Water Quality Data Table

To ensure the tap water is safe to drink, EPA prescribes regulations that limit the amount of contaminants allowed in the water. The table below lists all of the detectable drinking water contaminants during the calendar year of this report. Although several more contaminants were tested, only those listed below were found in the water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful. Removing all contaminants is not feasible on a large scale, and actually wouldn't improve the protection of public health. In fact, some naturally occurring minerals enhance the taste of the water and have nutritional value at low levels. The respective dates and years when these tests were conducted are given in the table below. A public water system serving 10,000 or more people is required to produce a CCR every year, but monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year. For this reason, you may notice some of the data, though representative, is more than one year old. In addition to the water quality data, units and commonly used abbreviations are defined at the end of this table.

Regulated Contaminant	MCLG or MRDLG	MCL, TT, MRDL	Highest Level Detected	Low end of range	High end of range	Sample Date	Violations	Typical Sources and Health Effects
Disinfectants and Disinfection By-Products								
Chlorine as Cl_2 (ppm)	4	4	1	0.4	1	2021	No	Water additive used to control microbial contaminants. Exposure causes eye/nose irritation, stomach discomfort, and anemia.
Total Trihalomethanes, abbreviated TTHM (ppb)	N/A	80	3.9	2.5	3.9	2021	No	Disinfection by-product. Exposure increases the risk of cancer and attacks the liver, kidney, and central nervous system.
Inorganic Contaminants								
Arsenic (ppb)	0	10	11	0	21	2021	Yes	Erosion of natural deposits. Exposure increases risk of getting cancer and causes damage to both skin and circulatory systems.
Barium (ppm)	2	2	0.022	0.022	0.022	2021	No	Erosion of natural deposits. Exposure causes an increase in blood pressure.
Chromium (ppb)	100	100	10	10	10	2021	No	Erosion of natural deposits. Exposure causes allergic dermatitis.
Fluoride (ppm)	4.0	4.0	1.01	1.01	1.01	2021	No	Erosion of natural deposits and water additives purposed to promote dental health. Exposure causes bone disease, and children may get mottled teeth.
Nitrate as Nitrogen (ppm)	10	10	1.97	0.1	1.97	2021	No	Runoff from farmland where fertilizer is used; leaching from septic tanks and sewage; and erosion of natural deposits. Infants below the age of 6 could become seriously ill, and if left untreated may die. Symptoms of exposure include shortness of breath and blue-baby syndrome.
Microbial Contaminants								
Total coliform (positive samples/month)	0	No more than 5% samples total coliform-positive in a month	3	--	--	2021	No	Naturally present in the environment as well as in animal and human fecal waste. Not a health threat itself, but rather an indicator if more harmful bacteria are present.
Radioactive Contaminants								
Combined Radium 226/228 (pCi/L)	0	5	0.06	0.06	0.06	01/10/20	No	Erosion of natural deposits. Exposure may cause an increased risk of cancer.

Gross alpha excluding radon and uranium (pCi/L)	0	15	3.7	1	3.7	01/10/20	No	Erosion of natural deposits of certain minerals that emit alpha radiation. Exposure may cause increased risk of cancer.
Uranium (ug/L)	0	30	4	4	4	01/10/20	No	Erosion of natural deposits. Exposure may cause increased risk of cancer and kidney toxicity.
Inorganic Contaminants								
Lead- action level at consumer taps (ppb)	0	TT; AL=15	0	--	--	2021	No	Corrosion of household plumbing systems and erosion of natural deposits. For description of health effects, see "Additional information on lead" in written portion of the CCR.
Copper- action level at consumer taps (ppm)	1.3	TT; AL=1.3	0.11	--	--	2021	No	Corrosion of household plumbing systems and erosion of natural deposits. Short-term exposure may cause gastrointestinal distress. Long-term exposure may cause liver and kidney damage. *People with Wilson's Disease should consult their doctor if copper in their water exceeds the action level.

Unit Descriptions

Term	Definition
ug/L	Micro-grams per liter
ppm	Part per million, or milligram per liter of contaminant in water
ppb	Part per billion, or micro-gram per liter of contaminant in water
pCi/L	Picocurie per liter (a measure of radioactivity)
mrem/yr	Millirems per year (a measure of radioactivity)
Positive samples/month	Number of samples taken during the month that were found to be positive
ND	Not detected
N/A	Not applicable
NR	Monitoring not required, but recommended

Important Drinking Water Definitions (directly from epa.gov, National Primary Drinking Water Regulations)

Term	Definition
MCLG	Abbreviation for "maximum contaminant level goal". 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.
MCL	Abbreviation for "maximum contaminant level". 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.
TT	Abbreviation for "treatment technology". A required process intended to reduce the level of a contaminant in drinking water.
AL	Abbreviation for "action level". The level of concentration of a harmful or toxic contaminant that when exceeded is considered sufficient to warrant regulatory or remedial action. (merriam-webster.com)
MRDLG	Abbreviation for "maximum residual disinfectant level goal". 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.
MRDL	Abbreviation for "maximum residual disinfectant level". The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Violations

Arsenic: People who drink water containing arsenic in excess of the MCL over many years are at risk of developing skin damage, problems with their circulatory system, and cancer.
The City of Belen was in violation of the MCL for arsenic in the 2nd, 3rd and 4th Quarters of 2021. The City is currently constructing a treatment facility to remove arsenic from the water, which is expected to be completed and return the City to compliance in summer of 2022.
The City also had routine monitoring violations in the 4th quarter of 2022. This means the City failed to collect quarterly samples. The City returned to compliance in the 4th quarter of 2022.

Chlorine: People who use water containing chlorine in excess of the MRDL could experience irritation of their eyes and nose, and stomach discomfort.
The City had routine monitoring violations in the 1st, 2nd and 3rd quarters of 2021. The City failed to collect total trihalomethane samples at one location. The City will collect samples from this location in 2022 to return to compliance.

E. coli: Fecal coliforms and E. coli are bacteria whose presence indicate the water may be contaminated with human or animal fecal waste. Short-term health effects include diarrhea, cramps, nausea, headaches, and other symptoms. Special symptoms may appear in infants and young children.
The City failed to collect triggered source water monitoring sample following a Total Coliform positive sample on June 29, 2021. The triggered source samples were collected in April 2022.

Groundwater Rule: The Ground Water Rule specifies appropriate use of disinfection while addressing other components of groundwater systems to ensure public health protection.
The City failed to submit a Corrective Action Plan for significant deficiencies identified during the 2021 sanitary survey conducted by the New Mexico Environment Department-Drinking Water Bureau. A Corrective Action Plan was submitted in October 2021 to correct this violation.
The City had a further violation for failing to correct all significant deficiencies identified during the 2021 sanitary survey performed by the New Mexico Environment Department-Drinking Water Bureau. The City corrected all of the significant deficiencies in September and October 2021, and March 2022.
Lead and Copper Rule: The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper-containing plumbing materials.
The City was out of compliance with the Lead and Copper Rule for failure to submit notices in 2019. The City returned to compliance by submitting the notices in 2021.

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