

# 2021 Columbus AFB Drinking Water Quality Report

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

## Spanish (Español)

Este informe contiene información muy importante sobre la calidad de su agua potable. Por favor lea este informe o comuníquese con alguien que pueda traducir la información.

## Is my water safe?

**Yes, our drinking water is safe to drink.** Drinking Water on Columbus AFB is routinely monitored for contaminants according to federal and state laws. All samples for the Columbus AFB distribution system are taken by the Bioenvironmental Engineering Flight and analyzed by the Mississippi State Department of Health. Additional sampling is completed by the water provider, Columbus Light and Water Company (CL&W). All results for 2021 are summarized in the Water Quality Data Table below.

## Do I need to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

## Where does my water come from?

The Columbus AFB water supply is treated and distributed by CL&W. The water is drawn from eight wells supplied by the lower Tuscaloosa Aquifer, a groundwater source, and is stored in various places on base, e.g., water towers. No further treatment is done by base personnel.

## Source water assessment and its availability

An inspection of the Columbus AFB water supply was completed on 28 June 2021 for compliance with the Ground Water Rule. Columbus AFB water supply received an overall capacity rating of 5.0 out of a possible 5.0 points. For more information, please contact Bioenvironmental Engineering Flight at the phone numbers provided below.

## Why are there contaminants in my drinking water?

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).

**Contact Information**

The Bioenvironmental Engineering Flight is the primary point of contact for drinking water information on Columbus AFB. They can be reached by phone at 434-2284 or 434-2285. Additional information can be obtained from the water provider, CL&W, by accessing their 2021 Consumer Confidence Report or by contacting 662-328-7192.

**Additional Information for Lead**

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 and home plumbing. Columbus AFB 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 seconds to 2 minutes before using water for drinking or cooking. \*If you are concerned about lead in your water, you may wish to have your 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 or at <http://www.epa.gov/safewater/lead>.

**Fluoridation**

To comply with the “Regulation Governing Fluoridation of Community Water Supplies,” CL&W is required to report certain results pertaining to the fluoridation of the water system. The number of months in the previous calendar year in which average fluoride sample results were within the optimal range of 0.6-1.2 ppm was 12 months. The percentage of fluoride samples collected in the previous calendar year that was within the optimal range of 0.6-1.2 ppm was 90%.

## Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that were detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires monitoring for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table, you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we've provided the definitions below the table.

<u>Contaminants</u>	MCLG or MRDLG	MCL, TT, or MRDL	Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
<b>Disinfectants &amp; Disinfectant By-Products</b>								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Haloacetic Acids (HAA5) (ppb)	NA	60	4	NA	NA	2020	No	By-product of chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	80	15.8	NA	NA	2021	No	By-product of disinfection
Chlorine (as Cl <sub>2</sub> ) (mg/L)	4	4	1.2	0.17	2.12	2021	No	Water additive for microbes control
<b>Inorganic Contaminants</b>								
Barium (ppm)	2	2	0.008	NA	NA	2019	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Antimony (ppm)	0.006	0.006	<0.0005	NA	NA	2019	No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic (ppm)	0	0.010	<0.0005	NA	NA	2019	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes

Beryllium (ppm)	0.004	0.004	<0.0005	NA	NA	2019	No	Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and
Cyanide (ppm)	0.2	0.2	<0.015	NA	NA	2019	No	Discharge from steel metal factories; discharge from plastic and fertilizer factories
Cadmium (ppm)	0.005	0.005	<0.0005	NA	NA	2019	No	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; Runoff from waste batteries and paints
Chromium (ppm)	0.1	0.1	<0.0005	NA	NA	2019	No	Discharge from steel and pulp mills; Erosion of natural deposits
Mercury (ppm)	0.002	0.002	<0.0005	NA	NA	2019	No	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills and cropland
Fluoride (ppm)	4	4	0.738	NA	NA	2019	No	Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Selenium (ppm)	0.05	0.05	<0.0005	NA	NA	2019	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Thallium (ppm)	0.0005	0.002	<0.0005	NA	NA	2019	No	Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories
Nitrate (ppm)	10	10	<0.08	NA	NA	2021	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Nitrite (ppm)	1	1	<0.02	NA	NA	2021	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrate-Nitrite (ppm)	N/A	10	<0.1	NA	NA	2021	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
<b>Microbiological Contaminants</b>								
Total Coliform (positive samples/month)	0	0	0	NA	NA	2019	No	Naturally present in the environment
<b>Radioactive Contaminants</b>								
Combined Uranium (ppb)	0	30	<0.5	NA	NA	2018	No	Erosion of natural deposits
Radium (combined 226/228) (pCi/L)	0	5	<0.4	NA	NA	2019	No	Erosion of natural deposits
Gross Alpha (pCi/L)	0	15	0.76	NA	NA	2019	No	Erosion of natural deposits
<b>Organic Contaminants</b>								
1,2,4-Trichlorobenzene (ppb)	70	70	<0.5	NA	NA	2018	No	Discharge from textile factories
cis-1,2-Dichloroethylene (ppb)	70	70	<0.5	NA	NA	2018	No	Discharge from chemical factories
Xylenes, Total (ppb)	10000	10000	<0.5	NA	NA	2018	No	Discharge from petroleum and chemical factories
Dichloromethane (ppb)	0	5	<0.5	NA	NA	2018	No	Discharge from drug and chemical factories
o-Dichlorobenzene (ppb)	600	600	<0.5	NA	NA	2018	No	Discharge from chemical factories
p-Dichlorobenzene (ppb)	75	75	<0.5	NA	NA	2018	No	Discharge from chemical factories
Vinyl Chloride (ppb)	0	2	<0.5	NA	NA	2018	No	Leaching from PVC pipes; Discharge from plastic factory
1,1 Dichloroethylene (ppb)	7	7	<0.5	NA	NA	2018	No	Discharge from chemical factories
trans-1,2-Dichloroethylene (ppb)	100	100	<0.5	NA	NA	2018	No	Discharge from chemical factories
1,2-Dichloroethane (ppb)	0	5	<0.5	NA	NA	2018	No	Discharge from chemical factories
1,1,1-Trichloroethane (ppb)	200	200	<0.5	NA	NA	2018	No	Discharge from metal degreasing sites and other factories

Carbon Tetrachloride (ppb)	0	5	<0.5	NA	NA	2018	No	Discharge from chemical plants and other industrial activities
1,2-Dichloropropane (ppb)	0	5	<0.5	NA	NA	2018	No	Discharge from chemical factories
Trichloroethylene (ppb)	0	5	<0.5	NA	NA	2018	No	Discharge from metal degreasing sites and other factories
1,1,2-Trichloroethane (ppb)	3	5	<0.5	NA	NA	2018	No	Discharge from chemical factories
Tetrachloroethylene (ppb)	0	5	<0.5	NA	NA	2018	No	Discharge from factories and dry cleaners
Chlorobenzene (ppb)	100	100	<0.5	NA	NA	2018	No	Discharge from chemical and agricultural chemical factories
Benzene (ppb)	0	5	<0.5	NA	NA	2018	No	Discharge from factories; Leaching from gas storage tanks and landfills
Toluene (ppb)	1000	1000	<0.5	NA	NA	2018	No	Discharge from petroleum factories
Ethylbenzene (ppb)	700	700	<0.5	NA	NA	2018	No	Discharge from petroleum refineries
Styrene (ppb)	100	100	<0.5	NA	NA	2018	No	Discharge from rubber and plastic factories; Leaching from landfills
Perfluorooctanesulfonic Acid (ng/L)	2	2	<2	NA	NA	2021	No	Discharge from a group of manmade chemicals used for a variety of residential, commercial, and industrial purposes
Perfluorooctanoic acid (ng/L)	2	2	<2	NA	NA	2021	No	Discharge from a group of manmade chemicals used for a variety of residential, commercial, and industrial purposes
<b><u>Contaminants</u></b>	<b><u>MCLG</u></b>	<b><u>AL</u></b>	<b><u>Result</u></b>	<b><u>Date</u></b>	<b><u># Above AL</u></b>	<b><u>Violation</u></b>	<b><u>Source</u></b>	
<b><u>Inorganic Contaminants</u></b>								
Copper (mg/L)	0	1.3	0.1	2021	0	No	Corrosion of household plumbing systems; erosion of natural deposits	

Lead (mg/L)	0	0.015	0.003	2021	0	No	Corrosion of household plumbing systems; erosion of natural deposits
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<b>Unit Descriptions</b>	
<b>Term</b>	<b>Definition</b>
ug/L	ug/L : Number of micrograms of substance in one liter of water
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter ( $\mu\text{g/L}$ )
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)
positive samples/month	positive samples/month: Number of samples taken monthly that were found to be positive
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

<b>Important Drinking Water Definitions</b>	
<b>Term</b>	<b>Definition</b>
MCLG	MCLG: 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.
MCL	MCL: Maximum Contaminant Level: 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
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection 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	MRDL: Maximum residual disinfectant level. 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.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

<b>For more information please contact:</b>
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