

Your Water Quality Report

We know the quality of your drinking water is important to you. Inside this report you'll find accurate information about drinking water quality from source to tap. The Albuquerque Bernalillo County Water Utility Authority is proud that our drinking water continues to meet all state and federal drinking water quality standards – without exception – as it has for more than 30 years.

This report also provides you with information about our ground water supply source and its protection and the sustainable solution for the future, the San Juan-Chama Drinking Water Project. A diagram is included to show how the water system works and the locations where water quality samples are collected. Page 3 summarizes progress made to meet the arsenic challenge.

We know the information in this report is complex. The content of the report, the language in it, and the format for reporting compliance monitoring results are required by law. We have attempted to include all the necessary information in a readable format at the lowest cost.

This report, along with additional information, can be downloaded from our web page at www.abcwua.org/waterquality. To contact us, please call the Water Quality Information Line at 857-8260 or use the links on our web page to send e-mail to waterquality@cabq.gov.

El Informe en Español

Este informe se ha preparado en español. Si desea más información o para una copia en español, sírvase llamar a la línea de información de Calidad de Agua, teléfono 857-8260 o visite nuestra página web en www.abcwua.org/waterquality.



Utility Technician Gerald Romero tests pH in a water sample at the new Drinking Water Project Pilot Plant south of the Alameda Bridge in the North Valley.

Our Drinking Water Sources: The Sustainable Solution

The Ground Water Legacy

For many years, ground water pumped from the Santa Fe Group Aquifer has been our only water supply source. In 2006, 90 wells pumped 31.3 billion gallons of water. Thanks to the water conservation efforts of our customers, that's 1.3 billion gallons less than in the year before.

Water level measurements have shown significant decline in some parts of the aquifer. Continued pumping at current rates could damage the aquifer itself and cause subsidence in some areas. Studies have shown that only about half of the water pumped from the aquifer is being replenished; the rest is "mined" – lost forever.

The Water Utility monitors both the water level and water quality in each well. Water Quality Specialists collect samples each year from every well to monitor the chemical and biological characteristics of the wells. While water quality in a single well does not vary much from year to year, water quality in wells in different parts of the aquifer can vary significantly. Water quality in wells near known or suspected soil or ground water contamination sites is monitored more frequently.

The Santa Fe Group aquifer stretches from Cochiti Reservoir on the north to San Acacia on the south and from the Sandia Mountains on the east to (and beyond) the Rio Puerco on the west.



Source Water Protection

The City of Albuquerque and Bernalillo County work together to find and clean up contaminated ground water and promote coordinated protection and prudent use of ground water throughout the region. The Water Protection Advisory Board oversees ground water protection activities. The mission of the

Board is being expanded to include surface water protection as well. Call 768-3633 for meeting schedules and educational materials.

In 2002, the New Mexico Environment Department (NMED) conducted a Source Water Assessment to determine each well's susceptibility to contamination. NMED reported that the wells are generally protected from potential sources of contamination. To request a copy of the Source Water Assessment, contact NMED Drinking Water Bureau in Santa Fe toll free at 1-(877)-654-8720. Reference the Albuquerque Water System, number 10701.

San Juan-Chama and the Drinking Water Project

In 2008, the Drinking Water Project will begin diverting San Juan-Chama river water to a new, state-of-the-art water treatment plant. The finished water will be distributed to our customers for drinking water and may be blended with ground water supplies during the summer or in times of drought.

Customers will continue to receive high quality drinking water, while we transition to a sustain-able water supply – one that we can count on for generations to come. But, more importantly, reducing our dependence on the aquifer will allow it to recover, enabling us to draw from it as a drought reserve in times of minimal precipitation.

