

## Public Participation Opportunities

**Date:** September 13, 2017

**Time:** 8 am – 5 pm

**Location:** Agua SUD  
3120 N. Abram Rd  
Palmview, TX

**Phone:** (956) 585-2459

Please call us to learn about future public meetings (concerning your drinking water), or to request to schedule a meeting with us.

This report is available for viewing at Agua S.U.D.'s web site:  
<http://www.aguasud.com>

### For More Information

If you have questions about this report, please contact Aaron Castillo at (956) 585-2459.

### En Español

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.



Agua Special Utility District  
PO Box 4379  
Mission, TX 78573

# Agua S.U.D. Annual Drinking Water Quality Report 2016



We are pleased to present our Annual Drinking Water Quality Report to you covering the period from January 1, 2016 to December 31, 2016. This report is a summary of the quality of the water we provide to our customers. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests. We hope this information helps you become more knowledgeable about what's in your drinking water.

### Water Sources

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 before treatment 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 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 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.

### Where Do We Get Our Drinking Water?

Our drinking water is obtained from surface water, which comes from the Rio Grande River; La Joya Lake; 492 Reservoir; and Abram Reservoir. The TCEQ completed an assessment of your source water and results indicate that some of your sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detections of the contaminants may be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, contact Aaron Castillo at (956) 585-2459.

For more information about your sources of water, please refer to the Source Water Assessment Viewer available at <http://www.tceq.texas.gov/gis/swaview>. Further details about sources and sourcewater assessments are available in Drinking Water Watch at the following URL: <http://dww2.tceq.texas.gov/DWW/>.

### Cryptosporidium and Drinking Water

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

### Lead and Drinking Water

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. This water supply 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 the 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 EPA Safe Drinking Water Hotline at 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.

### All Drinking Water May Contain Contaminants

When drinking water meets federal standards there may not be any health based benefits to purchasing bottled water or point of use devices. 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 EPA's Safe Drinking Water Hotline (1-800-426-4791).

### Secondary Constituents

Many constituents (such as calcium, sodium, or iron) which are often found in drinking water, can cause taste, color, and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas, not the EPA. These constituents are not causes for health concern. Therefore, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

Agua Special Utility District strives to account for all water resources used throughout the District. Agua SUD submits a yearly water report to Texas Water Development Board. In the water loss audit submitted to the Texas Water Development Board for the time period of January - December 2016, our system lost an estimated 9.26% of all water used. If you have any questions about the water loss audit, please call 956-585-2459.



## About the Following Tables:

The following tables list all of the federally regulated or monitored contaminants which have been found in your drinking water. The U.S. EPA requires water systems to test up to 97 constituents.

Coliform Bacteria						
MCLG	Total Coliform MCL	Highest No. Positive	Fecal Coliform or E. Coli MCL	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	5% of monthly samples are positive	1.9%	0	0	N	Naturally present in the environment

Microorganisms							
Year	Contaminant (Unit)	Average Level	Range of Levels	MCLG	MCL	Violation	Likely Source of Contamination
2016	Cryptosporidium (oocysts)	0	0-0	0	99% removal	N	Human and animal fecal waste

Cryptosporidium is a microbial pathogen that may be found in water contaminated by feces. Although filtration removes Cryptosporidium, it cannot guarantee 100 percent removal nor can the testing methods determine if the organisms are alive and capable of causing cryptosporidiosis, an abdominal infection with nausea, diarrhea and abdominal cramps that may occur after ingestion of contaminated water. The following results were acquired from untreated water coming into our raw water reservoir; prior to any chemical treatment.

Inorganic Contaminants							
Year	Contaminant (Unit)	Highest Level	Range of Levels	MCLG	MCL	Violation	Likely Source of Contamination
2016	Barium (ppm)	0.135	0.109 - 0.135	2	2	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
2016	Fluoride (ppm)	0.6	0.48 - 0.59	4.0	4.0	N	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
2016	Nitrate (measured as Nitrogen)(ppm) <sup>1</sup>	0.08	0.04 - 0.08	10	10	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
2016	Selenium (ppb)	3.6	0 - 3.6	50	50	N	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines

<sup>1</sup> Nitrate Advisory – Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

