

NEW MEXICO STATE UNIVERSITY  
OFFICE OF FACILITIES & SERVICES



DOMESTIC WATER SUPPLY SYSTEM  
CONSUMER CONFIDENCE REPORT

JULY 1, 2007

In 1999, the U.S. Environmental Protection Agency promulgated a new rule that required water system operators to publish annually, a report for the public it serves on the quality of water delivered to the community. New Mexico State University, through the Office of Facilities & Services, owns and operates a domestic water system which provides water for the main campus.

This report describes the testing and treatment we conduct to insure a safe water supply for this community. It includes results of that testing which show that the drinking water supplied to the campus during the past year has not exceeded any contaminant levels established by the United States Environmental Protection Agency's "Safe Drinking Water Standards".

This report covers the period from January 1 through December 31, 2006. It is distributed annually to all campus departments. In addition, it is posted to New Mexico State University's general electronic mail distribution and website.

**CONSUMER CONFIDENCE REPORT - WHAT IS IT?**

The following report describes the water system operated by New Mexico State University, as required by the United States Environmental Protection Agency under Safe Drinking Water regulations. Those regulations mandate each community water system provide its customers with a report on the quality of its drinking water. These reports must contain information on the quality of water and characterize any risks associated with exposure to any water contaminants.

**NEW MEXICO STATE UNIVERSITY PROVIDES GOOD SAFE DRINKING WATER**

New Mexico State University provides a very good quality drinking water that is safe and has not exceeded any contaminant levels established by the United States Environmental Protection Agency's "Safe Drinking Water Standards" during the past year.

In order to ensure the quality of our water, the Office of Facilities & Services at New Mexico State University routinely samples the water supply and tests for over 125 contaminants. These contaminants include 10 heavy metals, 50 semi-volatile organic compounds (SOC), 58 volatile organic compounds (VOC), pH, hardness, iron, nitrates, fluoride, lead, copper, sulfates, total trihalo methane's, halo-acetic acids and alkalinity. The table located at the bottom of the following page is a listing of contaminants which were detected over the past year. None of these contaminants exceeded "Safe Drinking Water Standards."

**STATE AND FEDERAL AGENCIES MONITOR WATER QUALITY**

In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency prescribes regulations which 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. All 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 Safe Drinking Water Hotline (800-426-4791).

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 for infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline (800-426-4791).

To protect public health, the EPA and New Mexico Environment Department set maximum contaminant levels, maximum

contaminant level goals and action levels for contaminants. Drinking water regulations may also require water treatment techniques.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms, we have provided the following definitions:

- ! *Non-Detects (ND)* - laboratory analysis indicates that the contaminant is not present.
- ! *Parts per million (ppm) or Milligrams per liter (mg/l)* - one part per million corresponds to one minute in two years or a single penny in \$10,000.
- ! *Parts per billion (ppb) or Micrograms per liter (micrograms/l)* - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- ! *Parts per trillion (ppt) or Nanograms per liter (nanograms/l)* - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.
- ! *Parts per quadrillion (ppq) or Picograms per liter (picograms/l)* - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.
- ! *Picocuries per liter (pCi/L)* - picocuries per liter is a measure of the radioactivity in water.
- ! *Millirems per year (mrem/yr)* - measure of radiation absorbed by the body.
- ! *Million Fibers per Liter (MFL)* - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.
- ! *Nephelometric Turbidity Unit (NTU)* - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- ! *Variances and Exemptions (V&E)* - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
- ! *Action Level* - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- ! *Treatment Technique (TT)* - (Mandatory Language) A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
- ! *Maximum Contaminant Level* - (Mandatory Language) The "Maximum Allowed" (MCL) is 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* - (Mandatory Language) The "Goal" (MCLG) is 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.

<b>TEST RESULTS</b>						
<b>Contaminant (Unit Measurement)</b>	<b>Violation Y/N</b>	<b>Level Detected</b>	<b>Date Tested</b>	<b>MCLG</b>	<b>MCL</b>	<b>Likely Source of Contaminants</b>
<b>MICROBIOLOGICAL CONTAMINANTS</b>						
1. Total Coliform Bacteria	NONE	Absent	300 Samples per Year	Absent	Presence of Coliform bacteria in 5% of monthly samples.	Naturally present in the environment.
2. Fecal Coliform and <i>E.coli</i>	NONE	Absent	0 Samples per Year	Absent	A routine sample and repeat sample are total coliform positive, and one is also fecal coliform or <i>E.coli</i> positive.	
3. Turbidity	NO	N/A		NTU n/a	TT	Soil Runoff
<b>RADIOACTIVE CONTAMINANTS</b>						
4. Beta/photon emitters (pCi/l)	NO	8.03	10/08/03	0	50	Decay of natural and man-made deposits.
5. Alpha emitters (pCi/l)	NO	7.6	10/08/03	0	15	Erosion of natural deposits.
6. Combined radium	NO	N/A	10/08/03	0	5	Erosion of natural deposits.

