

2007 Water Quality Report

Spanish (Español)

Este informe contiene información muy importante sobre la calidad de su agua beber. Tradúscalo o hable con alguien que lo entienda bien.

Is my water safe?

We routinely test for over 80 contaminants. Last year, we only detected 11 of those contaminants, and found only 1 at a level higher than the EPA allows. Since the updated EPA's Arsenic Rule became effective on January 23, 2006, our water has exceeded the drinking water standard for Arsenic contamination. (For more information see the section labeled Violations at the end of the report.) This report is a snapshot of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. We are committed to providing you with information because informed customers are our best allies.

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).

Where does my water come from?

Our water is pumped from the underground water aquifer formed within the Santa Fe Group of sand and gravel deposits. We have three wells. Well #3 and #4 (formerly known as Well #1) are located on Lot 73, replatted to be called 50-A. These two wells are on Trails Road East just across the street from the town homes. Well #2 is on Lot 22, on Norte Trail Court, towards the west end of the subdivision. Our water system includes the wells, the respective pump houses, all equipment contained within the pump houses, the large storage tank on Lot 51-A, the distribution line, meters, meter cans, valves, fire hydrants, easements of record, and water rights.

Well #1 was re-drilled in June of 2003 and became known as Well #4. The depth is 760 ft. and depth to static water level is 357 ft. The water-bearing layer is 680 to 760 ft. of coarse sand and gravel. Well #2 was drilled in 1985 and the depth is 451 ft. Depth to static water level is 238 ft. The water-bearing layer is 410 to 451 ft. of small gravel. Wells #4 and #2 act as backup wells to well #3 and are used when demand is greater or if we have a problem with Well #3. Well #3 is our primary producer. It was drilled in 1995. The depth is 580 ft. with depth to static water level at 398 ft. The water-bearing layer is 520 to 580 ft. of gravel and river sand.

Water is drawn from the wells by three submersible pumps. Each pump delivers water to a 100,000-gallon storage tank. Water is chlorinated by injection under pressure of a sodium hypochlorite solution directly into the well pump discharge line.

Source water assessment and its availability

The Susceptibility Analysis of the Placitas Trails Water Coop (PTWC) water utility reveals that the utility is well maintained and operated, and the sources of drinking water are generally protected from potential sources of contamination based on well construction, hydrogeologic settings, and system operations and management. The susceptibility rank of the entire water system is moderately high, as determined by the Drinking Water Bureau of NMED.

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: 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 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, urban stormwater 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 stormwater runoff, and septic systems; and 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.

How can I get involved?

We want our members to be informed about their water utility. If you want to learn more, please attend any of our regular monthly board meetings. They are usually held at 7:00 p.m. on the third Monday of each month at one of the board members' homes. Please call one of the board members to find out the meeting location. Also, as required in the Coop bylaws, we hold an annual membership meeting in October of each year.

Conservation Tips

Did you know that the average U.S. household uses approximately 350 gallons of water per day? Luckily, there are many low-cost or no-cost ways to conserve water. Water your lawn at the least sunny times of the day. Fix toilet and faucet leaks. Take short showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath. Turn the faucet off while brushing your teeth and shaving; 3-5 gallons go down the drain per minute. Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!

Results of radon monitoring

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).

Water Quality Data Table

The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

<u>Contaminants</u>	<u>MCLG</u>	<u>MCL,</u>	<u>Your</u>	<u>Range</u>		<u>Sample</u>	<u>Violation</u>	<u>Typical Source</u>
	<u>or</u>	<u>TT, or</u>		<u>Low</u>	<u>High</u>			
	<u>MRDLG</u>	<u>MRDL</u>	<u>Water</u>			<u>Date</u>		
Disinfectants & Disinfection By-Products								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.)								
Chlorine (as Cl ₂) (ppm)	4	4	0.5	0.3	0.5	2007	No	Water additive used to control microbes
Inorganic Contaminants								
Antimony (ppb)	6	6	0.805	NA		2007	No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; test addition.
Arsenic (ppb)	0	10	59.3		59.3	2007	Yes	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production
Barium (ppm)	2	2	0.0429	NA		2007	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beryllium (ppb)	4	4	0.0944	NA		2007	No	Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries

Cadmium (ppb)	5	5	0.013	NA		2007	No	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; runoff from waste batteries and paints
Chromium (ppb)	100	100	1.76	NA		2007	No	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride (ppm)	4	4	0.31	0.25	0.31	2006	No	Erosion of natural deposits; Water additive which promotes strong teeth;
Mercury [Inorganic] (ppb)	2	2	0.067	NA		2007	No	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland
Nickel (ppb)	100	100	2.35	NA		2007	No	Discharge from organic chemical manufacture, petroleum refining and edible oil hardening
Nitrate [measured as Nitrogen] (ppm)	10	10	0.623	0.513	0.623	2007	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium (ppb)	50	50	2.55	NA		2007	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Thallium (ppb)	0.5	2	0.0403	NA		2007	No	Discharge from electronics, glass, and Leaching from ore-processing sites; drug factories

Radioactive Contaminants

Radium (combined 226/228) (pCi/L)	0	5	1.01	0.317	1.01	2005	No	Erosion of natural deposits
Uranium (ug/L)	0	30	4.57	2.2	4.57	2005	No	Erosion of natural deposits

<u>Contaminants</u>	<u>MCLG</u>	<u>AL</u>	<u>Your Water</u>	<u>Sample Date</u>	<u># Samples Exceeding AL</u>	<u>Exceeds AL</u>	<u>Typical Source</u>
Inorganic Contaminants							
Copper - action level at consumer taps (ppm)	1.3	1.3	0.24	2004	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Undetected Contaminants

The following contaminants were monitored for, but not detected, in your water.

