

YEAR 2000 DRINKING WATER QUALITY REPORT

DEPARTMENT OF PUBLIC UTILITIES
COUNTY OF LOS ALAMOS, NEW MEXICO

North Mesa Improvements - Year 2000

A new 200,000 gallons capacity elevated storage tank was constructed during 2000 on a North Mesa site adjacent to the Middle School. Cost of the tank and related piping was \$800,000. This tank, together with other distribution system improvements will significantly improve the fire protection available to residents of North Mesa.

The Source of Los Alamos Drinking Water

The Los Alamos County water system is supplied by groundwater pumped from 12 wells, which tap the main aquifer under the Pajarito Plateau, part of the Santa Fe Formation. The Los Alamos County system has well-head protection in place.

Sources for communities' drinking water (both tap water and bottled water) can 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 radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

You're Invited . .

The Los Alamos County Utilities Board encourages public interest and participation in our community's decisions affecting drinking water. Regular Utilities Board meetings are held on the third Wednesday of each month at 5:30 p.m. in the Stout Room at the Municipal Building. The public is always welcome.

For People With Special Conditions

Some people may be more vulnerable to contaminants in drinking water than is 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* are available from the Safe Drinking Water Hotline: (800-426-4791).

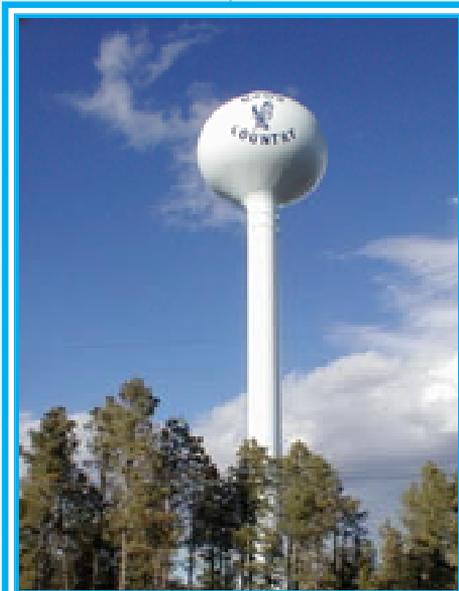
EPA and AWWA Hotline Numbers

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). Information is also available on the World Wide Web at <http://www.waterdata.com>.

We at Los Alamos County Utilities know how very important safe and good quality drinking water is to our community. Los Alamos County incurred no violations in 2000.

Our goal is to provide you high-quality, safe drinking water that meets or exceeds federal and state standards, and we take seriously our pledge to safeguard the quality and safety of our drinking water.



The North Mesa water tank, constructed in 2000

Consumer Confidence Report: 2000 Drinking Water Quality Data

Detected Compounds	Units	SDWA MCL	SDWA MCLG	Range of Values Detected	System Average	Violation	Major Sources
<i>Inorganic Compounds</i>							
Arsenic	ppb	50	n/a	0.8 - 2.6	1.7	NO	Natural deposits
Chromium	ppb	100	100	5.5 - 6.7	5.9	NO	Natural deposits
Fluoride	ppm	4	4	0.29 - 0.40	0.33	NO	Natural deposits, Fluoridation by County
Nitrate & Nitrite	ppm	10	10	0.32 - 1.00	0.50	NO	Leaching from septic tanks, sewage; Natural deposits
Lead (residential taps)	ppb	15 ¹	0	< 5.0 - 12.0	over 90% less than detect limit of 5 ppb over 90% less than 0.09 ppm	NO	Corrosion of household plumbing
Copper (residential taps)	ppm	1.3 ¹	1.3	< 0.05 - 0.13		NO	Corrosion of household plumbing
Hardness (as CaCO ₃)	grains/gal	-	-	1.58 - 5.08	2.82	NO	Natural deposits
<i>Organic Compounds</i>							
Total Trihalomethanes (TTHMs) ²	ppb	100	0	< 0.50 - 12.3	4.1	NO	By-product of drinking water chlorination
<i>Radionuclides</i>							
Alpha emitters	pCi/L	15	0	0.30 - 2.30	1.18	NO	Decay of natural deposits
Beta/photon emitters	pCi/L	50	0	2.10 - 4.70	3.69	NO	Decay of natural, man-made deposits
<i>Microbiology</i>							
Total Coliform ³	cfu per 100 mL	5%	0	max. monthly positive samples: 0 of 48 (0%) min. monthly positive samples: 0 of 45 (0%)	Total positive samples in 2000: 0 of 577	NO	Regrowth of soil bacteria in the distribution system piping

Notes:

¹ 2000 results. The Action Level for lead/copper is exceeded if 90% of homes tested have lead levels above 15 ppb and copper levels above 1.3 ppm. No lead/copper samples exceeded action levels.

