

**2017 Annual Consumer Confidence Report  
Northeast Alabama Water, Sewer, and Fire Protection District**

We are pleased to present to you this year's Annual Consumer Confidence Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

Our water sources are the Waterloo Springs (combination ground/surface water) which supplies the Waterloo Springs Water Treatment Plant, located in Gaylesville, Alabama; and the Tennessee River/Lake Guntersville (surface water), which is the source for the Monsanto Water Treatment Plant, located in Guntersville, Alabama and Highpoint Water Treatment Plant, which is located in Fort Payne. Our extensive network of waterlines allows us to interconnect with and purchase water from several water systems within northeast Alabama. These systems, their water sources, the types and order of treatments used are listed below.

**Definitions:**

1. **Aeration** – The mixing of air into water; Removes certain dissolved gases in the water and aids in the removal of iron and manganese.
2. **Adsorption** – Adsorption involves the adhesion of organic contaminants to an adsorbent such as activated carbon.
3. **Oxidation** – The conversion of organic substances to simpler, more stable forms by either chemical or biological means.
4. **Coagulation** – The water treatment process that causes very small suspended particles to attract one another and form larger particles; This is accomplished by adding a chemical, called a coagulate (e.g. aluminum sulfate or ferric chloride), that neutralizes the electrostatic charges on the particles that cause them to repel each other.
5. **Flocculation** – The water treatment following coagulation, which uses gentle stirring to bring suspended particles together so they will form larger, more settleable clumps called floc.
6. **Sedimentation** – The water treatment process that involves reducing the velocity of water in basins so the suspended material, such as floc, can settle out by gravity.
7. **Chlorination** – (Pre) = Aid in Coagulation; (Post) = the process of adding chlorine to water to kill disease-causing organisms or to act as an oxidizing agent.
8. **Stabilization** – The water treatment process intended to reduce the corrosive or scale-forming tendencies of water (e.g. pH adjustment or Polyorthophosphates).
9. **Fluoridation** – The water treatment process in which a chemical (e.g. Sodium Fluoride or Hydrofluosilicic Acid) is added to the water to increase the concentration of fluoride ions to an optimum level. The purpose of fluoridation is to promote dental health and bone density.

<b>System</b>	<b>Water Source/Type</b>	<b>Treatment</b>
NE. AL. Water Dist. – Highpoint WTP	Lake Guntersville/Surface Water	Pre-Chlorination, Coagulation, Flocculation Filtration, and Post-Chlorination
NE. AL. Water Dist. – Monsanto WTP	Lake Guntersville/Surface Water	Oxidation, Pre-Chlorination, Pre-Treatment Coagulation, Pre-Filtration, Formal Coagulation Flocculation, Final Filtration, and Post-Chlor.
NE. AL. Water Dist. – Waterloo WTP	Waterloo Spring/Surface Water	Pre-Chlorination, Coagulation, Flocculation Filtration, and Post-Chlorination
Municipal Utilities Bd. – Albertville, AL	Tennessee River – Short Creek/Surface Water	Coagulation, Stabilization, Pre-Chlorination Flocculation, Sedimentation, Filtration, Chlorination, Stabilization, and Fluoridation
Cave Spring, Georgia	2 Underground Springs – City of Cave Spring	Chlorination, Fluoridation
Cherokee County – Centre, AL	Bristow Spring/Ground Water	Chlorination
Cherokee County – Centre, AL	Sanford Spring /Ground & Surface Water	Coagulation, Filtration, and Chlorination
DeKalb-Jackson WSD – Stevenson, AL	Tennessee River/Surface Water	Pre-chlorination, Coagulation, Flocculation, Sedimentation, Filtration, Post-Chlorination
Fort Payne WWB	Allen Branch Reservoir, Big Wills Reservoir, and the Tennessee River/Surface Waters	Oxidation, Coagulation, Flocculation, Sedimentation, Pre-Chlorination, Filtration
WWB of Section and Dutton Rainsville, AL	Tennessee River/Surface Waters	Pre-Chlor., Stabilization, and Fluoridation Oxidation, Coagulation, Flocculation, Sedimentation Filtration, Chlorination, and Fluoridation

If you have any questions about this report or concerning your water utility, please contact **Mr. Johnny Jordan, General Manager at (256) 845-6186 ext. 116 or Michael Smith, Compliance Operator at (256) 845-6186 ext. 115** or by writing to this address: P.O. Box 681359, Fort Payne, AL 35968. For additional information you may log on to our website at [www.neawater.com](http://www.neawater.com). We want our valued customers to be informed about their water utility. You can attend any of our regularly scheduled board meetings. They are held on **the third Monday of each month, at 6:30 p.m., at the office of the Water Board, located at 2416 Beck Industrial Boulevard, Fort Payne, Alabama.**

