



Albuquerque Campus



## 2017 Annual Water Quality Report

Drinking water supplied by the University of New Mexico is safe and is of much better quality than required by all state and federal drinking water standards.

This is an annual report on the quality of drinking water supplied by the University of New Mexico (UNM) primarily to the Main Campus area. The report is based upon tests conducted during 2017 and recent prior years by the New Mexico Environment Department (NMED) Drinking Water Bureau (DWB), NMED-certified 3rd-party laboratories and UNM.



We conduct water quality tests for a wide variety of regulated contaminants every year and we have only detected 12 of those contaminants (all at levels well below regulatory limits) for the 2017 report.

This report meets the Environmental Protection Agency (EPA) and Safe Drinking Water Act (SDWA) requirements for “Consumer Confidence Reports (CCR)” and contains information on the source of our water, its constituents, and the health risks associated with any contaminants.

El informe contiene información muy importante sobre la calidad de su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.

UNM is committed to providing you with a safe and reliable drinking water supply. Please read this report carefully and, if you have questions, call UNM’s Department of Safety & Risk Services at 277-2753.



## Table of Detected Contaminants

### **How to Read This Table**

This report is based upon more than 400 drinking water tests primarily conducted during 2017 by the University of New Mexico. Terms used in the Water-Quality Table and in other parts of this report are defined in the Footnotes, Key and Definitions below.

<i>Contaminant</i>	<i>Sample Date</i>	<i>Concentration Unit</i>	<i>EPA's Action Level or Maximum Level (MCL)</i>	<i>Ideal Goal (MCLG)</i>	<i>Maximum Level Measured</i>	<i>Measured Range</i>	<i>Violation</i>	<i>Typical Sources</i>
<b><i>Inorganic</i></b>								
<i>Arsenic</i>	2/21/2017	ppb	10 <sup>A</sup>	0	7	7-7	No	Erosion of natural volcanic deposits
<i>Copper</i>	6/6/2015	ppm	1.3 <sup>E</sup>	1.3 <sup>E</sup>	0.17*	N/A	No	Corrosion of household plumbing systems, corrosion of natural deposits
<i>Lead</i>	6/6/2015	ppb	15 <sup>E</sup>	0	3*	1-5	No	Corrosion of household plumbing systems, corrosion of natural deposits
<i>Fluoride</i>	2/21/2017	ppm	4	4	0.56	0.56-0.56	No	Erosion of natural deposits; Water additive that promotes strong teeth.
<i>Nitrate Measured as Nitrogen</i>	2017	ppm	10	10	0.13	0.13-0.13	No	Runoff from fertilizer use, leaching from septic tanks, sewage, and erosion of natural deposits.
<b><i>Radioactive</i></b>								
<i>Uranium</i>	2/6/2014	µg/L	30	0	4.0	4-4	No	Erosion of natural deposits
<i>Combined Radium 226/228</i>	2/6/2014	pCi/L	5	0	0.08	0.08-0.08	No	Erosion of natural deposits
<i>Gross Alpha<sup>F</sup></i>	2/6/2014	pCi/L	15	0	2.8	0.1-2.8	No	Erosion of natural deposits
<i>Beta/photon emitters</i>	2/6/2014	mrem/yr	4	0	5.5	5.5-5.5	No	Decay of natural and man-made deposits
<b><i>Disinfection Byproducts</i></b>								
<i>Chlorine<sup>B</sup></i>	2017	ppm	4	4	0.6	0.5-0.6	No	By-product of drinking water disinfection
<i>Total Trihalomethanes</i>	2017	ppb	80	N/A	11	1.7-18	No	By-product of drinking water disinfection
<i>Total Haloacetic Acids</i>	2017	ppb	60	N/A	3	0-6.9	No	By-product of drinking water disinfection

