



# 2022 CONSUMER CONFIDENCE REPORT

ENGLISH  
VERSION

INCLUDES DETAILS  
ABOUT UNM'S  
**DRINKING  
WATER  
QUALITY**



PREPARED FOR CONSUMERS OF DRINKING WATER AT THE UNIVERSITY OF NEW MEXICO ALBUQUERQUE CAMPUS.

# Overview

This annual report details the quality of drinking water supplied by The University of New Mexico (UNM). The report is based upon tests conducted for the period of January 1 to December 31, 2022, by the New Mexico Environment Department (NMED) Drinking Water Bureau (DWB), NMED-certified 3rd-party laboratories, and UNM. Test results from prior years are occasionally included.

To provide consumers with a safe and reliable drinking water supply, UNM conducts water quality tests for a wide variety of regulated contaminants every year. In 2022, just nine contaminants were detected. All were below regulatory limits, indicating UNM's water supply is safe for its consumers.

This report meets the U.S. Environmental Protection Agency (EPA) and Safe Drinking Water Act (SDWA) requirements for "Consumer Confidence Reports (CCRs)," and contains information on the source of UNM's water, its constituents, and the health risks associated with any contaminants.

## ¿Solo habla español?

El informe contiene información muy importante sobre la calidad de su agua de beber. Tradúzcalo o hable con alguien que lo entienda bien. Si aún necesita ayuda, comuníquese con EHS.

# OUR WATER SOURCE



The drinking water for UNM's Central Campus and portions of the North Campus is pumped from a groundwater well. It produces water at approximately 2,000 gallons per minute from a maximum depth of about 720 feet below the surface. This water is pumped to a 1,250,000-gallon storage tank from which the chlorinated water is distributed.

The UNM 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 drinking water. For information regarding ABCWUA water quality,

- call 505-842-WATR (9287),
- email [WebCustomerService@abcwua.org](mailto:WebCustomerService@abcwua.org), or
- visit <https://www.abcwua.org/your-drinking-water/>

# Source Water Assessment & Availability

The Susceptibility Analysis of the UNM water system 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 management. Copies of the assessment are available from the UNM Environmental Health & Safety department (for contact details, see the section below titled "How You Can Get Involved").

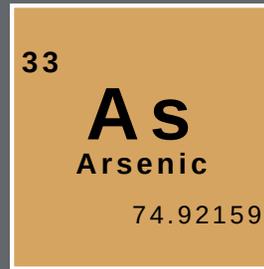
To request copies from the New Mexico Environment Department (NMED) Drinking Water Bureau (DWB), use the contact info below. Include your name, address, telephone number, your e-mail address, and the name of the water utility. The NMED DWB may charge a nominal fee for paper copies.

- email David Torres at [David.Torres@env.nm.gov](mailto:David.Torres@env.nm.gov) or
- call 505-259-5048.

## GROUNDWATER MONITORING:

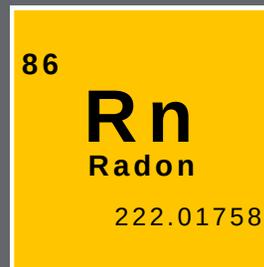
UNM remains involved in a groundwater investigation with NMED. 2022 results demonstrate that the contaminants listed below remain below the regulatory limits to protect public health:

- 1,2-Dichloroethane,
- Chloroform,
- Benzene,
- Ethylbenzene,
- Tetrachloroethene (PCE),
- Toluene,
- Total Xylenes, &
- Trichloroethene (TCE; aka Trichloroethylene).



Arsenic is known to cause cancer at high concentrations. It may cause other health effects like skin damage or circulatory issues.

While UNM's drinking water meets the EPA's regulatory standard for arsenic, it does contain low levels of the mineral. 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.



Radon (a radioactive gas) occurs naturally in groundwater. At high exposure levels, it can cause lung cancer.

During previous UNM tests, results demonstrated radon levels of 226 picoCuries per liter (pCi/l). In March 2018, EPA established a regulatory limit of 300 pCi/L for radon (see 2018 Edition of the Drinking Water Standards and Health Advisories Tables).

Radon is released from water into the air during normal use. Radon readings in UNM's water supply are low and are not a cause for concern. For more information on radon testing & mitigation contact EPA's Radon Hotline:

- call 800-SOS-RADON (767-7236).

# BOTTLED WATER

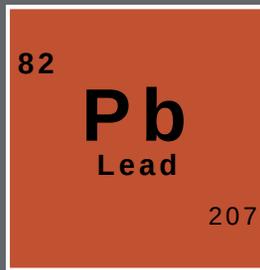
In order to ensure that groundwater is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems.

The U.S. Food & Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protections for public health.