(pCi/l)						
7. Antimony (ppb) *	NO	ND	9/13/05	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
8. Arsenic (ppb) *	NO	ND	5/14/07	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
9. Asbestos (MFL)	NO	N/A		7	7	Decay of asbestos cement water mains; erosion of natural deposits.
10. Barium (ppm) *	NO	.003	5/14/07	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
11. Beryllium (ppb) *	NO	ND	9/13/05	4	4	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries.
12. Cadmium (ppb) *	NO	ND	5/14/07	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints.
13. Chromium (ppb) *	NO	.0051	5/14/07	100	100	Discharge from steel and pulp mills; erosion of natural deposits
14. Copper (ppm) *	NO	.003	5/14/07	1.3	AL=1.3	Corrosion of galvanized pipes; erosion of natural deposits; leaching from wood preservatives
15. Cyanide (ppb)	NO	ND	01/13/03	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories.
16. Fluoride (ppm) *	NO	.48	5/14/07	4	4	Erosion of natural deposits; water additive shish promotes strong teeth; discharge from fertilizer and aluminum factories.
17. Lead (ppm) *	NO	ND	5/14/07	0	AL=0.015	Corrosion of household plumbing systems, erosion of natural deposits.
18. Mercury (inorganic) (ppb) *	NO	ND	5/14/07	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland.
19. Nitrate (as Nitrogen) (ppm) ***	NO	ND	9/13/05	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
20. Nitrite (as Nitrogen) (ppm) *	NO	ND	9/13/05	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
21. Selenium (ppb) *	NO	ND	5/14/07	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.
22. Thallium (ppb) *	NO	.00028	9/13/05	0.5	2	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories.
23. Total Trihalomethanes (ppb)	YES	25.8	3/15/05	<40	80	Disinfection byproduct. SEE NOTE 1
24. Total Haloacetic Acid (ppb)	YES	5.7	3/15/05	<30	60	Disinfection byproduct. SEE NOTE 1
25. pH		7.80	5/14/07	0	0	SEE NOTE 2
26. Alkalinity (ppm)		160	5/14/07	500	500	Occurs Naturally
27. Hardness (ppm)		185	5/14/07	250	250	Occurs Naturally

28. Sulfate (ppm)		61	5/14/07	250	250	Occurs Naturally
-------------------	--	----	---------	-----	-----	------------------

**Synthetic Organic Contaminants: No Detects**

**Volatile Organic Contaminants: No Detects**

1.OFS took samples at well heads not at Gerald Thomas as required. Samples did not exceed MCLG or MCL.

2. pH is a measure of acidity/alkalinity in water. pH=7.0 is neutral. pH<7.0 is acidic. pH>7.0 is alkaline. Drinking water should be between 6.0 and 8.5.

\* Primary drinking water standards

\*\* Secondary drinking water standards

\*\*\* Some people who drink water containing inorganic Mercury well in excess of the MCL over many years could experience kidney damage.

**WHAT DOES THIS MEAN?**

New Mexico State University provides a very good quality water.

**WHAT IS NEW FOR THE FUTURE?**

New Mexico State University obtains all of its water from an underground aquifer. This water is currently produced from three wells (#10, #14, and #17). These wells are capable of producing from 1600 gallons per minute (GPM) (Well #10) to 2000 GPM (Wells #14 and #17). Prior to the water entering the main distribution system, chlorine is added to disinfect and destroy any bacteria or viruses. Supplemental chlorine is added at the 4.0 million gallon storage tank.

OFS Engineering staff have installed a new 24” diameter water line that delivers water from the new 5.0 million gallon tank to the Main Campus. This new line has stabilized system pressure and supply. Construction of the new line began in September 2006 and was completed in March 2007.

Due to the unfortunate events of September 11, NMSU has taken several steps to enhance security at its water supply and storage systems. These steps are following the "Public Health Security and Bio-terrorism Preparedness Response Act of 2002" as enacted by Congress on June 12, 2002. NMSU has completed the mandated "vulnerability assessment" and its "emergency response survey" for the water system. Based on the results of these assessments, OFS is implementing efforts to minimize any vulnerability to ensure the continued safety and security of the water system.

The New Mexico State University Water Distribution System is well maintained and operated, and sources of drinking water are generally protected from potential sources of contamination based on construction, hydro geologic settings, and system operations and management. The susceptibility rank of the entire water system is high.

