This is Your Annual Report on Drinking Water Quality.

What Are Drinking Water Standards?

Under the authority of the Safe Drinking Water Act (SDWA), EPA sets standards for approximately 90 contaminants in drinking water. For each of these contaminants, EPA sets a legal limit, called a maximum contaminant level, or requires a certain treatment. Water suppliers may not provide water that doesn't meet these standards. Water that meets EPA standards is safe to drink.

En Español:

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

The Safe Drinking Water Act (SDWA), which celebrated its 25th anniversary in 1999, is the main federal law that ensures the quality of Americans' drinking water. Under SDWA, EPA sets standards for drinking water quality and oversees the states, localities, and water suppliers who implement those standards. The SDWA covers all public water systems with piped water for human consumption with at least 15 service connections or a system that regularly serves at least 25 individuals.

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 the water poses a health risk. **More information about contaminants and potential health effects can be obtained by simply calling the EPA's Safe Drinking Water Hotline at (1-800-426-4791).**

Important Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons 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/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).**

Why Do I Need to Read This?

A survey conducted by the American Water Works Research Foundation in 1993 found that nearly two-thirds of water consumers surveyed said they received "very little" or "no" information on the quality of their water. The water quality reports will increase the availability of information. Informed and involved citizens can be strong allies of water systems, large and small, as they take action on pressing problems. Also, an increase in public awareness can give sensitive sub-populations the information that they need to protect themselves. Drinking water can come from either ground water sources (via wells) or surface water sources (such as rivers, lakes, and streams).

Nationally, most water systems use a ground water source (80%), but most people (66%) are served by a water system that uses surface water. This is because large metropolitan areas tend to rely on surface water, whereas small and rural areas tend to rely on ground water. In addition, 10-20% of people have their own private well for drinking water.

Where Can I Get More Information?

Information on water quality in your area is available from several sources, including your local public health department and your water supplier. You can determine whom to contact by checking your water bill or by calling your local town hall. You can also contact your state drinking water program or call EPA's Safe Drinking Water Hotline at 1-800-426-4791. EPA has also prepared a citizen's guide to drinking water called **"Water on Tap: A Consumer's Guide to the Nation's Drinking Water."**

Terminology

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 stormwater 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, stormwater runoff, and residential uses.
Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can 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.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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.

2004 Water Report

Consumer Confidence Report

2004 Annual Drinking Water Quality Report

City of Andrews Water Utilities

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 persons 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. The EPA/Centers 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)**.

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 tel. (432) 523-4820 para hablar con una persona bilingüe en español.

Public Participation Opportunities

Date: July 13, 2005
Time: 9:00
Location: City Hall

To learn about future public meetings (concerning your drinking water), or to request to schedule one, please call us.

Our Drinking Water is Regulated

by the Texas Commission on Environmental Quality (TCEQ) and they have determined that certain water quality issues exist which prevent our water from meeting all of the requirements as stated in the Federal Drinking Water Standards. Each issue is listed in this report as a violation and we are working closely with the TCEQ to achieve solutions.

Water Sources

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 before treatment include: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants.

Where Do We Get Our Drinking Water?

Our drinking water is obtained from *Ground* water sources. It comes from the OGALLALA Aquifer. TCEQ completed an assessment of our source water and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for our water system are based on this susceptibility and previous sample data.

Any detections of these contaminants will be found in this report. If we receive or purchase water from another system, their susceptibility is not included in this assessment. For more information on source water assessments and protection efforts at our system, please contact us.

ALL Drinking Water May Contain Contaminants

When drinking water meets federal standards there may not be any health-based 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 (1-800-426-4791)**.

Secondary Constituents

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

About The Following Table

The table that follows lists all of the federally-regulated or monitored contaminants which have been found in your drinking water. The U.S. EPA requires water systems to test for up to 97 contaminants.

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.

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

Abbreviations

MFL: million fibers per liter (a measure of asbestos)
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
ppq: parts per quadrillion, or picograms per liter

Conservation Tips

- Installing a low-flow toilet can save a family of 4 more than 45 gallons of water a day. That's 1,350 gallons a month.
- By planting low-water-use grasses and shrubs, you can cut your lawn watering by 20 to 50 percent.
- The average automatic dishwasher uses 12 to 20 gallons of water in one cycle. Save water by running the dishwasher only when it is full. Washing by hand is less efficient and wastes more water.
- Running the faucet while brushing your teeth or shaving can use two to five gallons of water per minute. Shut off the water until you're ready to rinse. You could save about 100 gallons a month.
- A leaking faucet can waste up to 100 gallons of water a day. Check for leaking faucets, toilets or pipes around the house to cut water waste.
- When watering the lawn, adjust sprinklers so only the lawn is watered, not the house, sidewalk or street.
- Recycle water from fish tanks by using it to water plants. Fish emulsion is a good, inexpensive fertilizer that is high in nitrogen and phosphorous.

Did You Know?

75% of the human brain is water

75% of a living tree is water

Thank you for allowing us to continue to provide your family with quality drinking water this year. We ask that all our customers help us protect our water sources, which are the heart of our community. If you notice something unusual or out of the ordinary, please contact us. As always, we welcome your questions and concerns.