UNM EHS encourages consumers to use reusable water bottles. Filling up your personal reusable bottle on campus reduces plastic waste and provides a safe, reliable source of drinking water.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. However, their presence does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by contacting the EPA's Safe Drinking Water Hotline:

- visit <http://www.epa.gov/safewater> or
- call 800-426-4791.



Elevated levels of lead can cause serious health problems, especially for pregnant women and young children.

In 2019, UNM sampled for lead contamination at 31 different distribution points. There were zero Action Level (AL) exceedances. Roughly 75% of the samples (23) had no detectable concentrations above the state laboratory's Sample Detection Limit (SDL) of 9 parts per billion (ppb). The 90th percentile concentration of lead was 3 ppb. The EPA's SDL is 5 ppb, while the AL is 15 ppb. Federal regulations do not allow these low levels to be included in the water quality table.

Lead in drinking water is primarily from materials and components associated with service lines. While UNM is responsible for providing high-quality drinking water, some buildings containing these components may exist on campus. They do not pose an imminent risk. These buildings were likely built before the effects of lead were well understood.

Stagnant water can be riskier. To minimize the potential for lead exposure, flush any tap for 30 to 120 seconds before drinking or cooking. Otherwise, if you have questions about lead in the drinking water, contact David Thomas:

- email [dthomas27@UNM.edu](mailto:dthomas27@UNM.edu) or
- call 505 277-2464.

Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline:

- visit <http://www.epa.gov/safewater/lead> or
- call 800-426-4791.

# MORE HEALTH INFORMATION

The sources of drinking water (for both groundwater 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 may include:

- **Inorganics**, such as salts and metals, can be naturally-occurring or result from stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Microbials**, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife.
- **Organics**, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, can also come from gas stations, urban stormwater runoff, and septic systems.
- **Pesticides & herbicides**, which may come from a variety of sources such as agriculture, stormwater runoff, and residential uses.
- **Radioactives**, which can be naturally occurring or be the result of oil and gas production and mining activities.

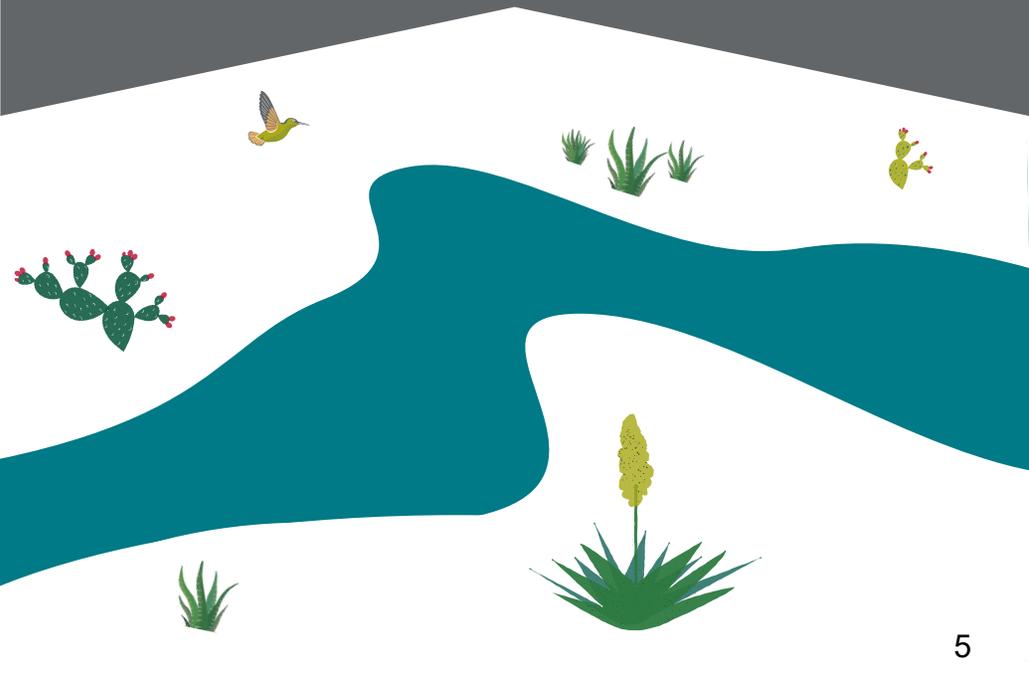
## IMMUNO-COMPROMISED PEOPLE MAY BE AT GREATER RISK FOR INFECTION

Some people may be more vulnerable to contaminants in drinking water than is the general population, including:

- cancer patients undergoing chemotherapy,
- organ transplant survivors,
- people with HIV/AIDS,
- people with immune system disorders,
- some elderly, and
- infants.

These people should seek advice about drinking water from their health care providers. EPA and Centers for Disease Control & Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline:

- visit <http://www.epa.gov/safewater> or
- call 800-426-4791.