Disinfection By-Products							
Year	Disinfectant By-Product (Unit)	Highest Level	Range of Levels	MCLG [MRDLG]	MCL [MRDL]	Violation	Likely Source of Contamination
2016	Haloacetic Acids (ppb)	22	13.1 - 27.4	NA	60	N	By-product of drinking water disinfection
2016	Total Trihalomethanes (ppb)	50	2.8 - 57.4	NA	80	N	
2016	Chlorite (ppm)	0.79	0 - 0.79	0.8	1	N	Disinfectant used to control microbes
2016	Chlorine Dioxide (ppm)	0.52	0 - .52	0.80	0.80	N	Water additive use to control microbes

Radioactive Contaminants							
Year	Contaminant (Unit)	Highest Level	Range of Levels	MCLG	MCL	Violation	Likely Source of Contamination
2016	Beta/photon emitters (pCi/L)	7.3	7.3 - 7.3	0	50	N	Decay of natural and man-made deposits
2016	Combined Radium 226/228 (pCi/L)	1.5	1.5 - 1.5	0	5	N	Erosion of natural deposits

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

Lead and Copper							
Year	Contaminant (Unit)	90th Percentile	Number of Sites Exceeding Action Level	Action Level	MCLG	Violation	Likely Source of Contamination
2016	Lead (ppm)	0	0	0.015	0.015	N	Corrosion of household plumbing systems; erosion of natural deposits
2016	Copper (ppm)	0.075	0	1.3	1.3	N	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Turbidity				
	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1 NTU	0.3 NTU	N	Soil runoff
Lowest monthly percent meeting limit	0.3 NTU	100%	N	Soil runoff

*Turbidity is a measurement of the cloudiness of 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.						
Name	Average Level	Range of Levels	MRDL	MRDLG	Violation	Likely Source of Contamination
Chloramines (ppm)	2.7	1.34 - 4.03	4	4	N	Water additive used to control microbes

## Water Conservation

### Voluntary Water Conservation Measures:

For purposes of the implementing landscape irrigation restrictions in any of the stages of the District's drought plan, the District is divided accordingly:

- (1) The Green Watering Zone No. 1 includes customers south of Expressway 83 from west of Inspiration Road into Starr County.
- (2) The Yellow Watering Zone No. 2 includes customers north of Expressway 83, south of 3 Mile Line from west of Inspiration Road into Starr County.
- (3) The Red Watering Zone No. 3 includes customers north of 3 Mile Line, south of 8 Mile Line from West of Bentsen Palm Dr. into Starr County.

A copy of the map identifying the different zones is available for review at the District's offices or on the District's website.

#### *Voluntary Water Conservation Measures.*

- (1) The District, in an effort to conserve water resources, will promote voluntary water conservation measures year-round.
- (2) Voluntary Water Use Practices.
  - (A) Water customers are requested to voluntarily limit the irrigation of landscaped areas with hose-end sprinklers or automatic irrigation systems.
  - (B) Customers are requested, where practicable, to limit outdoor water use and landscape irrigation to:
    - (i) Mondays and Thursdays for water customers in Green Watering Zone No. 1;
    - (ii) Tuesdays and Fridays for water customers in Yellow Watering Zone No. 2; and
    - (iii) Wednesdays and Saturdays for water customers Red Watering Zone No. 3.
  - (C) Water customers are requested to voluntarily limit irrigation of landscaped areas hours of 12:00 midnight until 10:00 a.m. and between 8:00 p.m. and 12:00 midnight on designated watering days.
  - (D) Water customers are requested to avoid activities that waste water or that allows water to leave the customers property, such as water running down the gutter.

#### Definitions:

- AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- ALG (Action Level Goal): 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.
- MCL (Maximum Contaminant Level): The highest permissible level of a contaminant 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 health risk. MCLGs allow for a margin of safety.
- MRDL (Maximum Residual Disinfectant Level): The highest level of 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 contamination.
- TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.

#### Abbreviations:

- NA – Not applicable.
- NTU – Nephelometric Turbidity Units
- pCi/L – picocuries per liter (a measure of radioactivity)
- ppm – parts per million, or milligrams per liter (mg/L)
- ppb – parts per billion, or micrograms per liter (µg/L)
- ppt – parts per trillion, or nanograms per liter
- ppq – parts per quadrillion, or picograms per liter