**The Northeast Alabama Water, Sewer, and Fire Protection District Board of Directors are:**

**Larry McCallie – DeKalb County, Chairman; Simeon Morton – Etowah County, Vice-Chairman ; James (Jim) H. Bowman – Jackson County; Wayne Clanton – Cherokee County; Billy Charles Richards – DeKalb County; Keith Swisher – Marshall County; D.L. Powell – Town of Gaylesville**

The Northeast Alabama Water, Sewer and Fire Protection District routinely monitors for over 95 constituents in your drinking water according to Federal and State laws. The table included in this report shows the detected contaminants, resulting from our monitoring for the period of **January 1<sup>st</sup> to December 31<sup>st</sup>, 2017**. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

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

**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.

**MCL: *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.

**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.

**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.

**AL: *Action Level*** - The concentration of a contaminant that triggers treatment or other requirements a water system shall follow.

**Variance and Exemption** – State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

**TT: *Treatment Technique*** - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

**ND: *Non-Detects***- Laboratory analysis indicates that the constituent is not present.

**NTU: *Nephelometric Turbidity Unit*** - Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**SU: *Standard Units***

**ppm: *Parts per million*** - Milligrams per liter (mg/l) - One part per million corresponds to one minute in two years or a single penny in \$10,000.

**ppb: *Parts per billion*** - Micrograms per liter (mg/l) - One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

**ppt: *Parts per trillion*** - Nanograms per liter (nanograms/l) – One part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

**rCi/l: *Picocuries per liter***– Picocuries per liter is a measure of the radioactivity in water.

**90th Percentile** - 90% of samples are equal to or less than the number in the chart.

**HRAA: *Highest Rolling Annual Average***; based on seven quarters of testing.

**RAA: *Rolling Annual Average***

**NA: *Not Applicable; Not Available***

**LT2 ESWTR: *Long Term 2 Enhanced Surface Water Treatment Rule***

**IDSE: *Initial Distribution System Evaluation***

**CDC: *Center for Disease Control***

**EPA: *Environmental Protection Agency***

**ADEM: *Alabama Department of Environmental Management***

Test results that are specific to the *Highpoint Treatment Plant* are designated by **HP**; test results that are specific to the *Monsanto Water Treatment Plant* are designated by **MS**; and test results that are specific to the *Waterloo Springs Water Treatment Plant* are designated by **WS**.