# Public Notice of Violation(s)

# 2022-57647 (dated 03-18-2022) &  
# 2022-57648 (dated 06-22-2022):

## **Background:**

UNM violated a drinking water standard on two occasions in 2022. Although neither violation poses an emergency, as our consumers, you have a right to know what happened, what you should do, and what UNM is doing.

## **The Issue:**

UNM's Utility Services department is required to monitor UNM's drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not UNM's drinking water meets health standards. During February 2022 and again in May 2022, Utility Services did not complete all monitoring requirements for Total Coliform. Therefore, UNM cannot be sure of the quality of its drinking water during that time.

## **What does this mean?**

Utility Services is required by law to collect (at minimum) 40 total coliform samples per month across UNM. During these months, Utility Services did not collect all the required samples.

## **What happened?**

Utility Services originally collected 40 samples, but in both cases, a typographical error was entered on one of the samples' chain of custody forms. Accordingly, Utility Services was forced to discard the samples with errors, resulting in a failure to collect the minimum number of samples (i.e., 40) within the required timeframe.

## **What is being done?**

Utility Services immediately re-sampled for Total Coliform, and they were not detected in either case. However, the follow-up samples were taken beyond the state-mandated deadlines, so they could not be utilized to ensure compliance. For the remainder of the months in 2022, UNM collected the correct number of samples.

## **What should you do?**

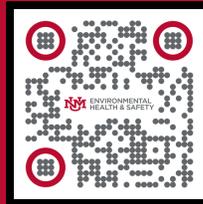
There is nothing that consumers need to do at this time. For more information, please contact David Thomas at 505-277-2464 or UNM Utility Services at Ford Utilities Center, Bldg. 116, Albuquerque, NM 87131. UNM hereby notifies its consumers of the violation in this annual report on the date of its publication.

# HOW YOU CAN GET INVOLVED



If you have questions, would like more information, or wish to provide public comments, contact UNM's Department of Environmental Health & Safety.

- Scan the QR Code with your cell phone:



- Call: 505-277-2753

- Email: [EHSweb-L@list.UNM.edu](mailto:EHSweb-L@list.UNM.edu)

- Mail: UNM Environmental Health & Safety  
MSC07 4100  
1 University of New Mexico  
Albuquerque, NM 87131-0001

- Visit: <https://ehs.unm.edu/environmental-affairs/drinking-water-quality.html>

# APPENDIX 1 OF 1

The following appendix contains a:

- Table of Detected Contaminants and
- Table of Un-Detected Contaminants.

A description of all acronyms and definitions used in this report and these tables are contained on the final page.

**Table of Detected Contaminants**

Contaminant	Violation?	Sample Date	Max Level Measured	Measured Range	Regulatory Limit <sup>A</sup>	Ideal Limit <sup>B</sup>	Unit <sup>C</sup>	Potential Health Effects <sup>D</sup>	Typical Sources	
<b>Inorganic Contaminants</b>	<b>Arsenic<sup>E</sup></b>	No	5/19/2020	6	6 - 6	10 (MCL)	0 (MCLG)	ppb	Skin damage or problems with circulatory systems, and may have increased risk of getting cancer	Erosion of natural (e.g., volcanic) deposits; runoff from orchards; runoff from glass & electronics production wastes
	<b>Barium</b>	No	5/19/2020	0.098	0.098 - 0.098	2 (MCL)	2 (MCLG)	ppm	Increase in blood pressure	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
	<b>Fluoride<sup>F</sup></b>	No	5/19/2020	0.5	0.5 - 0.5	4 (MCL)	4 (MCLG)	ppm	Bone disease (pain and tenderness of the bones); children may get mottled teeth.	Erosion of natural deposits; discharge from fertilizer and aluminum factories
	<b>Nitrate (Measured as Nitrogen)</b>	No	2022	0.18	0.18 – 0.18	10 (MCL)	10 (MCLG)	ppm	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

**Table of Detected Contaminants (continued)**

Contaminant	Violation?	Sample Date	Max Level Measured	Measured Range	Regulatory Limit <sup>A</sup>	Ideal Limit <sup>B</sup>	Unit <sup>C</sup>	Potential Health Effects <sup>D</sup>	Typical Sources	
Disinfectant By-products	<b>Chlorine<sup>G</sup></b>	No	2022	0.6	0.5 - 0.6	4 (MRDL)	4 (MRDLG)	ppm	Eye/nose irritation; stomach discomfort	By-product of drinking water additive used to control microbes
	<b>Haloacetic Acids (HAA5)</b>	No	07/15/2021	3.2	1.3 - 3.2	60 (MRDL)	N/A <sup>H</sup>	ppb	Increased risk of cancer	By-product of drinking water disinfection
	<b>Total Trihalo-methanes (TTHMs)</b>	No	07/15/2021	14	2.5 - 14	80 (MRDL)	N/A <sup>H</sup>	ppb	Liver, kidney, or central nervous system problems; increased risk of cancer	By-product of drinking water disinfection