**NOTE: All detected contaminant levels were at or below (cleaner than) the MCL or AL required for drinking water.**

## Table of Undetected Contaminants

<i>Contaminant</i>	<i>Sample Date</i>	<i>Concentration Unit</i>	<i>EPA's Action Level or Maximum Level (MCL)</i>	<i>Ideal Goal (MCLG)</i>	<i>Maximum Level Measured</i>	<i>Measured Range</i>	<i>Violation</i>	<i>Typical Sources</i>
<b><i>Inorganic</i></b>								
<i>Asbestos</i>	3/10/2017	MFL	7	7	ND	N/A	No	Decay of asbestos cement in water mains; erosion
<b><i>Organic</i></b>								
<i>Trichloroethylene</i>	2017	ppb	5	0	ND	N/A	No	Discharge from industrial chemical factories
<b><i>Microbial</i></b>								
<i>Coliform Bacteria</i>	2017	detection	1	0	0	N/A	No	Naturally present in the environment

### Water Quality Table Footnotes

- 1 None of the sites tested indicated copper levels above the AL.
- 2 UNM does not add Fluoride to the drinking water.
- A This MCL was reduced to 10 in January of 2006 and is reported accordingly in this 2016 CCR.
- B Sodium Hypochlorite solution is used for disinfection.
- C Value represents MRDL
- D Value represents MRDLG
- E Action Level Values
- F Excludes Radon and Uranium
- \* 90th percentile value
- † Running annual average value

### Key To Table

- AL Action Level
- MCL Maximum Contaminant Level
- MCLG Maximum Contaminant Level Goal
- MRDL Maximum Residual Disinfectant Level
- MRDLG Maximum Residual Disinfectant Level Goal
- MFL Million Fibers Per Liter
- pCi/l picoCuries per liter (a measure of radioactivity)
- ppm parts per million, or milligrams per liter (mg/l)
- ppb parts per billion, or micrograms per liter (ug/l)
- N/A Not Applicable
- ND Non-Detect



On 11/18/2016, The University of New Mexico (UNM) became aware that the set schedule for collecting water samples from the system did not comply with the Stage 2 Disinfectants/Disinfection Byproducts Rule set by the State of New Mexico. Although this incident was not an emergency, UNM customers have a right to know what occurred, and how the University is going to correct the situation.

UNM is required to monitor the campus drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. Table1 lists the contaminants and the compliance periods for which UNM did not monitor correctly. Because these samples were not collected, UNM cannot verify the quality of campus drinking water during the compliance periods listed below:

Contaminants	Sample Name (Address)	Sampling Frequency	Compliance Period(s)
Total Trihalomethanes and Haloacetic Acids	DBP-1 – Journalism Building 115 TTHM-1 – Hibben Building 15 TTHM-2 – Law Building 218 HAA5-1- Onate Building 156	Quarterly	<u>1<sup>st</sup> Quarter 2014</u> - Wrong sample point ID was used. <u>2<sup>nd</sup> Quarter 2014</u> – System only collected TTHM-2 samples. <u>3<sup>rd</sup> Quarter 2014</u> – System only collected DBP-1 samples. <u>4<sup>th</sup> Quarter 2014</u> – System only collected HAA5-1 samples. <u>1<sup>st</sup> Quarter 2015</u> – System only collected TTHM-1 samples. <u>2<sup>nd</sup> Quarter 2015</u> – System only collected TTHM-2 samples. <u>3<sup>rd</sup> Quarter 2015</u> – System only collected DBP-1 samples.

**What should you do?**

There is nothing the UNM community needs to do. Water users do not need to boil campus water or take other corrective actions, and may continue to drink the water. If a situation arises where the water is no longer safe to drink, customers will be notified within 24 hours.

**What happened and what is being done?**

The UNM water management technicians did not take the number of samples that were required by the State during the reporting period, and the University is now testing samples on the required schedule. UNM has resolved this problem and is using the proper sampling schedule. All 2017 samples have been completed in compliance with State rules and regulations.

### **Arsenic**

While UNM's drinking water meets the 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.