² TTHM compliance is based on a running annual average. TTHM concentrations vary seasonally in our water.

³ The MCL for total coliforms is the presence of coliform bacteria in 5% or more of the monthly samples.

Key to Table

MCL = Maximum Contaminant Level

MCLG = Maximum Contaminant
Level Goal

pCi/L = picocuries per liter (a measure
of radioactivity)

ppm = parts per million, or milligrams
per liter

ppb = parts per billion, or micrograms
per liter

cfu = colony forming units

How to Read the Table Above

Our water is tested to assure that it is safe and healthy. The results of tests performed in 2000 are presented in the table.

The column marked **SDWA MCLG** shows the Maximum Contaminant Level Goal (MCLG). This is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG allows for a margin of safety.

The column marked **SDWA MCL** is the Maximum Contaminant Level (MCL). This is the highest level of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

The column marked **Range of Values Detected** shows minimum to maximum results observed in our water in 2000.

Major Sources provides an explanation of typical or man-made origins of contaminant.

Additional Water Quality Monitoring

In addition to testing we are required to perform, our water system voluntarily tests for many additional substances and microscopic organisms to make certain our water meets water quality standards.

During 2000, perchlorate was detected at very low levels in one water production well, Otowi Well No. 1. While the amount is significantly below any level of concern, the well is now sampled monthly to closely monitor this substance. There is no water quality standard for perchlorate, and its effects on the human body, if any, are the subject of study by the USEPA and public health authorities. In addition to perchlorate, water production wells are regularly monitored in cooperation with Los Alamos National Laboratory for high explosives compounds, tritium and strontium 90, all of which were either below detection limits or greatly below drinking water standards.



Operator John Fesser makes adjustments at a booster pump station

Other Information

The State of New Mexico is working on a source water assessment. It is scheduled to be completed in 2004.

Environmental surveillance reports are available at LANL's reading room.

Cryptosporidium

Cryptosporidium, found in rivers and streams, is a microscopic organism that, when ingested, can result in diarrhea, fever and other gastrointestinal symptoms. Los Alamos water comes from wells, not rivers, and, as expected, cryptosporidium has not been detected in our water supply.

Radon

Radon is a naturally-occurring radioactive element, whose decay products have been linked to cancer in humans. EPA is currently considering regulation of radon in drinking water, but no MCL has been established. Radon 222 levels in Los Alamos' water supply are as follows (in pCi/L): Our water testing results showed a level of 235 to 685 pCi/L, with an average of 408 pCi/L.



Wayne Vigil repairs a pump control valve

Department of Public Utilities

County of Los Alamos
901 Trinity
Los Alamos, New Mexico 87544

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*As mandated by the Safe Drinking Water Act (SDWA),
this Consumer Confidence Report details our water sources, the results of our water tests, and other information.*

El informe contiene informacion importante sobre la calidad del agua en su comunidad. Traduzcalo o hable con alguien que lo entienda bien.

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Trees killed by the Cerro Grande fire surround Group 11 storage tank

The Cerro Grande Fire Disaster

Approximately 40 million gallons of water were produced for the fire fighting effort during the Cerro Grande fire disaster, with water production crews working around the clock before, during and after the time the fire struck Los Alamos. Some water system facilities sustained minor damage and the communications system was knocked out by the fire, severely hampering water production efforts. Deficiencies in the water distribution system were also revealed when water was temporarily unavailable in some locations during the fire fighting effort.

To remedy these deficiencies, increased fire protection water storage is being constructed in the North Community, emergency power generation capability for system pumping stations has been increased, the communications system is being upgraded and numerous distribution piping changes are under design and construction.

With the extreme stress sustained by the water system during the fire, there was the potential for the distribution system to become contaminated through back-siphonage from the many open valves and broken water lines. Immediately after the fire but before citizens were allowed to return to Los Alamos and White Rock, water in the distribution system was extensively tested by Los Alamos County Utilities and New Mexico Environment Department personnel. No evidence of contamination was detected and the water was determined to be safe for human consumption in all respects.