### Table of Detected Contaminants *(continued)*

Contaminant	Violation?	Sample Date	Max Level Measured	Measured Range	Regulatory Limit <sup>A</sup>	Ideal Limit <sup>B</sup>	Unit <sup>C</sup>	Potential Health Effects <sup>D</sup>	Typical Sources	
Lead & Copper Contaminants	Lead <sup>J</sup>	No	07/23/2021	2.9	N/A	15 (AL)	0	ppb	Infants and children: Delays in physical or mental development; children could show slight deficits in attention span and learning abilities; Adults: Kidney problems; high blood pressure	Corrosion of household plumbing systems; erosion of natural deposits
	Copper <sup>J</sup>	No	07/23/2021	0.12	N/A	1.3 (AL)	1.3	ppm	Short-term exposure: Gastrointestinal distress. Long-term exposure: Liver or kidney damage. People with Wilson's Disease should consult their personal doctor if the amount of copper in their water exceeds the Regulatory Limit	Corrosion of household plumbing systems, corrosion of natural deposits

## Table of Un-Detected Contaminants

Contaminant		Violation?	Sample Date	Max Level Measured	Measured Range	Regulatory Limit <sup>A</sup>	Ideal Limit <sup>B</sup>	Unit <sup>C</sup>	Potential Health Effects <sup>D</sup>	Typical Sources
Inorganic Contaminants	<b>Asbestos</b>	No	3/9/2020	0.2	0.2 - 0.2	7 (MCL)	7 (MCLG)	MFL	Increased risk of developing benign intestinal polyps	Decay of asbestos cement in water mains; erosion
Microbial Contaminants	<b>Total Coliforms</b>	No	2022	Not Detected	Not Detected	5% (MCL)	0 (MCLG)	%	Coliforms are bacteria that indicate that other, potentially harmful, bacteria may be present.	Naturally present in the environment

Definitions & Notes	
A	<p><b>Regulatory limits</b> vary by contaminant. Definitions:</p> <ul style="list-style-type: none"> <li>• <i>Maximum Contaminant Level (MCL)</i>: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology and taking cost into consideration. MCLs are enforceable standards.</li> <li>• <i>Maximum Residual Disinfectant Level (MRDL)</i>: 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.</li> <li>• <i>Action Level (AL)</i>: 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. <ul style="list-style-type: none"> <li>&gt; <i>Treatment Technique (TT)</i>: A required process intended to reduce the level of a contaminant in drinking water. Treatment Techniques are required when a contaminant exceeds the Action Level (AL).</li> </ul> </li> </ul>
B	<p><b>Ideal limits</b> vary by contaminant. They are established as advice to protect public health. Definitions:</p> <ul style="list-style-type: none"> <li>• <i>Maximum Contaminant Level Goal (MCLG)</i>: 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 and are non-enforceable public health goals.</li> <li>• <i>Maximum Residual Disinfectant Level Goal (MRDLG)</i>: 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.</li> </ul>
C	<p><b>Concentration Units</b> shown in the tables are consistent across each contaminant. Definitions:</p> <ul style="list-style-type: none"> <li>• <i>Detection</i> = There is no unit for this contaminant. Rather, the sample result indicates that the contaminant is either detectable or not detectable.</li> <li>• <i>MFL</i> = million fibers per liter</li> <li>• <i>mg/l</i> = milligrams per liter</li> <li>• <i>pCi/l</i> = picoCuries per liter (a measure of radioactivity)</li> <li>• <i>ppb</i> = parts per billion</li> <li>• <i>ppm</i> = parts per million</li> </ul>
D	<p><b>Potential Health Effects</b> are from long-term exposure unless specified as short-term exposure.</p>
E	<p>The MCL for Arsenic was reduced to 10 in January of 2006 and is reported accordingly in this CCR.</p>
F	<p>Although fluoride is a water additive which promotes strong teeth, UNM does not add fluoride to its drinking water.</p>
G	<p>Sodium Hypochlorite solution is used for disinfection.</p>
H	<p>Although there is no collective MCLG for this contaminant group, there are individual MCLGs for some of the individual contaminants:</p> <ul style="list-style-type: none"> <li>• Trihalomethanes: bromodichloromethane (zero), bromoform (zero), dibromochloromethane (0.06 mg/L); chloroform (0.07 mg/L); &amp;</li> <li>• Haloacetic acids: dichloroacetic acid (zero); trichloroacetic acid (0.3 mg/L).</li> </ul>
J	<p>Lead and copper are regulated by a Treatment Technique that requires systems to control the corrosiveness of their water. If more than 10 percent of tap water samples exceed the Action Level (AL), water systems must take additional steps. For copper, the AL is 1.3 mg/L (or 1.3 ppm), and for lead is 0.015 mg/L (or 15 ppb).</p>