### **Radon**

During previous testing, our water showed a radon level of 226 picoCuries per liter (pCi/l). The EPA is preparing a regulation that will specify a MCL for radon. Radon is a radioactive gas that occurs naturally in ground water and is released from water into the air during normal use. At high exposure levels it can cause lung cancer. Radon readings in our water are low and are not a cause for concern. For more information on radon testing & mitigation contact EPA's Radon Hotline at (800)-SOS-RADON.

### **Concerning Lead in Our Water**

In 2015, UNM water was sampled for lead contamination at 31 different distribution points on campus. Lead concentrations are measured in parts per billion (ppb) with 0 exceedances for the Action Level. The other 23 samples had no detectable lead concentrations above the NM State Laboratory's sample detection limit (SDL) of 9 ppb. The 90th percentile concentration of lead was 3 ppb. The EPA's SDL is 5 ppb and the Action Level for lead is 15 ppb. SDWA regulations do not allow lead levels this low to be included in the Water Quality Table.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines. UNM is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30-120 seconds before drinking or cooking. If you are concerned about lead in your water, you may wish to have the water tested. Information on lead in drinking water, testing methods and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (800-426-4791) or at <http://www.epa.gov/safewater/lead>.



### **Definitions**

*Action Level or 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.

*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 level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap without an unacceptable possibility of adverse health effects.

*Maximum Residual Disinfectant Level Goal (MRDLG):* The maximum level of a disinfectant added for water treatment at which no known or anticipated adverse effect on the health of persons would occur, and which allows an adequate margin of safety.

## Required Additional Health Information

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.

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 EPA's 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 radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, stormwater runoff, & residential uses.
- (D) Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also, come from gas stations, urban stormwater runoff and septic systems.
- (E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

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).

## Water Source

The drinking water for the University of New Mexico's Central Campus and portions of the North Campus is supplied by groundwater pumped from a well on campus. The Hospital and South Campuses are primarily supplied drinking water by the Albuquerque Bernalillo County Water Utility Authority (ABCWUA) system. During UNM system outages, all campuses use ABCWUA water. For information regarding ABCWUA water quality, call 842-WATR (9287), email [WebCustomerService@abcwua.org](mailto:WebCustomerService@abcwua.org), or visit [http://www.abcwua.org/Water\\_Report.aspx](http://www.abcwua.org/Water_Report.aspx)

The well that supplies UNM's Central and North Campuses produces water at approximately 2,000 gallons per minute from a maximum depth of about 720 feet below the ground. This water is pumped to a 1,250,000 gallon storage tank from which the chlorinated water is distributed. UNM remains involved in a trichloroethylene (TCE) impacted groundwater investigation with the New Mexico Environment Department (NMED). Monthly testing of water from our drinking water well continues to indicate TCE levels well below the MCL.

## Source Water Assessment and Availability

The Susceptibility Analysis of the UNM water utility reveals that the utility is well maintained and operated and the sources of drinking water are generally protected from potential sources of contamination based on well construction, hydrogeological settings and system operations and management. The susceptibility rank of the entire water system is "Moderately High".

Although throughout the U. S. it is common to find potential sources of contamination located atop wellheads, continued regulatory oversight, wellhead protection plans and other planning efforts continue to be the primary methods of protecting and ensuring high quality drinking water. Copies of the source water assessment are available from PPD Utilities Division at 505-277-2464. Copies may also be requested by calling David Torres at the NMED Drinking Water Bureau at (505) 541-5306 or by e-mailing at [David.Torres@state.nm.us](mailto:David.Torres@state.nm.us). Please include your name, address, telephone number, your e-mail address and the name of the water utility. The NMED DWB may charge a nominal fee for paper copies.

## National Primary Drinking Water Regulation Compliance

This report was prepared by the UNM Safety & Risk Services (SRS) Department, and the UNM Physical Plant Department (PPD) Utilities Division. For more information, or to get involved with water quality at UNM, go to <https://srs.unm.edu/environmental-affairs/drinking-water-quality.html> or call SRS at 505-277-2753 or the PPD Utilities Division at 505-277-2464.

