

# **City of Huntsville: 2017 Drinking Water Quality Report for the Huntsville Water System**

## **Reporting Period: January 1 –December 31, 2017**

CITY OF HUNTSVILLE provides two sources of water. The Purchased Surface Water from **Trinity River Authority Huntsville Regional Water Supply System Treatment Plant (HRWSS) located in Walker, County.** The Groundwater source from seven (7) active wells from the **Catahoula Aquifer** located in Walker, County.

**Know the Facts About Your Drinking Water:** In order to ensure that tap water is safe to drink, the *Environmental Protection Agency* (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. This report is the summary of the results from the most recent data available from the Texas Commission on Environmental Quality. Only those with concentrations greater than detection are provided.

**En Español:** Este reporte incluye informacion importante sobre el agua para tomar. Si tiene preguntas o' discusiones sobre este reporte en espanol, favor de llamar al tel. (936) 294-5743 par hablar con una persona bilingue en espanol.

**Special Notice:** You may be more vulnerable than the general population to certain microbial contaminants, such as *Cryptosporidium*, in drinking water. Infants, some elderly or immunocompromised persons such as those undergoing chemotherapy for cancer; those who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care provider. Additional guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline at (800) 426-4791.

**Source of Drinking Water:** 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, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants 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, and wildlife. Inorganic contaminants, such as salts and metals, which can be naturally-occurring or results 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 can also, come from gas stations, urban storm water runoff, and septic systems. Radioactive contaminants which can be naturally-occurring or be the result of oil and gas production and mining activities. The TCEQ completed an assessment of your source water and results indicate that some of your sources are susceptible to certain contaminants.

This data can be reviewed at <https://www.tceq.texas.gov/gis/swaview>. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detections of these contaminants may be found in this Consumer Confidence Report and a <http://dww2.tceq.texas.gov/DWW/>. For more information on source water assessments and protection efforts at our system, contact Kyle Matthews at (936) 294-5733.

**Where Do We Get Our Water?** Water from the City of Huntsville is obtained from two sources: One (1) seven wells owned and operated by the City of Huntsville which pumps water from the **Catahoula Aquifer** and two (2) Surface water from the Trinity River that is treated by the **Huntsville Regional Water Supply System (HRWSS)**. These two sources are blended, as needed, to provide an ample supply of potable drinking water year-round. Approximately ninety percent (90%) of the water is purchased, as a finished product, from the (**HRWSS**) with the remaining ten percent (10%) produced from the City wells.

**Water Loss:** In the water loss audit submitted to the Texas Water Development Board for the calendar year of January-December 2017, our system estimated volume of water loss was 217,396,324 gallons. The total water loss-percentage is five-point zero-five (5.05%). If you have any questions about the (**TWDB**) water loss audit please call (936) 294-5733.

**ALL Drinking Water May Contain Contaminants:** Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects may be obtained by calling EPA's Safe Drinking Water Hotline (1-800-426-4791).

**Understanding the Charts:** The charts that follow list all of the federally regulated or monitored constituents which have been found in your drinking water. The list below explains the terms used in the charts.

## Water Quality Test Results:

### Definitions and Abbreviations

Definitions and Abbreviations	The following tables contain scientific terms and measures, some of which may require explanation.
Action Level:	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Action Level Goal (ALG):	The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.
Avg:	Regulatory compliance with some MCLs are based on running annual average of monthly samples.
Level 1 Assessment:	A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
Level 2 Assessment:	A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
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.
Maximum residual disinfectant level or MRDL:	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.
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 contaminants.
MFL	million fibers per liter (a measure of asbestos)
mrem:	millirems per year (a measure of radiation absorbed by the body)
na:	not applicable.
NTU	nephelometric turbidity units (a measure of turbidity)
pCi/L	picocuries per liter (a measure of radioactivity)
ppb:	micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.
ppm:	milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

## TRA Huntsville Regional Water Supply System Treatment Plant

### Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorite	2017	0.28	< 0.02 – 0.28	0.1	1	ppm	N	By-product of drinking water disinfection.
Haloacetic Acids (HAA5) *	2017	0.138	13.8-13.8	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2017	.0414	41.4-41.4	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2017	0.0578	0.0578-0.0578	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Cyanide	2017	0.17	< 0.01 – 0.17	200	200	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
Fluoride	2017	<.10	0.10 - 0.10	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2017	1.31	1.31-1.31	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	01/26/2015	1.4	1.4-1.4	0	5	pCi/L*	N	Erosion of natural deposits.

\*EPA considers 50 pCi/L to be the level of concern for beta particles.

**Turbidity**

	<b>Limit (Treatment Technique)</b>	<b>Level Detected</b>	<b>Violation</b>	<b>Likely Source of Contamination</b>
Highest single measurement	1 NTU	0.26 NTU	N	Soil runoff.
Lowest monthly % meeting limit	0.3 NTU	100%	N	Soil runoff.

Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration

**Total Organic Carbon**

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.

*City of Huntsville “Blended” Distribution System Water*

**Coliform Bacteria**

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	5% or more of monthly samples.	0.00%	0	0	N	Naturally present in the environment.

**Lead and Copper**

Definitions:

Action Level Goal (ALG): The level of contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

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

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2017	1.3	1.3	0.44	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2017	0	0.15	.0046	1	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

## Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)*	2017	17	3.8-16.8	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
<b>Total Trihalomethanes (TTHM)</b>	2017	37	13.6-36.8	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Chemicals	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	01/11/2017	.0037	< 0.002-3.7	0.01	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	01/11/2017	0.143	0.0605-0.143	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	01/11/2017	0.63	0.50-0.63	4.0	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	01/11/2017	4	0.04-3.39	10	10	ppm	N	<b>Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.</b>
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	05/31/2017	13	5.5-13	0	50	pCi/L*	N	Decay of natural and man-made deposits.

\*EPA considers 50pCi/L to be the level of concern for

<b>Combined Radium 226/228</b>	05/31/2017	2.5	1-2.5	0	5	pCi/L	N	Erosion of natural deposits.
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<b>Gross alpha excluding radon and uranium</b>	05/31/2017	4.8	0.001-4.8	0	15	pCi/L	N	Erosion of natural deposits.
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**Disinfectant Residual Table**

<b>Disinfectant</b>	<b>Year</b>	<b>Average Level</b>	<b>Minimum Level</b>	<b>Maximum Level</b>	<b>MRDL</b>	<b>MRDLG</b>	<b>Violation</b>	<b>Likely Source of Contamination</b>
Chloramines	2017 Info from DLQOR	2.44	0.54	3.53	4.0	ppm	N	Water additive used to control microbes.

**Contact Person:** *Kyle Matthews*, Water Services Superintendent (936) 294-5733. **Public Participation:** The City Council meets regular on the first (1<sup>st</sup>) and third (3<sup>rd</sup>) Tuesday of each month. Call 936-291-5400 or visit our web site at <http://www.huntsvilletx.gov> for times and complete agenda.