**SOURCE SUSCEPTIBILITY RANKING**

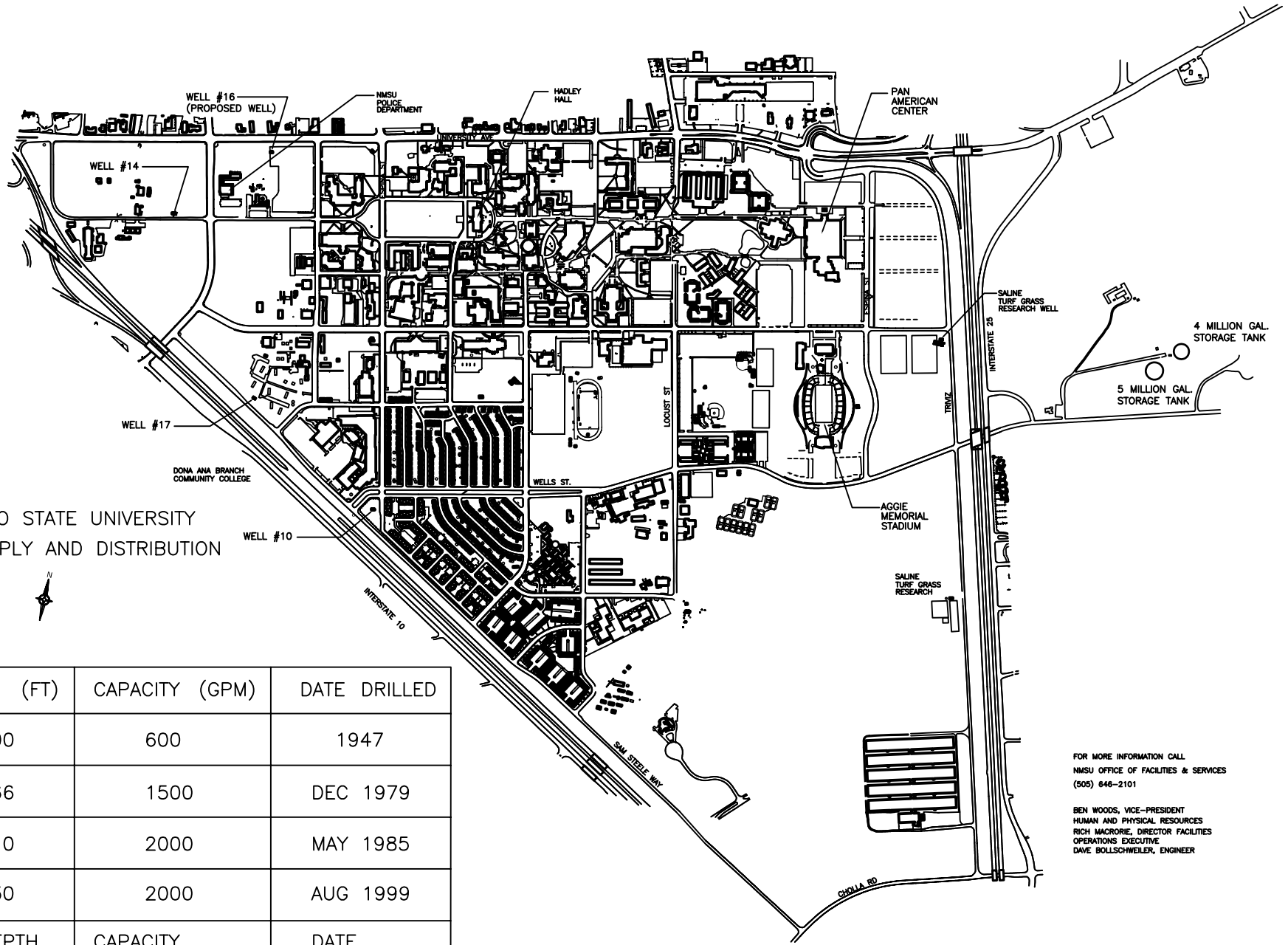
SOURCE NAME	Sensitivity Rank	Vulnerability Rank	Susceptibility Rank	Operational Exceptions	Final Rank
WELL #10	Moderately Low	High	Moderately High	Land Use	High
WELL #14	Moderately Low	High	Moderately High	Land Use	High
WELL #17	Moderately Low	High	Moderately High	Land Use <3 PSOCs	High

Copies may be requested by e-mailing the Drinking Water Bureau at [SWAPP@nmenv.state.nm.us](mailto:SWAPP@nmenv.state.nm.us) or by calling (505)827-7536 (toll free 1-877-654-8720). Please include your name, address, telephone number, and e-mail address, and the name of the water utility and water system number. *NMED-DWB prefers to e-mail copies of the report, and may charge a nominal fee for paper copies.*

**POINT OF CONTACT**

For further information on this report or any aspect of our water supply system, please contact David Bollschweiler at (505) 646-7844.

NEW MEXICO STATE UNIVERSITY  
WATER SUPPLY AND DISTRIBUTION



WELL	DEPTH (FT)	CAPACITY (GPM)	DATE DRILLED
1	500	600	1947
10	766	1500	DEC 1979
14	710	2000	MAY 1985
17	730	2000	AUG 1999
POD 22	DEPTH	CAPACITY	DATE

FOR MORE INFORMATION CALL  
NMSU OFFICE OF FACILITIES & SERVICES  
(505) 646-2101

BEN WOODS, VICE-PRESIDENT  
HUMAN AND PHYSICAL RESOURCES  
RICH MACORIE, DIRECTOR FACILITIES  
OPERATIONS EXECUTIVE  
DAVE BOLLSCHWEILER, ENGINEER