# CITY OF ALAMO HEIGHTS

2013 WATER QUALITY REPORT







# Providing Quality Water

2013 Water Quality Report

The City of Alamo Heights is proud to present its 2013 Water Quality Report. This reports reflects all testing completed from January 1 through December 31, 2013. 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.



## Notice for High Health Risk Groups

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).

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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

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# INFORMATION ABOUT SECONDARY CONTAMINANTS



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, or color of drinking water. For more information regarding this report contact: Patrick Sullivan, Public Works Director 822-1506.

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

## 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. 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 822-1506.

#### 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.

# **Detected Regulated Contaminants**

| Naturally present in the environment.  | Naturally present              | ~         |                                | 0  |  | 4                           | 1 positive monthly sample.                           | 0 1p                                       |
|--|--------------------------------|-----------|--------------------------------|--|--|-----------------------------|--|--|
| Contamination  | Likely Source of Contamination | Violation | ositive E. Coli<br>orm Samples | Total No. of Positive E. Coli<br>vel or Fecal Coliform Samples | Fecal Coliform or E. Coli<br>Maximum Contaminant Level | Highest No. of Positive     | Total Coliform Maxi- Hig<br>mum Contaminant<br>Level | Maximum Contaminant Tota Level Goal mu     |
|  |                                |           |                                |  |  |                             | 1a   | Coliform Bacteria                          |
| Discharge from electronics, glass, and Leaching from ore-processing sites; drug factories.                                 | Z                              | ppb       | 2                              | 0.5  | 0.015 - 0.015  | 0.015                       | 09/20/2011   | Thallium                                   |
|  | <u>-</u>                       |           |                                |  |  | · -                         | · -  |  |
| Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.                               | Z                              | ppm       | 10                             | 10   | 1.98 - 2.02  | 2                           | 2013   | Nitrate [measured as Nitro-gen]            |
|  |                                |           |                                |  |  |                             |  |  |
| Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories. | z                              | ppm       | 4.0                            | 4  | 0.29 - 0.29  | 0.29                        | 09/20/2011   | Fluoride                                   |
|  |                                |           |                                |  |  |                             |  |  |
| Discharge from steel and pulp mills; Erosion of natural deposits.  | z                              | ppb       | 100                            | 100  | 7.19 - 7.19  | 7.19                        | 09/20/2011   | Chromium                                   |
|  |                                |           |                                |  |  |                             |  |  |
| Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.                                | z                              | ppm       | 2                              | 2  | 0.0446 - 0.0446  | 0.0446                      | 09/20/2011   | Barium                                     |
|  |                                |           |                                |  |  |                             |  |  |
| Likely Source of Contamination   | Violation                      | Units     | MCL                            | MCLG   | :t- Range of Levels De-<br>tected                      | Highest Level Detect-<br>ed | Collection Date                                      | Inorganic Contaminants                     |
|  |                                |           |                                |  |  |                             |  |  |
| By-product of drinking water disinfection  | z                              | ppb       | 80                             | No goal for the total  | 0-7.6  | 1                           | 2012   | Total Trihalomethanes (TTHM)               |
|  |                                |           |                                |  |  |                             |  |  |
| By-product of drinking water disinfection.   | Z                              | ppb       | 60                             | No goal for the<br>total                                       | 0 - 3.5  | 1                           | 2012   | Haloacetic Acids (HAA5)*                   |
|  |                                |           |                                |  |  |                             |  |  |
| Likely Source of Contamination   | Violation                      | Units     | MCL                            | MCLG   | :t- Range of Levels De-<br>tected                      | Highest Level Detect-<br>ed | Collection Date                                      | Disinfectants and Disinfection By-Products |
|  |                                |           |                                |  |  |                             |  |  |

| Source             | Water Name       | Type of Water | Report Status |
|--------------------|------------------|---------------|---------------|
| 2-CITY HALL        | CITY HALL        | GW            | $\mathbf{Y}$  |
| <b>3-CITY HALL</b> | CITY HALL        | GW            | $\mathbf{Y}$  |
| 4-HIGH SCHOOL      | HIGH SCHOOL      | . GW          | $\mathbf{Y}$  |
| 5-TX MIL INST      | TX MIL INST      | GW            | $\mathbf{Y}$  |
| 6-CITY HALL        | CITY HALL        | GW            | Y             |
| 7-CITY HALL        | <b>CITY HALL</b> | GW            | ${f Y}$       |

#### **Violations Table**

| Chlorine  |                 |               |   |  |
|---|-----------------|---------------|---|--|
| Some people who use water containing chlorine taining chlorine well in excess of the MRDL could |                 | •             | itating effects to their eyes and nose. Some people who drink water con-  |  |
| Violation Type  | Violation Begin | Violation End | Violation Explanation   |  |
| Disinfectant Level Quarterly Operating Report (DLQOR).  | 01/01/2013      | 03/31/2013    | We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated. Reason: Well #4 was taken out of service during this time period for installation of new pump and building of new housing structure. No testing was conducted since water was not discharged into our water system through this well. |  |
| Disinfectant Level Quarterly Operating Report (DLQOR).  | 10/01/2013      | 12/30/2013    | We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated. Reason: Well #4 was taken out of service during this time period for installation of new pump and building of new housing structure. No testing was conducted since water was not discharged into our water system through this well. |  |

# E. coli Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with

short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.