**Northeast Alabama Water, Sewer, and Fire Protection District  
Standard List of Primary Drinking Water Contaminants**

<b>Contaminant</b>	<b>MCL</b>	<b>Amount Detected</b>	<b>Contaminant</b>	<b>MCL</b>	<b>Amount Detected</b>
<b>Bacteriological</b>			Endrin	2 ppb	ND
Total Coliform Bacteria	<5%	ND	Epichlorohydrin	TT	ND
Turbidity (Albertville) <sup>1</sup>	TT	.22	Glyphosate	700 ppb	ND
Fecal Coliform and E.coli	0	ND	Heptachlor	400 ppt	ND
<b>Radiological</b>			Heptachlor epoxide	200 ppt	ND
Alpha emitters (rCi/l) (MS 2016) <sup>2</sup>	15	2.5 ± 1.5	Hexachlorobenzene	1 ppb	ND
Beta/Photon emitters (rCi/l) <sup>3</sup>	4	ND	Hexachlorocyclopentadiene	50 ppb	ND
Combined Radium (pCi/l) (WS2016) <sup>4</sup>	5	1.05 ± 0.49	Lindane – Gamma BHC	200 ppt	ND
Uranium	30 ppb	ND	Methoxychlor	40 ppb	ND
<b>Inorganic Chemicals</b>			Oxamyl [Vydate]	200 ppb	ND
Antimony	6 ppb	ND	PCBs	500 ppt	ND
Arsenic	10 ppb	ND	Pentachlorophenol	1 ppb	ND
Asbestos (MFL)	7	Waived	Picloram	500 ppb	ND
Barium (WS)	2,000 ppb	36	Simazine	4 ppb	ND
Beryllium	4 ppb	ND	Toxaphene	3 ppb	ND
Cadmium	5 ppb	ND	Benzene	5 ppb	ND
Chromium	100 ppb	ND	Carbon Tetrachloride	5 ppb	ND
Copper (MS, HP, WS 2016) <sup>5</sup>	AL=1.3 ppm	0.50	Chlorobenzene (VOC - Mono, Di, or Tri)	100 ppb	ND
Cyanide	200 ppb	ND	Dibromochloropropane	200 ppt	ND
Fluoride (Cave Springs)	4 ppm	1.96	o-Dichlorobenzene	600 ppb	ND
Lead (HP,MS,WS 2016) <sup>5,6</sup>	AL=15 ppb	.007	p-Dichlorobenzene	75 ppb	ND
Mercury	2 ppb	ND	1,2-Dichloroethane	5 ppb	ND
Nitrate (Albertville)	10 ppm	3.15	1,1-Dichloroethylene	7 ppb	ND
Nitrite	1 ppm	ND	cis-1,2-Dichloroethylene	70 ppb	ND
Selenium	50 ppb	ND	trans-1,2-Dichloroethylene	100 ppb	ND
Thallium	2 ppb	ND	Dichloromethane	5 ppb	ND
<b>Organic Chemicals</b>			1,2-Dichloropropane	5 ppb	ND
2,4-D	70 ppb	ND	Ethylbenzene	700ppb	ND
2,4,5-TP (Silvex)	50 ppb	ND	Ethylene Dibromide (SOC – EDB)	50 ppt	ND
Acrylamide	TT	ND	Styrene	100 ppb	ND
Alachlor	2 ppb	ND	Tetrachloroethylene	5 ppb	ND
Atrazine	3 ppb	ND	1,2,4-Trichlorobenzene	70 ppb	ND
Benzo(a)pyrene [PAHs]	200 ppt	ND	1,1,1-Trichloroethane	200 ppb	ND
Carbofuran	40 ppb	ND	1,1,2-Trichloroethane	5 ppb	ND
Chlordane	2 ppb	ND	Trichloroethylene	5 ppb	ND

Dalapon	200 ppb	ND	TTHM (System-wide Average)	80 ppb	19.6
Di (2-ethylhexyl)adipate	400 ppb	ND	HAA5 (System-wide Average)	60 ppb	16.7
Di (2-ethylhexyl)phthalates	6,000 ppt	ND	Toluene	1 ppm	ND
Dinoseb	7 ppb	ND	Vinyl Chloride	2 ppb	ND
Diquat	20 ppb	ND	Xylenes	10 ppm	ND
Dioxin [2,3,7,8-TCDD]	30 ppq	Waived	TOC (Alberville)	TT	2.0
Chloramines	4 ppm	ND	Chlorine (WS)	4 ppm	2.55
Chlorite	1 ppm	ND	Chlorine Dioxide	800 ppb	ND
Endothall	100 ppb	ND	Bromate	10 ppb	ND

**Table of Detected Contaminants**

Contaminant	MCLG	MCL	Range			Amount Detected		Likely Source of Contamination
							Unit	
<b>Bacteriological</b>								
<b>Turbidity<sup>1</sup></b> Monsanto WTP Highpoint WTP Waterloo Spring WTP Alberville Cherokee County	N/A	TT	0.01	-	0.22	0.04 0.01 0.05 0.22 0.12	NTU	Soil runoff
<b>Radiological</b>								
<b>Alpha emitters<sup>2</sup></b> Monsanto WTP (2016) Highpoint WTP (2011) Waterloo Spring WTP (2016)	0	15	0	-	2.5	2.5±1.5 0 ± 2.1 .62±1.7	pCi/l	Erosion of natural deposits
<b>Combined Radium<sup>4</sup></b> Monsanto WTP (2016) Highpoint WTP (2011) Waterloo Spring WTP (2016)	5	5	0	±	1.05	. 071±0.49 0±0.7 1.05±0.4 9	pCi/l	Erosion of natural deposits
<b>Inorganic</b>								
<b>Barium</b> Highpoint WTP Monsanto WTP Waterloo WTP	2,000	2,000	19.7	-	36.1 19.7 24.5 36.1	19.7 24.5 36.1	ppb	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.