The Drinking Water Project includes:

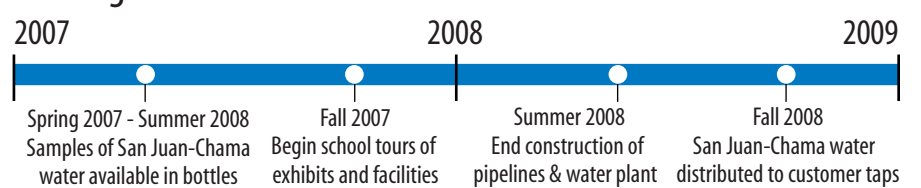
- A **Diversion Dam** on the Rio Grande just south of the Alameda Bridge.
- A **Pump Station** to move the diverted water from the river to the water treatment plant.
- A large diameter **Pipeline** to carry water from the pump station to the water treatment plant.
- A state-of-the-art **Water Treatment Plant** now under construction near Montañito and Chappell roads. The water will be treated with a combination of gravity settling, chemical treatment, ozonation, activated carbon filtration technologies. As a final step, the water will be disinfected with sodium hypochlorite, and fluoride will be added for dental health.
- A **Pump Station** to move the finished drinking water from the treatment plant to the distribution system.
- 38 miles of **Pipeline** to carry the finished water to the distribution system.

For more info on the Drinking Water Project, visit <http://www.sjcdinkingwater.org>

How Will the Water Taste?

The Drinking Water Project Pilot Plant is in operation. The pilot contains all of the equipment and water treatment processes of the full-size plant. We are gaining operations experience, while we monitor the quality of the water produced. Throughout the spring and summer of 2007, finished water from the pilot will be bottled and distributed at community events to provide our customers with a taste of the future. The water meets all federal and state drinking water quality standards.

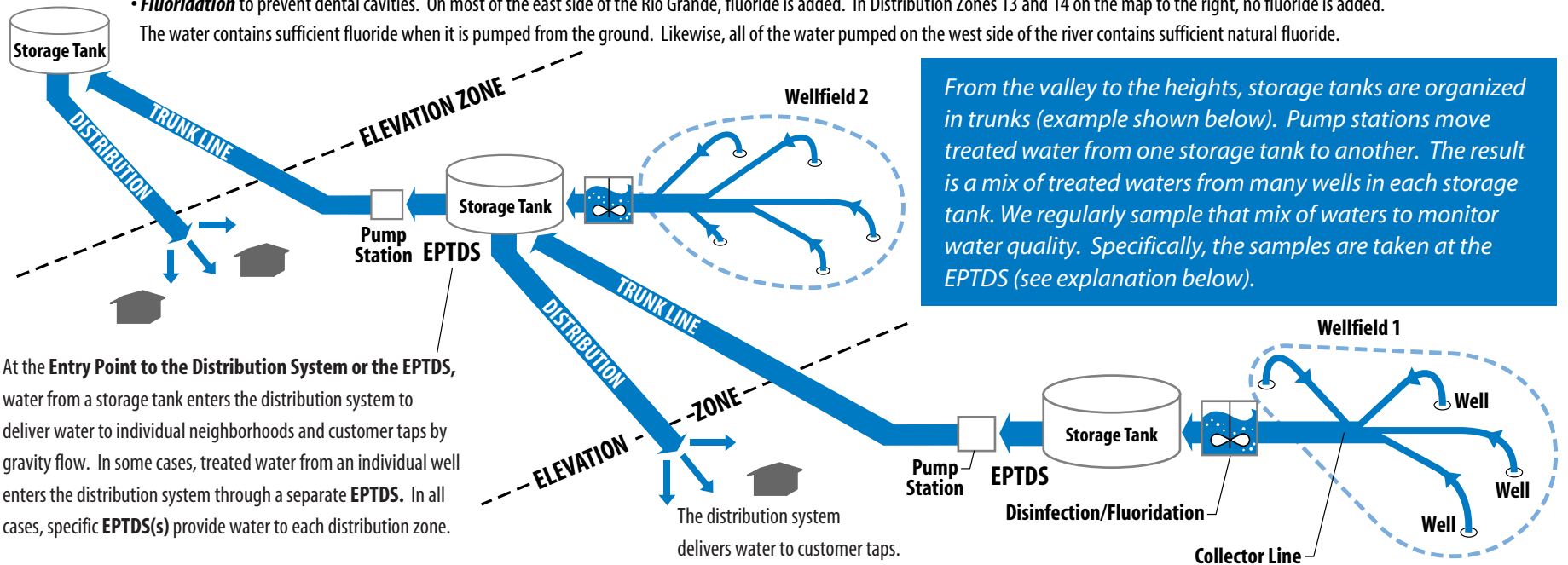
Looking Ahead:



Monitoring Water Quality - How it Works

Water is moved from the wells to storage tanks in large diameter pipelines. The water is treated along the way. Treatment includes:

- **Disinfection** with sodium hypochlorite. Generated on-site from table salt and water, the product is like weak household bleach.
- **Fluoridation** to prevent dental cavities. On most of the east side of the Rio Grande, fluoride is added. In Distribution Zones 13 and 14 on the map to the right, no fluoride is added. The water contains sufficient fluoride when it is pumped from the ground. Likewise, all of the water pumped on the west side of the river contains sufficient natural fluoride.



