

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.

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. SAWS samples 360 sites in the distribution system for bacteria each month, and no *E. coli* positives were found in our drinking water in 2018.

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 SAWS drinking water originated as groundwater from the Edwards, Carrizo, Trinity and Wilcox aquifers, and in some areas, surface water from Canyon Lake. 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. SAWS purchases water from GBRA Western Canyon Water Supply, Oliver Ranch, Schertz Sequin Local Government Corporation and Water Exploration Stein Roger Well Field.

The information contained in the assessment allows us to better focus our source water protection strategies. Some of this source water assessment information is available on Texas Drinking Water Watch at <http://dww2.tceq.texas.gov/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. The secondary constituents results are available for this System on Texas Drinking Water Watch at <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. San Antonio Water System 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 on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline at 800-426-4791.

HOW TO READ YOUR WATER QUALITY REPORT

CONTAMINANTS

Parameter/Substance	Collection Date	Highest Level Detected	Concentration Range Found	MCLG	MCL	AL	Units	Violation	Likely Source of Contamination
Substance 1	2018	0.112	0.024 – 0.112	2	2	1.5	ppm	No	Erosion of natural deposits
Substance 2	2017	0.15	0.03 – 0.15	50	50	15	ppb	No	Erosion of natural deposits

The year or years tests were conducted.

The amount from lowest to highest of a contaminant detected in SAWS drinking water.

The highest amount of a contaminant EPA allows in drinking water.

Parts per billion – one ppb equals to one teaspoon in 1,302,000 gallons.

This describes some of the ways contaminants enter drinking water; wording is provided by EPA and may or may not apply to SAWS.

The highest amount of a contaminant detected in SAWS drinking water.

Below this level, a contaminant has no known or expected health risks.

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements SAWS must follow.

Parts per million – one ppm equals to one teaspoon in 1,302 gallons.

How a contaminant ends up in SAWS drinking water.



2019 WATER QUALITY REPORT SAN ANTONIO WATER SYSTEM

PWS ID Number: TX 0150018

COLIFORM BACTERIA – Monitored in the Distribution System

Parameter/Substance	Date Sampled	MCLG	Total Coliform MCL	Highest No. of Positive	Fecal Coliform or <i>E. Coli</i> or Fecal	Total No. of Positive <i>E. Coli</i> or Fecal	Violation	Likely Source of Contamination
Coliform Bacteria	2018	0	5% of monthly samples are positive	1	NA	0	No	Naturally present in the environment

LEAD AND COPPER – Monitoring Done at Customers' Taps

Parameter/Substance	Date Sampled	MCLG	AL	90th Percentile	Number of Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2017	1.3	1.3	0.226	0	ppm	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	2017	0	15	3.25	0	ppb	No	Corrosion of household plumbing systems; erosion of natural deposits

DISINFECTANTS AND DISINFECTION BY-PRODUCTS – Monitored in the Distribution System

Parameter/Substance	Collection Date	Highest Locational Running Annual Average	Concentration Range Found	MCLG	MCL	Units	Violation	Likely Source of Contamination
Total Trihalomethanes (THMs)	2018	73	0 – 77.8	NA	80	ppb	No	By-product of drinking water disinfection
Total Haloacetic Acids (HAAs)	2018	17	0 – 27.4	NA	60	ppb	No	By-product of drinking water disinfection

INORGANIC CONTAMINANTS – Monitored at the Water Plants

Parameter/Substance	Collection Date	Highest Level Detected	Concentration Range Found	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2018	0.0517	0.0517 – 0.0517	2	2	ppm	No	Discharge from drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride	2018	0.88	0.68 – 0.88	4	4	ppm	No	Erosion of natural deposits; discharge from fertilizer and aluminum factories; added for dental health
Nitrate	2018	3.14	0.1 – 3.14	10	10	ppm	No	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits

RADIOACTIVE CONTAMINANTS – Monitored at the Water Plants

Parameter/Substance	Collection Date	Highest Level Detected	Concentration Range Found	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	2017	1.5	1.5 – 1.5	0	5	pCi/L	No	Erosion of natural deposits

SYNTHETIC ORGANIC CONTAMINANTS – Monitored at the Water Plants

Parameter/Substance	Collection Date	Highest Level Detected	Concentration Range Found	MCLG	MCL	Units	Violation	Likely Source of Contamination
2,4-D	2018	0.1	0 – 0.1	70	70	ppb	No	Runoff from herbicide use on row crops
Di (2-Ethylhexyl) Phthalate*	2018	7.7	0 – 7.7	0	6	ppb	No	Discharge from rubber and chemical factories

*Some people who drink water containing Di (2-ethylhexyl) phthalate in excess of the MCL over many years may have problems with their liver, or experience reproductive difficulties, and may have an increased risk of getting cancer.

VOLATILE ORGANIC CONTAMINANTS – Monitored at the Water Plants

Parameter/Substance	Collection Date	Highest Level Detected	Concentration Range Found	MCLG	MCL	Units	Violation	Likely Source of Contamination
Tetrachloroethylene	2018	0.5	0 – 0.5	0	5	ppb	No	Leaching from PVC pipes; discharge from factories and dry cleaners
Xylenes, Total	2018	1.2	0 – 1.2	10	10	ppb	No	Discharge from petroleum and chemical factories

MAXIMUM RESIDUAL DISINFECTANT LEVEL – Monitored in the Distribution System

Parameter/Substance	Test Year	Average Concentration Found	Minimum Level	Maximum Level	MRDL	MRDLG	Units	Likely Source of Contamination
Chlorine Residual, Free	2018	1.39	0.10	3.20	4	4	ppm	Disinfectant used to control microbes

DEFINITIONS

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

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.

Avg (Average) – Regulatory compliance with some MCLs are based on a running annual average of monthly samples.

Level 1 Assessment – 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 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.

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.

STATE WATER LOSS AUDIT

In the water loss audit submitted to the Texas Water Development Board for the time period of January through December 2018, San Antonio Water System lost an estimated total of 13,592,963,983 gallons of water through main breaks, leaks, inaccurate customer metering, theft and other causes.

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.

mrem – Millirems per year (a measure of radiation absorbed by the body)

NA – Not applicable

ND – Not detected

NTU – Nephelometric turbidity units (a measure of turbidity)

pCi/L – Picocuries per liter (a measure of radioactivity)

ppb – Parts per billion or micrograms per liter ($\mu\text{g/L}$) or one ounce in 7,350,000 gallons of water

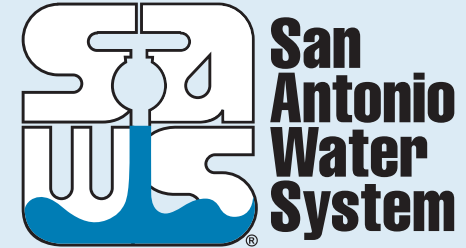
ppm – Parts per million or milligrams per liter (mg/L) or one ounce in 7,350 gallons of water

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

ppt – Parts per trillion or nanograms per liter (ng/L)

TT (Treatment Technique) – A required process intended to reduce the level of a contaminant in drinking water

$\mu\text{mhos/cm}$ – Micromhos per centimeter (a measure of conductivity)



SAN ANTONIO WATER SYSTEM

PWS ID Number: TX 0150018

Questions About Your Water Quality Report?

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

210-233-3546

Call 24 Hours a Day to:

- Report leaks, main breaks or sewer spills
- 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

En español

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

210-233-3546