<b>Fluoride</b> Albertville Cherokee County Highpoint WTP Monsanto WTP Waterloo WTP Cave Springs	4	4	<0.25 0.67 <0.25	- - -	1.96 0.68 <0.25 0.072 <0.06 0 1.96	0.68 <0.25 0.072 <0.060 1.96	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
<b>Lead</b> (MS,WS,HP) 2016	0	AL=15	ND ND	- -	. 007 .007	.007	ppb	Corrosion of household plumbing systems; erosion of natural deposits. ( 90 <sup>th</sup> percentile value)
<b>Copper</b> Albertville (MS,WS,HP ) WTP 2016	1.3	1.3	ND ND ND	- - -	0.50 0.16 0.50	0.16* 0.34*	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives (*= 90 <sup>th</sup> percentile value)
<b>Nitrate</b> Albertville Cave Springs Cherokee County Highpoint WTP Monsanto WTP Waterloo Spring WTP	10	10	0.28 2.99	- -	3.15 3.15	3.15 0.42 0.32 0.28 0.27 0.57	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
<b>Volatile Organic Contaminants</b>								<b>Unit</b>
<b>Total Trihalomethanes (TTHM)</b> Highpoint WTP Monsanto WTP Waterloo Spring WTP Albertville Cherokee County	0	80	<1 17.3 19.1 3.2 33.3 <1	- - - - -	52.9 23.3 26.0 4.3 52.9 1.8	HRAA 19.4 21.0 3.6 52.9 1.2	ppb	By-product of drinking water chlorination.  Compliance is based on a system-wide Running Annual Average rather than individual values.
<b>Haloacetic Acid (HAA5)</b> Highpoint WTP Monsanto WTP Waterloo Spring WTP Albertville Cherokee County	0	60	<1 18.4 8.1 6.2 22.4 <1	- - - - -	48.2 19.6 9.2 6.5 48.2 1.2	HRAA 19.1 8.8 6.4 48.2 <1	ppb	By-product of drinking water chlorination.  Compliance is based on a system-wide Running Annual Average rather than individual values.
<b>Organic Contaminants</b>								<b>Unit</b>

<b>Total Organic Carbon (TOC)</b> Highpoint WTP Monsanto WTP Waterloo Spring WTP Albertville	<b>0</b>	<b>TT</b>	<b>0.4</b> 1.3 1.2 0.4 1.5	-	<b>2.5</b> 1.6 1.7 1.0 2.5	<b>RAA</b> 1.4 1.4 0.6 2.0	ppm	Naturally present in the environment.
<b>Chlorine</b> Highpoint WTP Monsanto WTP Waterloo Spring Albertville Cherokee County Cave Springs	<b>4.0</b>	<b>4.0</b>	<b>0.67</b> 2.31 2.49 2.50 1.50 1.90 0.67	-	<b>3.00</b> 2.35 2.51 2.60 3.00 2.10 2.20	<b>RAA</b> 2.32 2.50 2.55 2.20 2.00 1.57	ppm	Water additive used to control microbes.
<b>Unregulated Contaminants</b>								
<b>Chloroform</b> Highpoint WTP Monsanto WTP Waterloo Spring WTP Albertville	<b>N/A</b>	<b>N/A</b>	<b>1.7</b>	-	<b>21.2</b>	11.1 21.2 1.7 11.7	ppb	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff
<b>Bromodichloromethane</b> Highpoint WTP Monsanto WTP Waterloo Spring WTP Albertville	<b>N/A</b>	<b>N/A</b>	<b>1.1</b>	-	<b>6.5</b>	4.5 6.5 1.1 4.9	ppb	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff
<b>Chlorodibromomethane</b> Highpoint WTP Monsanto WTP Albertville	<b>N/A</b>	<b>N/A</b>	<b>0</b>	-	<b>1.5</b>	.95 1.5 .87	ppb	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff
<b>Secondary Contaminants</b>								
<b>Aluminum</b> Highpoint WTP Monsanto WTP Waterloo WTP Cherokee County	<b>0</b>	<b>0.2</b>	<b>0.018</b> .068	-	<b>0.075</b> 0.018 0.025 0.057 .075	0.018 0.025 0.057 0.075	ppm	Naturally occurring in the environment or as a result of treatment with water additives
<b>Alkalinity</b> Highpoint WTP Monsanto WTP Waterloo Spring WTP Cherokee County	<b>N/A</b>	<b>N/A</b>	<b>67</b> 109	-	<b>130</b> 117	130 67 67 117	ppm	Naturally occurring in the environment or as a result of treatment with water additives