Results of Monitoring at Entry Points to the Distribution System

USEPA sets regulations that limit the amount of certain substances in drinking water. USEPA defines where and how often samples for each substance must be collected. The table below shows the substances found in the most recent water quality testing done at **Entry Points to the Distribution System (EPTDS)** to comply with USEPA requirements.

Substance	Sample Collection Year	Minimum Detected	Average Detected	Maximum Detected	Maximum Contaminant Level (MCL)	Maximum Contaminant Level Goal (MCLG)	Source	Health Effects Language
Metals								
Arsenic	2003	2 Parts Per Billion	13 Parts Per Billion	35 Parts Per Billion	10 Parts Per Billion	Zero Parts Per Billion	Erosion of natural volcanic deposits.	Please refer to map on next page
<i>Note: These arsenic values are effective December 31, 2008. Until then, the MCL is 50 Parts Per Billion and there is no MCLG. See map on next page.</i>								
Barium	2003	Not Detected	0.1 Parts Per Million	0.2 Parts Per Million	2 Parts Per Million	2 Parts Per Million	Erosion of natural deposits.	Not Applicable
Chromium	2003	Not Detected	2 Parts Per Billion	17 Parts Per Billion	100 Parts Per Billion	100 Parts Per Billion	Erosion of natural deposits.	Not Applicable
Minerals								
Fluoride	2005	0.3 Parts Per Million	0.7 Parts Per Million	1.1 Parts Per Million	4 Parts Per Million	4 Parts Per Million	Erosion of natural deposits. On the east side of the river, fluoride is added to water to promote strong teeth.	Not Applicable
Nutrients								
Nitrate	2006	Not Detected	0.6 Parts Per Million	1.9 Parts Per Million	10 Parts Per Million	10 Parts Per Million	Erosion of natural deposits.	Not Applicable
Organics								
Di(2-ethylhexyl)phthalate	2005	Not Detected	Not Detected	5.3 Parts Per Billion	6 Parts Per Billion	Zero Parts Per Billion	A widely used plasticizer. Gloves used in sample collection and laboratory analysis are the suspected source.	Not Applicable
Radionuclides								
Gross Alpha Particle Activity	2004	Not Detected	Not Detected	5.7 picoCuries Per Liter	15 picoCuries Per Liter	Zero picoCuries Per Liter	Erosion of natural deposits.	Not Applicable
Uranium	2004	1.8 Parts Per Billion	4.1 Parts Per Billion	9.3 Parts Per Billion	30 Parts Per Billion	Zero Parts Per Billion	Erosion of natural deposits.	Not Applicable

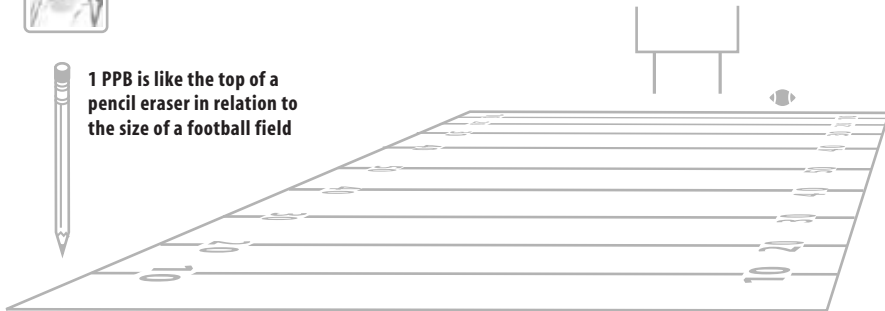
Important Definitions for Reviewing the Tables

Parts Per Million/Parts Per Billion or PPM/PPB: Think of a football field, without the end zones. A football field covers 48,000 square feet. One part per million or 1 PPM of that football field would cover 7 square inches – about the size of a photo in your wallet. One part per billion or 1 PPB of that football field would cover about 1/12th of a square inch – about the size of a pencil eraser.