<u>Contaminants</u>	<u>MCLG or MRDLG</u>	<u>MCL or MRDL</u>	<u>Your Water</u>	<u>Violation</u>	<u>Typical Source</u>
Inorganic Contaminants					

Cyanide [as Free Cn] (ppb)	200	200	ND	No	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories
Synthetic organic contaminants including pesticides and herbicides					
2,4,5-TP (Silvex) (ppb)	50	50	ND	No	Residue of banned herbicide
2,4-D (ppb)	70	70	ND	No	Runoff from herbicide used on row crops
Alachlor (ppb)	0	2	ND	No	Runoff from herbicide used on row crops
Atrazine (ppb)	3	3	ND	No	Runoff from herbicide used on row crops
Benzo(a)pyrene (ppt)	0	200	ND	No	Leaching from linings of water storage tanks and distribution lines
Carbofuran (ppb)	40	40	ND	No	Leaching of soil fumigant used on rice and alfalfa
Chlordane (ppb)	0	2	ND	No	Residue of banned termiticide
Dalapon (ppb)	200	200	ND	No	Runoff from herbicide used on rights of way
Dibromochloropropane (DBCP) (ppt)	0	200	ND	No	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards
Dinoseb (ppb)	7	7	ND	No	Runoff from herbicide used on soybeans and vegetables
Diquat (ppb)	20	20	ND	No	Runoff from herbicide use
Endothall (ppb)	100	100	ND	No	Runoff from herbicide use
Endrin (ppb)	2	2	ND	No	Residue of banned insecticide
Glyphosate (ppb)	700	700	ND	No	Runoff from herbicide use
Heptachlor (ppt)	0	400	ND	No	Residue of banned pesticide
Heptachlor epoxide (ppt)	0	200	ND	No	Breakdown of heptachlor
Hexachlorobenzene (ppb)	0	1	ND	No	Discharge from metal refineries and agricultural chemical factories
Hexachlorocyclopentadiene (ppb)	50	50	ND	No	Discharge from chemical factories
Lindane (ppt)	200	200	ND	No	Runoff/leaching from insecticide used on cattle, lumber, gardens
Methoxychlor (ppb)	40	40	ND	No	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock
Oxamyl [Vydate] (ppb)	200	200	ND	No	Runoff/leaching from insecticide used on apples, potatoes and tomatoes
Pentachlorophenol (ppb)	0	1	ND	No	Discharge from wood preserving factories
Picloram (ppb)	500	500	ND	No	Herbicide runoff
Simazine (ppb)	4	4	ND	No	Herbicide runoff
Toxaphene (ppb)	0	3	ND	No	Runoff/leaching from insecticide used on cotton and cattle
Volatile Organic Contaminants					
1,1,1-Trichloroethane (ppb)	200	200	ND	No	Discharge from metal degreasing sites and other factories
1,1,2-Trichloroethane (ppb)	3	5	ND	No	Discharge from industrial chemical factories
1,1-Dichloroethylene (ppb)	7	7	ND	No	Discharge from industrial chemical factories
1,2,4-Trichlorobenzene (ppb)	70	70	ND	No	Discharge from textile-finishing factories
1,2-Dichloroethane (ppb)	0	5	ND	No	Discharge from industrial chemical factories
1,2-Dichloropropane (ppb)	0	5	ND	No	Discharge from industrial chemical factories
Benzene (ppb)	0	5	ND	No	Discharge from factories; Leaching from gas storage tanks and landfills
Carbon Tetrachloride (ppb)	0	5	ND	No	Discharge from chemical plants and other industrial activities
Chlorobenzene (monochlorobenzene) (ppb)	100	100	ND	No	Discharge from chemical and agricultural chemical factories
Ethylbenzene (ppb)	700	700	ND	No	Discharge from petroleum refineries
Styrene (ppb)	100	100	ND	No	Discharge from rubber and plastic factories; Leaching from landfills

Tetrachloroethylene (ppb)	0	5	ND	No	Discharge from factories and dry cleaners
Toluene (ppm)	1	1	ND	No	Discharge from petroleum factories
Vinyl Chloride (ppb)	0	2	ND	No	Leaching from PVC piping; Discharge from plastics factories
Xylenes (ppm)	10	10	ND	No	Discharge from petroleum factories; Discharge from chemical factories

Unit Descriptions	
<u>Term</u>	<u>Definition</u>
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

Important Drinking Water Definitions	
<u>Term</u>	<u>Definition</u>
MCLG	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	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.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection 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	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.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

Violations and Exceedances

Arsenic

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. All of the PTWC water sources exceed the updated EPA's Arsenic Rule which became effective on January 23, 2006. The updated and more stringent rule reduced acceptable arsenic levels from 50 parts per billion (ppb) to 10 ppb. This violation will remain until an effective Arsenic removal system is implemented. The Placitas Trails Water Coop Board contracted with a Civil and Environmental Engineering firm to evaluate and rank Arsenic removal techniques for the PTWC water sources and prepare a report of their results which will be used to select the best technique to be implemented.

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