



## A REFRESHING TOMORROW



This report is a summary of the quality of water San Antonio Water System (SAWS) provides its customers. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in this report. We hope this information helps you become knowledgeable about what is in your drinking water.

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# 2012 WATER QUALITY REPORT

SAN ANTONIO WATER SYSTEM | TEXAS RESEARCH PARK

## 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 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?

The source of drinking water used by SAWS Texas Research Park is ground water from the Edwards Aquifer. 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. Some of this source water assessment information is available on Texas Drinking Water Watch at <http://dww.tceq.state.tx.us/DWW/>.

For more information on source water assessments and protection efforts at our systems, please contact us.

## ALL DRINKING WATER MAY CONTAIN CONTAMINANTS

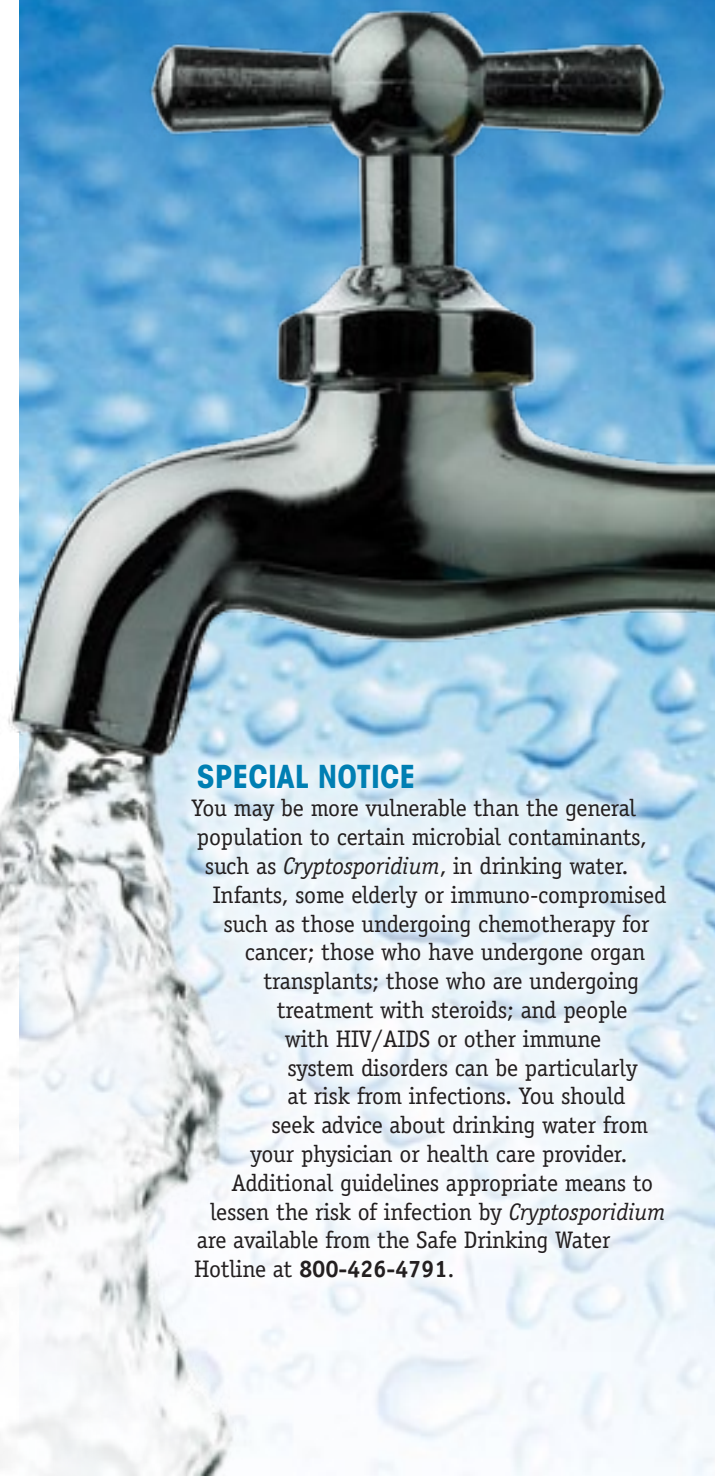
When drinking water meets federal standards, there may not be any health benefits to purchasing bottled water or point of use devices. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily 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

Many constituents (such as calcium, sodium, or iron), which are 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 affect the appearance and taste of your water.

## 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. 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 two 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 NOTICE

You may be more vulnerable than the general population to certain microbial contaminants, such as *Cryptosporidium*, in drinking water. Infants, some elderly or immuno-compromised 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 appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline at 800-426-4791.

## DEFINITIONS

The following tables contain scientific terms and measures, some of which may require explanation.

**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.

**AL (Action Level)** – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**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 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.