1 PPM is like 1 wallet-size photo in relation to the size of a football field

1 PPB is like the top of a pencil eraser in relation to the size of a football field



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.

Maximum Residual Disinfectant Level (MRDL): 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.

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 contaminants.

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. The Action Level is compared to the concentration detected in the 90th percentile sample.

picoCuries per liter: A measure of radioactivity.

FAQ: How Much Sodium is in the Water?

Average sodium levels for all distribution zones range from 21 to 98 PPM. The system-wide average is 46 PPM. For more information on variation of sodium, visit www.abcwua.org/waterquality.

Regulated Substances we test for and have not detected:

Inorganic Chemicals	Cadmium	Nitrite
Antimony	Cyanide	Selenium
Asbestos	Lead	Thallium
Beryllium	Mercury	
Microbiological Contaminants	Fecal Coliform	
Organic Chemicals	cis-1,2-Dichloroethylene	Methoxychlor
Alachlor	trans-1,2-Dichloroethylene	Oxamyl (Vydate)
Atrazine	Dichloromethane	Polychlorinated biphenyls (PCBs)
Benzene	1-2-Dichloropropane	Pentachlorophenol
Benzo(a)pyrene	Dinoseb	Picloram
Carbofuran	Dioxin (2,3,7,8-TCDD) (waived)	Simazine
Carbon tetrachloride	Diquat	Styrene
Chlordane	Endothall	Tetrachloroethylene
Chlorobenzene	Endrin	Toluene
2,4-D	Ethylbenzene	Toxaphene
Dalapon	Ethylene dibromide	2,4,5-TP (Silvex)
1,2-Dibromoethane (EDB)	Glyphosate	1,2,4-Trichlorobenzene
1,2-Dibromo-3-chloropropane (DBCP)	Heptachlor	1,1,1-Trichloroethane
Di(2-ethylhexyl) adipate	Heptachlor epoxide	1,1,2-Trichloroethane
o-Dichlorobenzene	Hexachlorobenzene	Trichloroethylene
p-Dichlorobenzene	Hexachlorocyclopentadiene	Vinyl chloride
1,2-Dichloroethane	Lindane	Total Xylenes
1-1-Dichloroethylene		
Radiological Chemicals	Radium 226	Radium 228
Unregulated Substances we must test for and have not detected:		
2,4-dinitrotoluene	DCPA di-acid degradate	MTBE
2,6-dinitrotoluene	4,4'-DDE	Nitrobenzene
Acetochlor	EPTC	Perchlorate
DCPA mono-acid degradate	Molinate	Terbacil

All About Arsenic

The Arsenic Exemption

The New Mexico Environment Department (NMED) has granted the Albuquerque Bernalillo County Water Utility Authority (ABCWUA) an exemption to the new arsenic standard. As a result, the MCL will remain at 50 PPB until December 31, 2008. This will allow time to complete the Arsenic Compliance Strategy requirements described below.

Requirement 1: Continued protection of public health during the time of the exemption by blending ground water to keep quarterly arsenic concentrations at all EPTDS below the 35 PPB excess exposure level allowed by law.

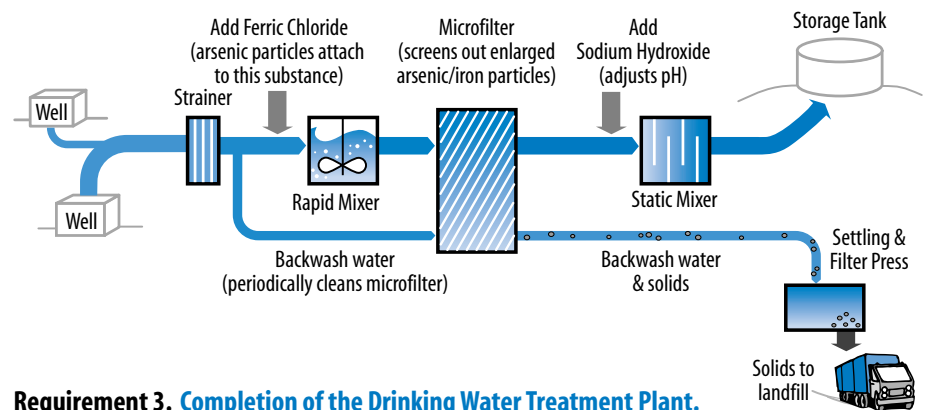
What is being done to meet the requirement? Some wells are no longer used. Other wells are used only when wells with lower arsenic concentrations are pumping. By selectively pumping wells, arsenic concentrations in storage tanks at EPTDS are lowered.

