Of Household Plumbing Systems; Erosion Of Natural Deposits
Copper	N	Values ranged from From 0.0056 to 0.343 ppm The 90th Percentile Was 0.166 ppm	ppm	1.3 ppm	AL =1.3 ppm	Corrosion Of Household Plumbing Systems; Erosion Of Natural Deposits; Leaching From Wood Preservatives