**MFL** – Million fibers per liter (a measure of asbestos)

**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 (ng/L)

**ppq** – Parts per quadrillion or picograms per liter (pg/L)

**TT** – Treatment technique

## COLIFORM BACTERIA

**Total Coliform:** Total coliform bacteria are used as indicators of microbial contamination of drinking water because testing for them is easy. While not disease-causing organisms themselves, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are more hardy than many disease-causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.

## MAXIMUM RESIDUAL DISINFECTANT LEVEL

Disinfectant	Year	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Units	Source of Chemical
Chlorine residual, free	2011	1.0	0.3	2.0	4.0	<4.0	ppm	Disinfectant used to control microbes

## LEAD AND COPPER

Constituent	Date Sampled	MCLG	AL	90th Percentile	Number of Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2009	1.3	1.3	0.3	0	ppm	No	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems
Lead	2009	0	15	2.0	1	ppb	No	Corrosion of household plumbing systems; erosion of natural deposits

## SECONDARY AND OTHER CONSTITUENTS NOT REGULATED (Not associated with adverse health effects)

Constituent	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Aluminum	2011	0.00356	0.00356–0.00356	0	0.05	ppm	No	Abundant naturally occurring element
Bicarbonate	2011	211	205–211	0	NA	ppm	No	Corrosion of carbonate rocks such as limestone
Calcium	2011	73.9	73.9–73.9	0	NA	ppm	No	Abundant naturally occurring element
Chloride	2011	16.6	10.1–16.6	0	300	ppm	No	Abundant naturally occurring element; used in water purification; byproduct of oil field activity
Hardness (as Ca/Mg)	2011	242	242–242	0	300	ppm	No	Naturally occurring calcium and magnesium
Magnesium	2011	14.1	14.1–14.1	0	NA	ppm	No	Abundant naturally occurring element
Nickel	2011	0.000952	0.000952–0.000952	0	NA	ppm	No	Erosion of natural deposits
pH	2011	7.7	7.6–7.7	>7.0	>7.0	units	No	Measure of corrosivity of water
Sodium	2011	8.50	8.50–8.50	0	NA	ppm	No	Erosion of natural occurring element
Sulfate	2011	24.5	14.9–24.5	0	300	ppm	No	Naturally occurring; common industrial byproduct; byproduct of oil field activity
Total alkalinity (as CaCO <sub>3</sub> )	2011	211	205–211	0	NA	ppm	No	Naturally occurring soluble mineral salts
Total dissolved solids	2011	305	276–305	0	1,000	ppm	No	Total dissolved mineral constituents in water
Zinc	2011	0.0648	0.0648–0.0648	0	5	ppm	No	Moderately abundant naturally occurring element; used in the metal industry

## DISINFECTANTS AND DISINFECTION BY-PRODUCTS

Constituent	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic acids (HAAs)	2010	4.6	4.6–4.6	0	60	ppb	No	By-product of drinking water chlorination
Total Trihalomethanes (TTHM)	2010	28.2	28.2–28.2	0	80	ppb	No	By-product of drinking water chlorination

## INORGANIC CONTAMINANTS

Constituent	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2011	0.0412	0.0412–0.0412	0	2	ppm	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	2011	0.000692	0.000692–0.000692	0	100	ppb	No	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride	2011	0.68	0.16–0.68	0	4.0	ppm	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (measured as nitrogen)	2011	1.92	1.66–1.92	0	10	ppm	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	2011	.000733	.000733–.000733	0	50	ppb	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines

## RADIOACTIVE CONTAMINANTS

Constituent	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Gross beta particles	2011	<4.0	<4.0–<4.0	0	50	pCi/L	No	Decay of natural and man-made deposits
Gross alpha	2011	<2.0	<2.0–<2.0	0	15	pCi/L	No	Erosion of natural deposits

**Note:** The MCL for beta particles is 4 mrem/year. EPA considers 50 pCi/L to be the level of concern for beta particles.

## CONTACT US

### Questions About Your Water Quality Report?

If you would like more information or a copy of this Water Quality Report, call:

**210-233-3176**

### Call 24 Hours a Day to:

- Report leaks, main breaks, or sewer back-ups
- Discuss water quality concerns

**210-704-SAWS** (210-704-7297)

### In Your Neighborhood

SAWS External Relations team extends its community outreach efforts with neighborhood leaders through homeowners associations and neighborhood meetings, schools and community gatherings. Call us for more information about how we can assist in your neighborhood.

**210-233-3246**

### Website

Our website has the latest news and program information on water issues.

[www.saws.org](http://www.saws.org)

### En Español

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe en español, favor de llamar al

**210-233-3176**

Para hablar con una persona bilingüe en español.



**TEXAS RESEARCH PARK**  
PWS ID Number: TX0150497