To lower the arsenic concentration even more, water with low arsenic concentrations is pumped between storage tanks. Some water lines have been reconfigured and new pump stations are under construction to create more blending opportunities. Arsenic concentrations at EPTDS have changed as a result. Samples are analyzed for arsenic every three months to monitor arsenic concentrations at the EPTDS. See the results on the map below.

Requirement 2. Construction of an Arsenic Removal Demonstration Plant on the West Side.

When will the plant be completed? The plant is scheduled for completion in July 2007. More than 4 million gallons of low concentration arsenic water can be produced each day. When the plant is in operation, visitors will see firsthand how the new process works.

The Arsenic Removal Demonstration Plant Process



Requirement 3. Completion of the Drinking Water Treatment Plant.

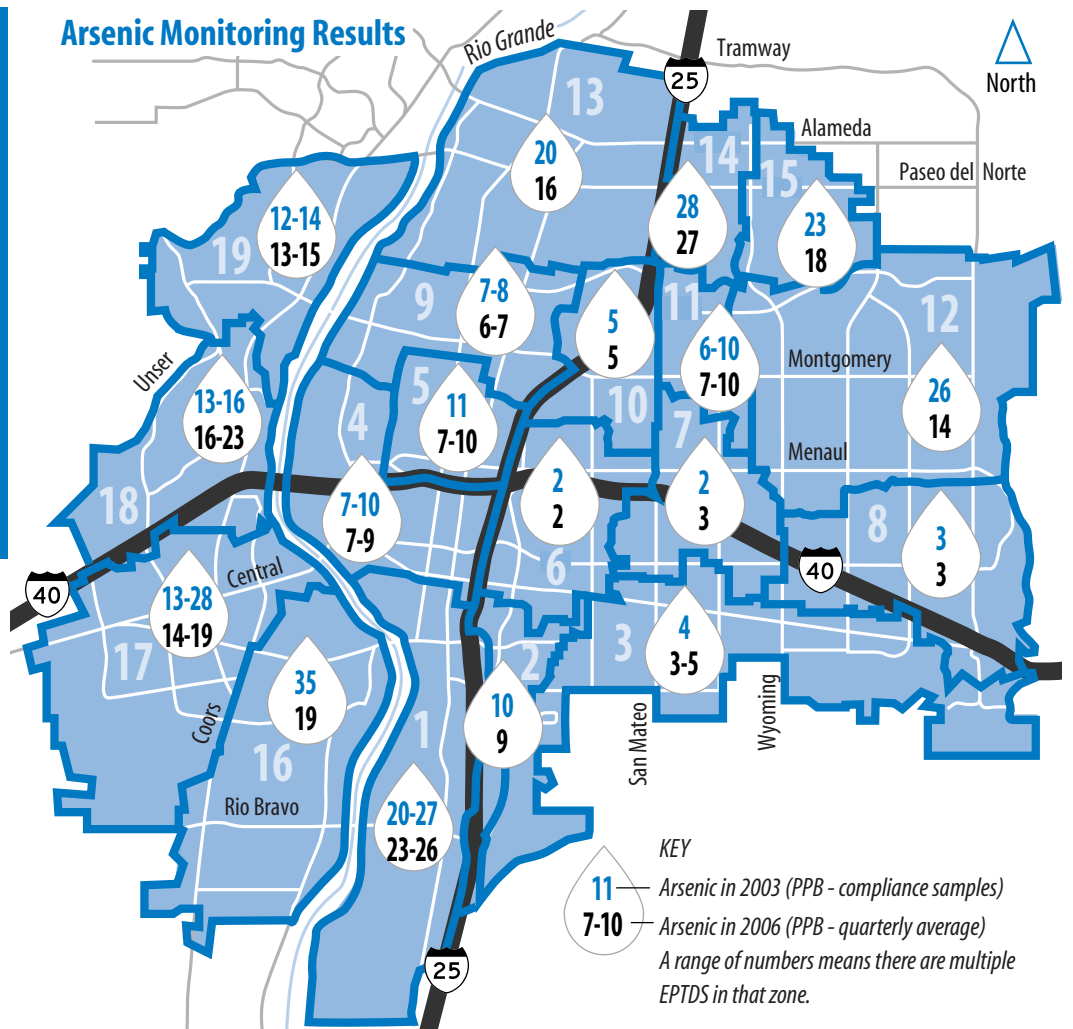
What's the schedule? Construction will be completed in the summer of 2008. Drinking water will be produced by the new plant in the fall of 2008. The water will meet all drinking water standards, including the 10 PPB arsenic standard.

