CITY OF ALAMO HEIGHTS

2017/2018 WATER QUALITY







Providing Quality Water

2017/2018 Water Quality Report

The City of Alamo Heights is proud to present its 2017/2018 Water Quality Report. This report reflects all testing completed from January 1 through December 31, 2017. This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water. Over the years, we have dedicated ourselves to provide drinking water that meets all state and federal drinking water standards. The City continually strives to adopt new and better methods of delivering the best quality drinking water to its residents. As regulations and drinking water standards change, it is the City's commitment to meet the challenges of source water protection, water conservation and community education while continuing to serve the needs of all our residents.

Drinking Water Source

The City of Alamo Heights' sole source of water is the Edwards Aquifer which is one of the world's most unique groundwater resources. The Edwards Aquifer has supported civilization for more than 8,000 years and today is the primary source of water for 1.3 million people. The aquifer is about 180 miles long and five to 40 miles wide at different points. It reaches from Bracketville in the west to Kyle in the east. The aquifer covers over a 3,000 square mile area. The primary geologic component of the Edwards Aquifer is Edwards Limestone. It occurs in three distinct segments: the drainage area, the recharge zone and the artesian zone. Each area is equally important to the health and viability of the Edwards Aquifer as a whole.

All Drinking Water May Contain Contaminants

When drinking water meets federal standards, there may not be any health 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 (800-426-4791).

Secondary Constituents

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, color of drinking water or regarding this report, contact Patrick Sullivan, Public Works Director 210-822-1506.

Further details about sources and source-water assessments are available in Drinking Water Watch http://dww2.tceq.texas.gov/DWW.

Health Information About Lead

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. We are responsible for providing high quality drinking water, but we 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.

Special Information

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; persons 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 providers Additional guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline (800-426-4791).

Detected Regulated Contaminants

Maximum Residual Disinfectant Level	Collection Date	Average Concentra- tion Found	Minimum Level	Maximum Level	MRDL	MRDG	Units	Likely Source of Contamination
Chlorine Residual, Free	2017	1.24	0.78	1.96	4	4	ppm	Disinfectant used to control microbes

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Concentration Range Found	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAAs)*	2017	4	0.00 - 4.0	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2017	6	0.00 - 6.0	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	0.0457	0.0451-0.0457	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	09/20/2011	7.19	7.19 - 7.19	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Fluoride	2017	0.94	0.19 - 0.94	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	2	1.88 - 1.95	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Combined Radium	2016	2.52	1.5-2.52	0	5	pCi/L	N	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	03/15/2016	2.52	1.5 - 2.52	0	5	pCi/L	N	Erosion of natural deposits.

Lead and Cooper

Lead and Cooper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Cooper	2017	1.3	1.3	0.139	0	ppm		Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2017	0	15	6.5	1	ppb		Corrosion of household plumbing systems; Erosion of natural deposits.

Source	Water Name	Type of Water	Report Status
2-CITY HALL	CITY HALL	GW	Υ
3-CITY HALL	CITY HALL	GW	Υ
4-HIGH SCHOOL	HIGH SCHOOL	GW	Υ
5-TX MIL INST	TX MIL INST	GW	Υ
6-CITY HALL	CITY HALL	GW	Υ
7-CITY HALL	CITY HALL	GW	Υ

^{*} The levels of the disinfection are taken daily - a total of 14 bacteriological samples are taken monthly and 6 production wells are sampled monthly to address an potential hazards throughout the water system

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 os safety.

MCL (Maximum Contaminant Level) - 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.

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.

MFL - Million fibers per liter (a measure of asbestos)

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.

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.

NA - Not applicable ND - Not detected 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 micograms per liter (µg/L)

ppt – Parts per trillion or nanograms per liter (ng/L) ppq – Parts per quadrillion or picograms per liter (pg/L)

TT – Treatment technique µmhos/cm – Micromhos per centimeter (a measure of conductivity)

Lead and Copper Rule

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

Violation Type	Violation Begin	Violation End	Violation Explanation
LEAD CONSUMER NOTICE (LCR)	12/30/2014		We failed to provide the results of lead tap water monitoring to the consumers at the location water was tested. These were supposed to be provided no later than 30 days after learning the results.

Public Notification Rule

The Public Notification Rule helps to ensure that consumers will always know if there is a problem with their drinking water. These notices immediately alert consumers if there is a serious problem with their drinking water (e.g. a boil water emergency).

