

# 2008 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?**

Last year, we conducted tests for over 80 contaminants. We only detected 12 of those contaminants, and found only 1 at a level higher than the EPA allows. As we told you at the time, our water temporarily exceeded drinking water standards. (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?**

Water for the Town of Bernalillo is pumped from one or more of four water wells. The wells are between 600 and 1500 feet deep and the water is from the Rio Grande Group Aquifer.

## **Source water assessment and its availability**

The town has water availability to serve our residents including the amounts needed for future growth. We have increased our approved supply requirements and will continue to acquire more as we move forward.

## **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 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; 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?**

Water is a precious resource. We can all do our part by conserving it. This will help to insure adequate supplies in the future and help to keep our water rates as low as possible.

### **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!

### **Other Information**

The Town is currently in the midst of requesting additional pumping authority from the Office of the State Engineer. The administrative process and necessary hearing are taking place as anticipated and we look forward to approval.

### **Variance and Exemptions**

As mentioned under the Arsenic section, the Town of Bernalillo is operating under an approved variance for Arsenic compliance through the end of this year. As stated earlier, we expect to be in full compliance at that time.

### **Monitoring and reporting of compliance data violations**

The regulation requires that the Town publish and certify this report by July 1 of each year. Although published and distributed for 2006, it was not published and certified as required. As a result, the Town received two violations from the New Mexico Environment Department. The timely publication, distribution, and certification of this document will mitigate these violation notices and bring the Town back in good standing with the NMED.

---

# 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> or <u>MRDLG</u>	<u>MCL,</u> <u>TT, or</u> <u>MRDL</u>	<u>Your</u> <u>Water</u>	<u>Range</u> <u>Low</u> <u>High</u>	<u>Sample</u> <u>Date</u>	<u>Violation</u>	<u>Typical Source</u>
<b>Disinfectants &amp; Disinfection By-Products</b>							
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.)							
Chlorine (as Cl <sub>2</sub> ) (ppm)	4	4	0.52	0.35   0.52	2008	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	0.4	NA	2005	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	80	1.1	NA	2005	No	By-product of drinking water disinfection
<b>Inorganic Contaminants</b>							
Arsenic (ppb)	0	10	15	12   15	2008	Yes	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Chromium (ppb)	100	100	.01	.01   .01	2008	No	Discharge from steel and pulp mills; Erosion of natural deposits
Cyanide [as Free Cn] (ppb)	200	200	100	100	2007	No	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories
Fluoride (ppm)	4	4	0.3	0.2   0.3	2008	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [measured as Nitrogen] (ppm)	10	10	0.1	.009   0.1	2008	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
<b>Radioactive Contaminants</b>							
Alpha emitters (pCi/L)	0	15	1.99	1.92   1.99	2004	No	Erosion of natural deposits
Radium (combined 226/228) (pCi/L)	0	5	0.6	0.32   0.6	2004	No	Erosion of natural deposits
Uranium (ug/L)	0	30	4	3   4	2004	No	Erosion of natural deposits
<u>Contaminants</u>	<u>MCLG</u>	<u>AL</u>	<u>Your</u> <u>Water</u>	<u>Sample</u> <u>Date</u>	<u># Samples</u> <u>Exceeding AL</u>	<u>Exceeds</u> <u>AL</u>	<u>Typical Source</u>
<b>Inorganic Contaminants</b>							
Copper - action level at consumer taps (ppm)	1.3	1.3	0.27	2005	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead - action level at consumer taps (ppb)	0	15	5	2005	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

<b>Unit Descriptions</b>	
<b><u>Term</u></b>	<b><u>Definition</u></b>
ug/L	ug/L : Number of micrograms of substance in one liter of water
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

<b>Important Drinking Water Definitions</b>	
<b><u>Term</u></b>	<b><u>Definition</u></b>
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. As a result of new regulations concerning Arsenic, the allowable concentration was reduced from 50 ppm to 10 ppm. This occurred along with a mandatory compliance requirement. Within the mandatory requirement was an opportunity for cities and towns to request a compliance variance and an extension of time. In order to be approved for the compliance time extension, the Town of Bernalillo had to demonstrate a physical and financial plan to comply. The Town of Bernalillo applied for, and was granted, a compliance time extension from 2005 to the end of this year.

Earlier this spring, the Town began treating our water for Arsenic at well #4. At the current time, water to the town is routed through the new equipment at well #4. Although not official at this time, test results at well #4 indicate Arsenic levels well below the required 10 ppm.

In addition, we are completing our second arsenic removal installation at well #3 and it is expected to be in full operation this summer.

Early next year, we anticipate completion of similar installations on wells #1 and #2.

The completion of all 4 wells will provide the reliability and flexibility for the Town to meet our changing water requirements.

### **For more information please contact:**

PO Box 638  
Bernalillo, NM 87004  
505-867-3311