Arsenic occurs naturally in the earth's crust. When rocks, minerals, and soil erode, they release arsenic into ground water. Arsenic occurs naturally in varying amounts in ground water throughout Albuquerque. For many years, the Water Utility has worked hard to meet the challenge of the USEPA's lower arsenic standard. The map at the right demonstrates the 2003 compliance monitoring results and the effects of efforts to lower arsenic concentrations in 2006.

Albuquerque's water system is made up of 19 distinct distribution zones. Water within each zone is of the same quality. For information on water quality in your distribution zone, visit our web page at www.abcwua.org/waterquality or call the Water Quality Information Line at 857-8260.

To use this map:

1. Find your location on the map.
2. Determine your distribution zone. The distribution zones are outlined by a dark blue line, and the distribution zone number is the large number printed in that zone. Drinking water supplied within a distribution zone is of the same quality.
3. The top (dark blue) number in the water drop is the amount of arsenic in the compliance sample(s) collected at the EPTDS for your distribution zone in 2003.
4. The bottom (black) number is the quarterly average for 2006, in PPB.
5. A single number for arsenic in a water drop indicates there is a single EPTDS for that distribution zone. If a range of numbers is given for a distribution zone, there are multiple EPTDS to that distribution zone.



Arsenic Health Effects

USEPA has revised the Maximum Contaminant Level from 50 PPB to 10 PPB. For the ABCWUA, the new standard will become effective December 31, 2008. Because water in some locations did not meet the new 10 PPB standard, consumers need to be aware of USEPA's health effects language for arsenic.

USEPA arsenic health effects language applies as follows:

For water containing greater than 5 PPB of arsenic and up to and including 10 PPB of arsenic:

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's 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.

For water containing greater than 10 PPB of arsenic, but not greater than 50 PPB of arsenic:

Some people who drink water containing arsenic in excess of the new MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

Special Notice for Immuno-compromised Persons

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

DRINKING WATER INFORMATION RESOURCES

	FOR INFORMATION ON	CONTACTS
Local Issues	Water Quality Complaints & Inquiries	Water Quality Information Line: 857-8260 e-mail: waterquality@cabq.gov www.abcwua.org/waterquality TTY 857-8206
	Water System Emergency Repair: 24 Hr Response	Water Utility Dispatch: 857-8250
	Unusual Activity at Water Utility Facilities: 24 Hr Response	Water Utility Central Control: 342-3001
	Water Bills & Service	Customer Services: 768-2800 www.abcwua.org/customerservices/index.html
	On-line water bill payments	www.abcwua.org/customerservices/paybill.html
	Water Conservation Rebate Programs, Xeriscaping, Audits, Ways to Conserve	Water Conservation Line: 768-3655 www.abcwua.org/waterconservation/index.html
	To Report Water Waste	Water Waste Hotline: 768-3640 www.abcwua.org/waterconservation/wwform.html
	Albuquerque Bernalillo County Water Utility Authority	768-2500 www.abcwua.org
	Arsenic Removal Demonstration Project	768-2562 www.abcwua.org/waterquality/results/arsenic.html
	Water Protection Policy & Action Plan	768-3633
Statewide	San Juan-Chama Drinking Water Project Information	www.sjcdinkingwater.org/index.htm For related road construction, call 242-ROAD
	Cross Connection Control	857-8210 e-mail: backflow@cabq.gov
	Water Regulations Source Water Assessments Lead Testing: Certified Labs	New Mexico Environment Department Drinking Water Bureau, Albuquerque: 222-9500 Santa Fe: 1-877-654-8720 www.nmenv.state.nm.us/dwb/dwbtot.html
Federal	Water Quality	USEPA Safe Drinking Water Hotline: 1-800-426-4791
	Precautions Required for Immuno-Compromised Individuals (e.g. HIV/AIDS Patients, Patients in Chemotherapy)	www.epa.gov/safewater USEPA Questions & Answers http://safewater.custhelp.com

