YOUR annual WATER report QUALITY

San Antonio Water System

June 2000

We want you to be knowledgeable and comfortable with the information about what's in your drinking water. SAWS is committed to our responsibility of delivering safe, clean water day in and day out, and to guard and care for the source of that water. Since 1936, SAWS has been rated as a superior water system by the Texas Natural Resource Conservation Commission.

In 1996, Congress amended the Safe Drinking Water Act requiring public water systems to report to their customers every year about what substances are in the water and how much of them there are. SAWS makes sure the water at your faucet is much better than standards require it to be, and we work hard to keep it that way.

The **Safe Drinking Water Act (SDWA)** requires us to present some of the information in a specific, somewhat technical way. The data presented was recorded between 1997 to 1999 according to SDWA regulations. We hope you'll take a few moments to read this whole report.

We'll start with where your water comes from and a little bit about what we - and you - are doing and can do to protect it. Then we'll discuss what else is in your water besides just water.

To make sure tap water is safe to drink, the Environmental Protection Agency issues regulations limiting the amount of certain contaminants in public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The Texas Natural Resource Conservation Commission reviews all of Texas' drinking water sources. The source water assessment process for Texas will be completed in the near future.

Where Our Water Comes From

Almost all municipal water supplies come from two sources. Water which is drawn from rivers and lakes is called "surface water," and water which comes from wells is called "ground water." In San Antonio, SAWS pumps ground water from Edwards Aquifer wells located throughout the SAWS service area. From there the water is pumped into storage reservoirs where it is chlorinated and distributed to our customers.

The aquifer is divided into three segments-the drainage area, recharge zone and artesian reservoir area. An aquifer is a geologic formation which may contain sand, gravel, clays and/or limestone that collects and holds rainwater as it flows through the ground. Water flows overland from the drainage area to the north of the aquifer onto the exposed recharge zone of the Edwards. Rain falling directly on the recharge zone percolates or seeps into the ground and eventually enters the confined underground reservoir or artesian area of the aquifer to the south. The geologic formation that forms the Edwards Aquifer is primarily limestone, which is calcium carbonate. Therefore, relatively high levels of calcium carbonate dissolve in the water making the water "hard."

It's important to protect the recharge zone from contamination such as fertilizer, petrochemical products, and other chemical contaminants because they might eventually filter into the water supply in the aquifer. There are strict regulations about what may and may not be discharged over the recharge zone, and aquifer water is checked and analyzed regularly to be sure it's safe to drink.

What's In Our Water

The technical term for anything else in water except pure water is "contaminant." Technically, pure, fresh orange juice can be considered water which has been "contaminated" by the oil, orange pulp and flavorings in the orange which make it taste so good! The important thing is not to be frightened by the word "contaminant" itself.

It's natural for drinking water to contain contaminants, but as you will see in the report, San Antonio's water is well below allowable limits. 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 Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

UNDERSTANDING THE CHARTS

DEFINITIONS:

Maximum Contaminant Level (MCL): 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.

Maximum Contaminant Level Goal (MCLG): 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.

ppm - Parts per million: One teaspoon in 1,302 gallons.

ppb - Parts per billion: One teaspoon in 1,302,000 gallons.

Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Not Regulated: The contaminant is not currently regulated by the Environmental Protection Agency.

N/A - Not Applicable

ND - Not Detected

Points-of-Entry: Entry point to the distribution system which is representative of each well after disinfection.

Remember that these substances are shown in parts per million or parts per billion. As you will see in these charts, water delivered by SAWS from the Edwards Aquifer is of excellent quality.