Test Results Water Quality Report for City of Andrews

Inorganic Contaminants

Year (Range)	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contamination
2002 - 2002	Arsenic	30.200	30.2	30.2	10*	0*	ppb	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
*These arsenic values are effective January 23, 2006. Until then, the MCL is 50 ppb and there is currently no MCLG.								
2002 - 2002	Barium	0.041	0.041	0.041	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
2004 - 2004	Fluoride	4.818	4.52	5.4	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
2004 - 2004	Nitrate	2.020	2.02	2.02	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
2002 - 2002	Selenium	16.400	16.4	16.4	50	50	ppb	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
2002 - 2002	Gross beta emitters	5.700	5.7	5.7	50	0	pCi/L	Decay of natural and man-made deposits
2002 - 2002	Gross alpha	3.900	3.9	3.9	15	0	pCi/L	Erosion of natural deposits

Required Additional Health Information for Arsenic

The maximum contaminant level (MCL) for arsenic will be decreasing from 0.05 mg/L (50 ppb) to 0.010 mg/L (10 ppb) effective January 23, 2006. The TCEQ is providing the following health effects language according to new Consumer Confidence Report (CCR) reporting requirements for arsenic. Because the highest reported arsenic level on this report is above 10 ppb, this information is required by EPA: *"Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer."*

Organic Contaminants (NOT TESTED OR REPORTED, OR NONE DETECTED)

Maximum Residual Disinfectant Level

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Disinfectant
2004	Chlorine	0.762	0.28	1.89	4	4	ppm	Disinfectant used to control microbes

Disinfection Byproducts

Year (Range)	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contamination
2004 - 2004	Total Haloacetic Acids	1.500	1.5	1.5	60		ppb	Byproduct of drinking water disinfection
2004 - 2004	Total Trihalomethanes	4.600	4.6	4.6	80		ppb	Byproduct of drinking water disinfection

Unregulated Contaminants

Year (Range)	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contamination
2002 - 2002	Bromoform	0.700	0.7	0.7	ppb	Byproduct of drinking water disinfection

Lead and Copper

Year (Range)	Contaminant	The 90th Percentile	No. of Sites Exceeding Action Level	Action Level	Unit of Measure	Source of Contamination
2004 - 2004	Lead	1.0000	0	15	ppb	Corrosion of household plumbing systems; erosion of natural deposits
2004 - 2004	Copper	0.2260	0	1.3	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Turbidity (NOT REQUIRED)

Total Coliform (NOT DETECTED)

Fecal Coliform (NOT DETECTED)

Violations

Explanation: *Naturally-occurring fluoride is in our groundwater.* ***Steps to correct:*** *The City of Andrews provides bottled water at city hall to all customers 24hrs/day free of charge.*

Violation Type	Duration	Health Effects
MCL VIOLATION - FLUORIDE	1/1/2004 to 3/31/2004	Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth.
MCL VIOLATION - FLUORIDE	4/1/2004 to 6/30/2004	Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth.

We participated in gathering data under the UCMR in order to assist EPA in determining the occurrence of possible drinking water contaminants. If any unregulated contaminants were detected, they are shown in the tables elsewhere in this report. This data may also be found on EPA's web site at http://www.epa.gov/safewater/data/ncod.html, or you can call the Safe Drinking Water Hotline at 1-800-426-4791.

Secondary and Other Not Regulated Constituents (No associated adverse health effects)

Year (Range)	Constituent	Average Level	Minimum Level	Maximum Level	Limit	Unit of Measure	Source of Constituent
2002 - 2002	Bicarbonate	272.000	272	272	NA	ppm	Corrosion of carbonate rocks such as limestone
2002 - 2002	Calcium	56.300	56.3	56.3	NA	ppm	Abundant naturally-occurring element
2002 - 2002	Chloride	167.000	167	167	300	ppm	Abundant naturally-occurring element; used in water purification; byproduct of oil field activity
2002 - 2002	Copper	0.008	0.008	0.008	NA	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
2002 - 2002	Iron	0.015	0.015	0.015	0.3	ppm	Erosion of natural deposits; iron or steel water delivery equipment or facilities
2002 - 2002	Magnesium	64.900	64.9	64.9	NA	ppm	Abundant naturally-occurring element
2002 - 2002	pH	7.200	7.2	7.2	NA	units	Measure of corrosivity of water
2002 - 2002	Sodium	98.400	98.4	98.4	NA	ppm	Erosion of natural deposits; byproduct of oil field activity
2002 - 2002	Sulfate	134.000	134	134	300	ppm	Naturally-occurring; common industrial byproduct; byproduct of oil field activity
2002 - 2002	Total Alkalinity as CaCO3	223.000	223	223	NA	ppm	Naturally-occurring soluble mineral salts
2002 - 2002	Total Dissolved Solids	661.000	661	661	1000	ppm	Total dissolved mineral constituents in water
2002 - 2002	Total Hardness as CaCO3	407.000	407	407	NA	ppm	Naturally-occurring calcium