The Albuquerque Bernalillo County Water Utility Authority is a joint agency of the City of Albuquerque and the County of Bernalillo that administers the water and wastewater utility for all of Albuquerque and Bernalillo County. The New Mexico State Legislature created the Albuquerque Bernalillo County Water Authority in June of 2003.

- Chair: Martin Heinrich, City Councilor
- Vice-Chair: Deanna A. Archuleta, County Commissioner
- City of Albuquerque Members: Mayor Martin Chávez, Isaac Benton, City Councilor, Michael Cadigan, City Councilor
- Bernalillo County Members: Alan B. Armijo, County Commissioner, Teresa Cordova, County Commissioner
- Ex Officio Member: Pablo R. Rael, Trustee, Village of Los Ranchos de Albuquerque

Monthly board meetings are held at the Vincent E. Griego Joint Chambers of the Albuquerque/Bernalillo County Government Center. Meeting schedules and agenda are available at <http://www.abcwua.org/agenda.html>.

Information about your drinking water

2006 Water Quality Report

We know the quality of your drinking water is important to you. Every year, thousands of samples are collected in the distribution system to monitor the quality of water delivered to your tap.



Seen any of these in your neighborhood?
For many years, many of you have allowed Water Quality Specialists access to water taps outside your homes for collection of water samples. We thank you. However, like the mailman or the meter reader, Water Quality Specialists often encounter difficult circumstances. A new dog, a new fence, or a broken or frozen faucet make a sample site unusable. Line Maintenance crews have installed the first of many sample hydrants dedicated to the collection of samples with better quality control, and easier access. The hydrants are enclosed in kelly green boxes that look much like a cable T.V. box. Made especially for the ABCWUA, each box is marked with our logo and should have a lock on the side. For more information about the sample hydrants, contact Robert Chavez of the Water System Division at 857-8613.

WHAT THE EPA SAYS ABOUT DRINKING WATER CONTAMINANTS

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 human activity.

Contaminants in drinking water sources may 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 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.
- 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. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Distribution System Monitoring at Customer Taps

Definitions on page 2

USEPA sets regulations that limit the amount of certain substances in drinking water. USEPA defines where and how often samples for each substance must be collected. **The table below shows the substances found in samples collected at customer taps throughout the distribution system in 2006.**

Substance Detected	Acceptable Level?	DETAILED INFORMATION						
		Source	Year of Samples	Minimum Detected	Average Detected	Maximum Detected	Maximum Contaminant Level (or equivalent)	Maximum Contaminant Level Goal (or equivalent)
Microbiological								
Total Coliform	Yes	Naturally present in the environment.	2006	-	-	1 of 214 samples or 0.5% of samples taken in July and October had detectable total coliform bacteria. No total coliform bacteria was detected in any repeat sample at any location.	Presence of coliform bacteria in 5.0% or more of samples in any month.	0% of samples with detectable coliform bacteria.
Disinfectants								
Chlorine	Yes	Water additive used to control microbes.	2006	0.3 PPM	0.8 PPM	1.5 PPM	4 PPM	4 PPM
Disinfection By-Products								
Total Trihalomethanes	Yes	By-product of chlorination.	2006	1 PPB	11 PPB	27 PPB	80 PPB	Not Applicable
Haloacetic Acid	Yes	By-product of chlorination.	2006	0 PPB	4 PPB	5 PPB	60 PPB	Not Applicable
Lead & Copper								
Copper	Yes	Corrosion of household plumbing.	2004	90th Percentile 0.1 PPM	No. of Samples that Exceed Action Level Zero	0.2 PPM	Action Level 1.3 PPM	1.3 PPM