Violation Type	Violation Begin	Violation End	Violation Explanation
PUBLIC NOTICE RULE LINKED TO VIOLATION	03/13/2017		We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations. At the time of violation the City followed all required public notification requirements as per the information provided by TCEQ.

GENERAL INFORMATION

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 EPAs Safe Drinking Water Hotline at (800) 426-4791.

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 result from urban storm 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 stormwater runoff and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

INFORMATION ABOUT SOURCE WATER ASSESSMENTS

A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality (TCEQ). This information describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assessment allows us to focus source water protection—strategies. 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 these contaminants may be found in this Consumer Confident Report. For more information on source water assessments and protection efforts at our system, contact Patrick Sullivan, Public Works Director, 210-822-1506.

Public Participation Opportunities

To get involved in decisions affecting your drinking water, attend and comment at the Alamo Heights City Council meetings, the 2nd and 4th Monday of each month. The meetings are held in City Council Chambers located at 6116 Broadway and begin at 5:30 p.m. Agendas are available on the City's website at www.alamoheightstx.gov.

En Español—Este informe incluye información importante sobre el potable. Si tiene preguntas o comentarios sobre este informe en español, favor de llamar al tel. 210-882-1518 - para hablar con una persona bilingüe en español.

Call to report leaks, main breaks or sewer splits 210-882-1518. To report after hour call 210-822-3321.

The adopted Stage Water Restrictions are as follows:

Critical Period Reduction Stage*	Index Well J-17 Level (MSL)	San Marcos Springs Flow (CFS)	Comal Springs Flow (CFS)	Withdrawal Reduction – San Antonio Pool
I	<660	<96	<225	20%
II	<650	<80	<200	30%
III	<640	N/A	<150	35%
IV	<630	N/A	<100	40%

Last number of your Address	Watering Day
0 or 1	Monday
2 or 3	Tuesday
4 or 5	Wednesday
6 or 7	Thursday
8 or 9	Friday
Multi-Family premises, schools, churches and com- mercial users	Wednesday

^{*}Implementation of Stages is based on a 10-day average. A change to a critical period stage with higher withdrawal reduction percentages is triggered if the 10-day average of daily springflows at the Comal Springs or the San Marcos Springs or the 10-day average of daily aquifer levels at the J-17 Index Well drops below the lowest number of any of the trigger levels. A change to a critical period stage with lower withdrawal reduction percentages is triggered only when the 10-day average of daily springflows at the Comal Springs or the San Marcos Springs and the 10-day average of daily aquifer levels at the J-17 Index Well are all above the same stage trigger level.

<u>Stage 1</u> - Landscape watering using automatic or manual irrigation systems is permitted only once a week **before 10 a.m. and after 8 p.m.** The last number of your address determines what day you are able to water. You may use drip irrigation, soaker hose, hand-held hose or bucket (5-gallon or less container) during any day at any time.

<u>Stage 2</u> - Landscape watering using automatic or manual irrigation system is permitted **only once a week** between the hours **7 a.m. and 11 a.m.** and **between the hours of 7 p.m. and 11 p.m.** The last number of your address determines what day you are able to water. You may use drip irrigation, soaker hose, or bucket (5-gallon or less container) during **any day of the week but only** between the hours of **7 p.m. and 11 p.m.** A hand-held hose may be used during any day of the week at any time.

<u>Stage 3</u> - Landscape watering using automatic or manual irrigation system is permitted **only every OTHER week** between the hours **7 a.m.** and **11 a.m.** and **between the hours of 7 p.m.** and **11 p.m.** The last number of your address determines what day you are able to water. You may use drip irrigation, soaker hose, hand-held hose or bucket (5-gallon or less container) during **any day of the week but only between the hours of 7 a.m. and 11 a.m. and between the hours of 7 p.m. and 11 p.m.**

<u>Stage 4</u> - Stage III landscape irrigation restrictions remain in effect. When Stage IV is in effect, the City Council may hold emergency sessions to consider other restrictions on water use or to allow special uses.

A full water restriction informational flyer is available either on the City's website **www.alamoheightstx.gov** or can be picked up at City Hall. We strongly urge compliance to water restrictions to avoid costly sanctions against users in violation of water restrictions AND the City of Alamo Heights by the Edwards Aquifer Authority. Individual offenses may be fined up to \$2,000.00. Each day's violation may constitute a separate offense.