

City of Santa Fe Water Division
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2002 Water Quality Report

Introduction

This is an annual report on the quality of drinking water delivered by the City of Santa Fe's Sangre De Cristo Water Division (SDWC) to its customers. SDWC is subject to the federal Safe Drinking Water Act and is required to test and meet United States Environmental Protection Agency (EPA) and State of New Mexico Drinking Water Standards. This report contains information on calendar year 2002 water quality tests. Additional details about where your water comes from, what it contains, and how it compares to standards set by federal and state regulatory agencies are also included. A safe and dependable water supply is vital to our community and is the primary mission of SDWC.

Sources of Supply

The SDWC is served by three separate sources of water supply. These are the Buckman well field, the City well field and surface runoff generated by the Santa Fe Watershed. The Buckman well field consists of 8 active wells located near the Rio Grande, approximately 15 miles northwest of Santa Fe. The City well field is mostly located in close proximity to the Santa Fe River and consists of 8 active wells located within the City of Santa Fe limits. The City's surface water supply is generated by runoff from the 17,000 acre Santa Fe watershed. The runoff drains into the Santa Fe River where it is stored at the McClure and Nichols Reservoirs.

Do I need to take special precautions?

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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

En Espanol

Este reporte contiene informacion importante sobre la calidad del agua en Santa Fe. Si tiene alguna pregunta o duda sobre este reporte puede hablarle a Gary Martinez al telefono 505.955.4370.

Source water assessment and its availability

In calendar year 2002 the New Mexico Environment Department conducted and completed the Source Water Assessment for the City of Santa Fe. This assessment includes a determination of the source water protection areas and an inventory of pollution sources within the areas of concern. A copy of this report is available for your review.

Why are there contaminants in my drinking water?

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 (EPA) Safe Drinking Water Hotline (800-426-4791). 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. This can include microbial contaminants, such as viruses and bacteria that 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. In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by 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.

Violation of Surface Water Treatment Rule Filtration and Disinfection Violation

In February of 2002 the SDWC finished water turbidity exceeded the monthly turbidity standard of 0.3 NTU. Plant operations staff determined this exceedance was the result of plant start up problems and not inadequate filtration. At that time plant operations staff maintained the appropriate disinfectant residuals. The City utilizes a multi-barrier approach to protect citizens from water borne pathogens. City residents were notified of the problem and the actions officials took to correct the situation. Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Unregulated Contaminant Monitoring (UCMR)

In calendar year 2002 the City of Santa Fe was sampled for 11 "unregulated" contaminants (UCMR). This sampling is part of a national effort to determine occurrence of contaminants in the nation's drinking water supplies and use this information to set future national drinking water standards. The following parameters comprise the UCMR list. The UCMR contaminants were not detected in the water supply. The sampling events took place on May 24, 2002 and November 22, 2002.

Parameter	Results (ug/l)
Acetochlor	not detected
2, 4 – Dinitrotoluene	not detected
2, 6 – Dinitrotoluene	not detected
DCPA acid metabolites	not detected
4-4 – DDE	not detected
EPTC	not detected
Molinate	not detected
MTBE	not detected
Nitrobenzene	not detected
Terbacil	not detected
Perchlorate	not detected

Results of radon monitoring

The City of Santa Fe water system has been sampled for radon gas in drinking water. This is not a required test since the EPA has not finalized the regulation. However, in an effort to be proactive these tests have been conducted over the past several years. The results indicated radon gas at levels in water of 300 to 400 picocuries per liter of water (pCi/l). EPA has proposed that the standard for drinking water be set at 4000 pCi/l. As proposed SDWC will be subject to this standard provided a program is in place to mitigate the radon present in in-door air. Radon is a radioactive gas that you can't see, taste, or smell. It is found throughout the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air-containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. Fix your home if the level of radon in your air is 4 picocuries per liter of air (pCi/L) or higher. There are simple ways to fix a radon problem that aren't too costly. For additional information, call your state radon program or call EPA's Radon Hotline (800-SOS-RADON).

Results of voluntary monitoring

Los Alamos National Laboratory in cooperation with the City of Santa Fe has conducted tests to determine if perchlorate is present in the Buckman Wells. No perchlorate was detected in any of the samples collected from the Buckman Wells Nos. 1, 2, and 8 at concentrations greater than the laboratory detection limit of 1.45 part per billion.

Educational Statement for Arsenic

The City of Santa Fe's Drinking water meets the current drinking water standard for arsenic of 50 µg/l. A new standard for arsenic in drinking water of 10 µg/l will go into effect in 2006. Sampling conducted in 2002 indicated arsenic levels below the new standard of 10 µg/l. City of Santa Fe drinking water contains low levels of arsenic at or near 10 µg/l. EPA's new standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Uranium

In 2002 the City detected uranium above the new drinking water standard of 30 µg/l at one of its sampling points. The new standard goes into effect on December 8, 2003. A source in the Buckman wellfield contains elevated levels of uranium in sufficient amounts to have caused this level. Proper management and/or treatment of the well will result in compliance by the effective date of the rule. Some people who drink water containing uranium in excess of the MCL (30 ug/L) over many years may have increased risk of getting cancer and kidney toxicity.

Nitrates

City of Santa Fe drinking water meets the federal drinking water standard of 10 ppm for nitrates. Nitrates have been detected in some of the City Wells above 5 ppm. This value, which is ½ the standard, triggers an increase in sampling from once per year to 4 times per year. Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advise from your health care provider.

Total Trihalomethanes (TTHMs)

Although the maximum contaminant level was not exceeded, in 2002 the City of Santa Fe detected TTHMs in two samples above 80 µg/l. To ensure that the city continues to meet this standard, treatment plant officials have implemented changes in operations that have resulted in lower overall TTHM levels. Some people who drink water-containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Lead and Copper Sampling

Tests for lead and copper are taken from customer taps located throughout the City. Lead and copper are present in home plumbing fixtures and pipes. If you are concerned about elevated lead levels in your home's water you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water.

Inorganic Contaminants	MCLG	AL	City Water Levels*	# of Sample <AL	Sample Date	Exceeds AL	Typical Source
Copper (ppm)	1.3	1.3	1.1	31	26-Sep-02	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead (ppb)	0	15	9	31	26-Sep-02	No	Corrosion of household plumbing systems; Erosion of natural deposits

* The City lead and copper levels reported are values for the 90th percentile which in this case is the 28th sample.

Contacts for Additional Information

If you have any questions, comments, or suggestions regarding this report, please contact Gary Martinez at 955-4370 or write to the above address. Feel free to call SDWC for information about the next opportunity for public participation in decision about our drinking water. For further information, consult the City of Santa Fe's Website at www.ci.santa-fe.nm.us or EPA at www.epa.gov/safewater or the Safe Drinking Water Hotline 800.426.4791.

Important Drinking Water Definitions:

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.

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

TT: Treatment Technique, a required process intended to reduce the level of a contaminant in drinking water.