

2012

*FACILITIES AND SERVICES
OPERATIONS AND UTILITIES*

**CONSUMER CONFIDENCE
WATER
REPORT**

**NM
STATE
UNIVERSITY**

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ABOUT THE REPORT . . .

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 Facilities & Services Department, 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, 2011. 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 Facilities & Services Department 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).

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.

Definitions and Terms

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.

Variations 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.

TEST RESULTS

Contaminant (Unit Measurement)	Violation Y/N	Level Detected	Date Tested	MCLG	MCL	Likely Source of Contaminants
MICROBIOLOGICAL CONTAMINANTS						
Total Coliform Bacteria	None	< 1	11/30/2010	NA	Presence of Coliform bacteria in 5% of monthly samples.	Naturally present in the environment.
Fecal Coliform and <i>E. coli</i>	None	< 1	11/30/2010	NA	A routine sample and repeat sample are total coliform positive, and one is also fecal coliform or <i>E. coli</i> positive.	
Turbidity	No	.1	11/30/2010	NTRU	TT	Soil runoff.
RADIOACTIVE CONTAMINANTS						
Beta/photon emitters (pCi/l)	No	8.03	10/08/2003	0	50	Decay of natural and man-made deposits.
Alpha emitters (pCi/l)	No	7.6	10/08/2003	0	15	Erosion of natural deposits.
Combined radium (pCi/l)	No	N/A	10/08/2003	0	5	Erosion of natural deposits.
Antimony (ppb) *	No	ND	6/10/11	.006	.006	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic (ppb) *	No	ND	6/10/11	.01	.01	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
Asbestos (MFL)	No	N/A		7	7	Decay of asbestos cement water mains; erosion of natural deposits.
Barium (ppm) *	No	ND	6/10/11	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Beryllium (ppb) *	No	ND	6/10/11	.004	.004	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries.

TEST RESULTS

Contaminant (Unit Measurement)	Violation Y/N	Level Detected	Date Tested	MCLG	MCL	Likely Source of Contaminants
RADIOACTIVE CONTAMINANTS						
Cadmium (ppb) *	No	ND	6/10/11	.006	.006	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints.
Chromium (ppb) *	No	ND	6/10/11	.1	.1	Discharged from steel and pulp mills; erosion of natural deposits
ORGANIC/NON-ORGANIC CONTAMINANTS						
Copper (ppm) *	No	.002-.003	9/02/2010	1.3	AL=1.3	Corrosion of galvanized pipes; erosion of natural deposits; leaching from wood preservatives
Cyanide (ppb)	No	ND	6/10/211	.2	.2	Discharge from steel/metal factories; discharge from plastic and fertilizer factories.
Fluoride (ppm) *	No	.72-.89	6/10/2011	4	4	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.
Lead (ppm) *	No	ND	9/02/2010	0	AL=0.015	Corrosion of household plumbing systems, erosion of natural deposits.
Mercury (inorganic) (ppb) *	No	ND	6/10/2011	.002	.002	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from croplands.
Nitrate (as Nitrogen) (ppm) ***	No	ND	6/10/2011	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Nitrite (as Nitrogen) (ppm) *	No	ND	6/30/2010	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Selenium (ppb) *	No	ND	6/10/2011	.05	.05	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.
Thallium (ppb) *	No	.00028	6/10/2011	.002	.002	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories.

TEST RESULTS

Contaminant (Unit Measurement)	Violation Y/N	Level Detected	Date Tested	MCLG	MCL	Likely Source of Contaminants
ORGANIC/NON-ORGANIC CONTAMINANTS						
Total Trihalomethanes (ppb)	No	10.2 ug/L	1/5/2011	<40	80	Disinfection byproduct.
Total Haloacetic Acid (ppb)	No	2.9 ug/L	10/5/2011	<30	60	Disinfection byproduct.
WATER CHARACTERISTICS						
pH		7.73-7.63	9/02/2010	N/A	N/A	See Note 1
Alkalinity (ppm)		140-148	9/02/2010	500	500	Naturally occurring.
Hardness (ppm)		196-252	9/02/2010	250	250	Naturally occurring.
Sulfate (ppm)		77.4-90.5	9/02/2010	250	250	Naturally occurring.

Synthetic Organic Contaminants: No Detects

Volatile Organic Contaminants: No Detects

Notes:

1. 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 THE FUTURE HOLD?

WHAT DOES THIS MEAN?



New Mexico State University provides high quality potable water that meets all applicable state and federal drinking water standards.

New Mexico State University recognizes that our water source not only supplies our campus community but the local Las Cruces community as well. We take pride in supplying our campus community with safe, great tasting drinking water.

NMSU Facilities and Services Operations and Utilities strives to ensure that not only the water we pump out of the ground is safe but the source is protected in every way possible through ground-water protection measures.

New Mexico State University obtains all of its water from an underground aquifer. This water is currently produced from our four wells (#10, #14, #16 and #17).

These wells are capable of producing anywhere from 1600 gallons per minute (GPM) (Well #10) to 2000 GPM (Wells #14, #16 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 and 5.0 million gallon storage tanks.

The 4 MG water tank was completely rehabilitated and put back into service in May of 2010. New Mexico State University has implemented engineering controls to ensure optimum tank levels during peak water demand while saving energy by running well pumps during off-peak times. Tanks levels are monitored 24/7 at our Central Utilities Plant located at the corner of Stewart and Sweet streets.

New Mexico State University 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. New Mexico State University has completed the mandated "vulnerability assessment" and its "emergency response

survey" for the water system. Based on the results of these assessments, New Mexico State University 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 #16	Moderately Low	High	Moderately High	Land Use	High
Well #17	Moderately Low	High	Moderately High	Land Use	High

Copies may be requested by e-mailing the Drinking Water Bureau at 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 Jack Kirby at (575) 646-2101.

NOTES:

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