<b>Calcium</b> Highpoint WTP Monsanto WTP Waterloo Spring WTP Cherokee County	N/A	N/A	17.0	-	42.5	17.0 22.7 33.9 42.5	ppm	Naturally occurring in the environment or as a result of treatment with water additives
<b>Carbon Dioxide</b> Highpoint WTP Monsanto WTP Waterloo Spring WTP Cherokee County	N/A	N/A	1.1	-	7.9	1.8 7.9 5.3 2.0	ppm	Erosion of natural deposits or as a result of treatment with water additives
<b>Chloride</b> Highpoint WTP Monsanto WTP Waterloo Spring WTP Albertville Cherokee County	N/A	250	2.80	-	16.3	13.0 14.4 3.79 16.3 2.86	ppm	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff
<b>Conductance</b> Highpoint WTP Monsanto WTP Waterloo Spring WTP Cherokee County	N/A	N/A	183	-	244	190 183 244 231	Umohs/ cm	Naturally occurring in the environment or as a result of treatment with water additives
<b>Hardness</b> Highpoint WTP Monsanto WTP Waterloo Spring WTP Albertville Cherokee County	N/A	N/A	45.5	-	124	79.6 77.9 124 46.3 108 118 118	ppm	Naturally occurring in the environment or as a result of treatment with water additives
<b>Magnesium</b> Highpoint WTP Monsanto WTP Waterloo Spring Cherokee County	N/A	N/A	2.87	-	11.0	3.94 6.04 10.3 11.0	ppm	Naturally occurring in the environment or as a result of treatment with water additives
<b>Secondary Contaminants</b>							<b>Unit</b>	
<b>pH</b> Highpoint WTP Monsanto WTP Waterloo Spring WTP Albertville Cherokee County	N/A	N/A	6.0	-	8.1	6.8 6.0 6.9 6.5 8.1 6.32 8.13 8.09	su	Naturally occurring in the environment or as a result of treatment with water additives
<b>Sodium</b> Highpoint WTP Monsanto WTP Waterloo Spring WTP Cherokee County Albertville	N/A	N/A	0.92	-	12.0	12.0 7.31 3.21 1.68 11.2 0.92 10.7 1.68 11.6	ppm	Naturally occurring in the environment or as a result of treatment with water additives

<b>Sulfate</b> Highpoint WTP Monsanto WTP Waterloo Spring WTP Albertville Cherokee County	N/A	250	3.83	-	20.4	20.4 13.2 4.33 13.9 4.18	ppm	Naturally occurring in the environment; erosion of natural deposits
<b>Total Dissolved Solids</b> Highpoint WTP Monsanto WTP Waterloo Spring WTP Albertville Cherokee County	N/A	500	88	-	168	93 133 168 100 128	ppm	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff

**Cryptosporidium is a significant concern in drinking water because it contaminates surface waters used as drinking water sources, it is resistant to chlorine and other disinfectants, and it has caused waterborne disease outbreaks. Consuming water with Cryptosporidium, a contaminant in drinking water sources, can cause gastrointestinal illness, which may be severe in people with weakened immune systems (e.g. infants and the elderly) and sometimes fatal in people with severely compromised immune systems (e.g. cancer and AIDS patients).**

**The purpose of the LT2 rule is to reduce disease incidence associated with Cryptosporidium and other pathogenic microorganisms in your drinking water. The rule applies to ALL public water systems that use surface water or ground water that is under the direct influence of surface water.**

**\*Cryptosporidium monitoring/testing was performed on each RAW Water source for each respective water treatment plant (i.e. MS&WS) at a frequency of once per month for twenty-four (24) consecutive months (April, 2015 thru March, 2017).**

<b>Non-Compliance Microbiological (LT2ESWTR)</b>								
CONTAMINANT	MCLG	MCL	Range			Amount Detected		Likely Source of Contamination
Bacteriological						Unit		
<b>Cryptosporidium</b> * Monsanto WTP * Waterloo Spring WTP * Highpoint WTP	0	TT	0	-	0.90	0.49	Organisms/ Liter	Wildlife and/or human waste
<b>Giardia</b> Monsanto WTP Highpoint WTP Waterloo Spring WTP	0	TT	0	-	2.1	0.1	Organisms/ Liter	Wildlife and/or human waste
<b>Total Coliform</b> Monsanto WTP Highpoint WTP Waterloo Spring WTP	0	TT	0	-	>2420	>2420	#/100 ml	Wildlife and/or human waste
			133	-	>2420	>2420		
			0	-	>2420	>2420		
			63	-	>2420	>2420		
<b>Non-Compliance Microbiological (LT2ESWTR)</b>								
CONTAMINANT	MCLG	MCL	Range			Amount Detected		Likely Source of Contamination
Bacteriological						Unit		
<b>E. coli</b> Monsanto WTP Highpoint WTP Waterloo Spring WTP	0	TT	0	-	691	691	#/100 ml	Wildlife and/or human waste
			0	-	691	73		
			2	-	579	579		