Regulated Substances

Substance	Test Year	Concentration Range Found in SAWS Water	Highest Concentration Found in SAWS Water	MCL	MCLG	Possible Source
Nitrate (ppm)	1999	1.53 - 1.94	1.94	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Barium (ppm)	1999	0.036 - 0.090	0.090	2	2	Discharge from drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride (ppm)	1999	0.1 - 0.3	0.3	4	4	Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Antimony (ppb)	1999	2.7	2.7	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Tetrachloroethylene (ppb)	1999	0.5 - 1.2	1.2	5	0	Leaching by PVC pipes; discharge from factories and dry cleaners
Total Trihalomethanes (ppb)	1999	20.7	20.7	100	N/A	By-products of drinking water chlorination
Methylene Chloride (ppb)**	1999	0.5	0.5	5	0	Discharge from pharmaceutical and chemical factories

**Dichloromethane (DCM) or methylene chloride is not likely associated with your drinking water because it did not occur in repeat sampling. TNRCC considers the chemical a probable artifact of unknown origin. DCM, a commonly used solvent, may have originated in the sampling vials or as an air contaminant.

Lead and Copper Rule Results (1998)

Substance	90th Percentile	Action Level	Number of residences exceeding Action Level	Possible Source
Lead (ppb)	5.8	15	1	Corrosion of household plumbing
Copper (ppm)	0.237	1.3	1	

Note: These two metals get into the water because of corrosion of household plumbing. Many older homes have copper pipes that were put together with lead-based solder The 90th percentile means that 90 percent of the homes measured had less than that. A total of 50 residences were monitored.

Other Substances (1999)

Substance	Concentration Range (ppm)	Average Concentration (ppm)	MCL (ppm)
Calcium	74 - 102	84	Not Regulated
Chloride	18 - 25	20	250
Magnesium	5 - 16	12	Not Regulated
Sodium	10 - 15	11	Not Regulated
Sulfate	21 - 29	25	250
Total Hardness*	236 - 258	245	Not Regulated
Total Alkalinity*	202 - 252	224	Not Regulated
Total Dissolved Solids	268 - 317	289	500

* As Calcium Carbonate

Disinfection By-Products Observed Under the Information Collection Rule (1997 - 1998)

Substance	Maximum Observed Concentration (ppb)
Chloroform	9
Trichloroacetonitrile	ND
Dichloroacetonitrile	1
Bromodichloromethane	6
Dichloropropanone	1
Chloropicrin	ND
Dibromochloromethane	12
Bromochloroacetonitrile	1
Dibromoacetonitrile	2
Trichloropropanone	ND
Bromoform	8
Choral hydrate	1
Monochloroacetic acid	2
Monobromoacetic acid	ND
Dichloroacetic acid	8
Trichloroacetic acid	2
Bromochloroacetic acid	4
Dibromoacetic acid	4

Note: No MCLs are established.

Required Monitoring - No MCLs* (1999)

Substance	Range Detected (ppb)	Average Concentration (ppb)	Reasons For Monitoring
Chloroform	0.6 - 2.8	0.14	Unregulated contaminants monitored helps EPA to determine where certain contaminants occur and whether EPA needs to regulate those contaminants.
Bromodichlormethane	0.8 - 2.7	0.22	
Dibromochloromethane	0.6 - 5.2	0.47	
Bromoform	0.6 - 5.0	0.42	

*these values are from points-of-entry

Conclusion

We want you to be knowledgeable and comfortable with the information about what's in your drinking water. We are all aware of our responsibility to you to deliver safe, clean water day in and day out, and to guard and care for the source of that water.

If there's anything about this report that you do not understand, or if you want more information, please call the SAWS Regulatory Programs Department at (210) 704-7350 or pick up a copy of the Consumer Confidence Report at any of our Customer Service Centers.

SPECIAL NOTICE FOR THE ELDERLY, INFANTS, CANCER PATIENTS, PEOPLE WITH HIV/AIDS OR OTHER IMMUNE PROBLEMS:

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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/Center for Disease Control and Prevention (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 (1-800-426-4791)**.

If you would like to find out when SAWS Board meetings and Town Hall meetings are scheduled, call the SAWS Public Information Line, (210) 704-7333. You can also check our web site at:

http://www.saws.org.

Thank you for reading this report, and for being a San Antonio Water System customer.

Look Inside!

This is your annual report on drinking water quality.

If you would like more information or a copy of the report in Spanish, please call 704-7350.

Este reporte incluye informacion importante sobre la calidad del agua.

Si requere mas informacion o una copia de este reporte en español, por favor llame 704-7350.