| Violation Type                             | Violation Begin | Violation End | Violation Explanation  |
|--|-----------------|---------------|--|
| MONITOR GWR TRIGGERED/ADDITIONAL, MINOR    | 04/01/2013      | 04/30/2013    | We failed to collect all the required follow-up samples within 24 hours of learning of the total coliform-positive sample. These needed to be tested for fecal indicators from all sources that were being used at the time the positive sample was collected. Reason: This well was taken out of service immediately after results received. After all necessary testing was performed well was placed back into service. |
| MONITOR GWR TRIGGERED/ADDITIONAL,<br>MINOR | 04/01/2013      | 2013          | We failed to collect all the required follow-up samples within 24 hours of learning of the total coliform-positive sample. These needed to be tested for fecal indicators from all sources that were being used at the time the positive sample was collected. Reason: This well was taken out of service immediately after results received. After all necessary testing was performed well was placed back into service. |

#### **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   |
|------------------------------------|-----------------|---------------|---|
| Follow-Up or Routine TAP M/R (LCR) | 10/01/2013      | 2013          | We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated. |
| Follow-Up or Routine TAP M/R (LCR) | 10/01/2013      | 2013          | We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated. |

#### **Violations Table**

| Public Notification Rule  |                 |               |  |  |
|---|-----------------|---------------|--|--|
| The Public Notification Rule helps to ensure tha there is a serious problem with their drinking w | •               | •             | m with their drinking water. These notices immediately alert consumers if  |  |
| Violation Type  | Violation Begin | Violation End | Violation Explanation  |  |
| PUBLIC NOTICE RULE LINKED TO VIOLATION  | 04/10/2013      | 2013          | 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. |  |
| PUBLIC NOTICE RULE LINKED TO VIOLATION  | 09/25/2013      | 2013          | 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. |  |

| Total Coliform   |                 |               |  |
|--|-----------------|---------------|--|
| Coliforms are bacteria that are naturally present found in more samples than allowed and this wa |                 |               | hat other, potentially-harmful, bacteria may be present. Coliforms were  |
| Violation Type   | Violation Begin | Violation End | Violation Explanation  |
| MCL (TCR), MONTHLY   | 04/01/2013      | 04/30/2013    | Total coliform bacteria were found in our drinking water during the period indicated in enough samples to violate a standard. Follow up samples taken within 24 hours where clear of Coliform. |

<sup>\*</sup> 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**

**Maximum Contaminant Level (MCL)** 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.

**Maximum Contaminant Level Goal (MCLG)** 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.

**Maximum Residual Disinfectant Level (MRDL)** 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.

Maximum Residual Disinfectant Level Goal (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. Treatment Technique (TT) A required process intended to reduce the level of a contaminant in drinking water. NTU nephelometric turbidity units (a measure of turbidity); pCi/L picocuries per liter (a measure of radioactivity); ppm/ppb/ppt/ppq A part per million means that one part of a particular contaminant is present for every million parts of water. Similarly, parts per billion indicate the amount of a contaminant per billion parts of water, parts per trillion, parts per quadrillion.

## **Stage Water Restrictions**

The adopted Stage Water Restrictions are as follows:

| Critical Period<br>(Reduction)<br>Stage* | Index Well J-<br>17 Level<br>(MSL) | San Marcos<br>Springs Flow<br>(CFS) | Comal Springs<br>Springs Flow<br>(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%                                     |

<sup>\*</sup> Implementation of Stage I 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 a.m.** and **11 a.m.** and 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 <b>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.

| 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 commercial users | Wednesday    |

A full water restriction informational flyer is available either on the City 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.

## Ways to Conserve

#### **Outdoors**

- Follow the watering times set in the year-round conservation ordinance when not in Water Restriction Stages.
- Don't water during a thunderstorm. Rain sensors installation is required on your irrigation systems.
- Don't water the streets, walkways or driveways.

#### **Check for Leaks**

- Test the toilet for leaks by adding food coloring to the tank. If color appears in the bowl, there is a leak that needs to be repaired. Leaks can account for, on average, 10,000 gallons of water wasted in the home every year.
- A leaky faucet that drips at the rate of one drip per second can waste more than 3,000 gallons per year.
- Constantly running toilets can potentially waste 200 gallons of water or more every day.
- To check for leaks, survey areas inside and outside such as faucets, toilets, showerheads, garden hoses, and irrigation systems

#### **Bathrooms**

- Install a low-flow shower head that will limit the flow from the shower to less than three gallon per minute.
- Replace your old toilet with a new High Efficiency Toilet (HET) by replacing 3.5 to 5 gallon per flush toilets, you can potentially save over 8,000 gallons of water per year. The City offers a \$50 credit (limit 2 per property) on your water bill with original proof of purchase of an HET.

#### **Appliances and Plumbing**

- Check water requirements of various models and brands when considering purchasing any new appliances. Some use less water than others.
- Be sure the water heater thermostat is not set too high. Extremely hot settings waste water and energy because the water often has to be cooled with cold water before it can be used.

### 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 the temporary City Hall Building located at 1248 Austin Hwy Ste 220 and begin at 5:30 p.m. Agendas are available on the City's website at <a href="https://www.alamoheightstx.gov">www.alamoheightstx.gov</a>.

#### City of Alamo Heights Officials

Mayor: Louis Cooper

**City Council**: Place 1 - Bobby Hasslocher, Mayor Pro-Tem Place 2 - Bobby Rosenthal, Place 3 - Fred Prassel, Place 4 - Lynda Billa Burke and Place 5 - John Savage

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. 882-1518 - para hablar con una persona bilingüe en español.