### Unregulated Contaminant Monitoring Rule 3 (UCMR3) Contaminants – 2014 and 2015

	Level	Unit	Likely Source Of Contamination
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Contaminants	Detected Range	Msmt.	Of Contamination
Chromium	ND – 0.3	ppb	Naturally occurring in the environment or as a result of industrial discharge
Molybdenum	ND – 1.1	ppb	Naturally occurring in the environment or as a result of runoff from mining or industrial discharge
Strontium	ND - 87	ppb	Naturally occurring in the environment or as a result of discharge
Vanadium	ND – 0.6	ppb	Naturally occurring in the environment or as a result of runoff from mining or industrial discharge
Chlorate	ND - 980	ppb	Naturally occurring in the environment or from water treatment techniques
Chromium - 6	ND - .51	ppb	Naturally occurring in the environment or as a result of industrial discharge
1,4 Dioxane	ND- 0.24	ppb	Industrial discharge; leachate from landfills
Chloromethane	ND – 0.2	ppb	Industrial discharge or from water treatment techniques

IDSE's are one-time studies conducted by water systems to identify distribution system locations with high concentrations of trihalomethanes (THMs) and haloacetic acids (HAA5s). Water systems will use the results from the IDSE, in conjunction with their Stage I Disinfection By-Product Monitoring Rule compliance monitoring data, to select compliance monitoring locations for the Stage 2 Disinfection By-Product Monitoring Rule.

Distribution System Evaluation (DSE) 2016-Present							
CONTAMINANT	MCLG	MCL	Range		Amount Detected	Likely Source of Contamination	
Organics					Units		
<b>Total Trihalomethanes (TTHM)</b> NEAW - System-Wide	N/A	N/A	2.0	- 25.0	25.0	ppb	By-product of drinking water chlorination.
<b>Haloacetic Acid (HAA5)</b> NEAW - System-Wide	N/A	N/A	6.0	- 38.0	38.0	ppb	By-product of drinking water chlorination.

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.

<sup>1</sup>*Turbidity*: Turbidity is the cloudy appearance of water caused by the suspended and colloidal matter. In the waterworks field, a turbidity measurement is used to indicate the clarity of water.

<sup>2</sup>*Gross Alpha*: ADEM has reduced the required monitoring of many water systems throughout the state to (1) sample of Gross Alpha every nine (9) years because the concentrations of these contaminants do not change frequently.

<sup>3</sup>*Beta Photon*: The data presented is from the most recent testing done in accordance with applicable ADEM regulations.

<sup>4</sup>*Combined Radium*: The data presented is from the most recent testing done in accordance with applicable ADEM regulations.

<sup>5</sup>*Copper and Lead*: The state requires us to monitor for thirty (30) samples of Lead and Copper every three (3) years because the concentrations of the contaminants does not change frequently.

<sup>6</sup>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. NORTHEAST ALABAMA WATER DISTRICT 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 [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water **IS SAFE** at these levels. All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or are man made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials. 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.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

#### **SOURCE WATER ASSESSMENTS**

The Source Water Assessments (SWA) for the Waterloo Springs WTP, Highpoint WTP, and the Monsanto WTP on the Tennessee River have been completed. The SWA is the systematic identification of contaminant sources within a watershed area and the relative susceptibility to these contamination sources. The SWA consists of: watershed delineation, contamination source inventory, susceptibility analysis, contingency plans and public awareness. The susceptibility of each contaminant was evaluated and determined jointly with representatives from ADEM, Northeast Alabama Water District, and ADL Engineering, Inc. The overall rating for Waterloo Springs, Manning Quarry, and the Tennessee River Watershed contaminants was a Low Susceptibility rating. The SWA is updated every four years. Individual members of the public may review all assessment documents during normal business hours of operation at the water system's office. SWA documents will be maintained on display at the office for easy access to the public. Copies of the assessment documents shall be provided to members of the public upon request after payment of a nominal reproduction fee.

#### **VULNERABILITY ASSESSMENT AND EMERGENCY RESPONSE PLANS**

A Vulnerability Assessment (VA) has been conducted to help protect the water system from intentional damage. The Emergency Response Plans (ERPs) have been completed and are available in the event of an emergency. Certifications for the VA and the ERPs have been submitted to the EPA. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. Please call our office if you have any questions.

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Johnny Jordan, General Manager