

2016 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.

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 Columbus AFB are collected 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. All results for 2016 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?

Columbus AFB water is supplied by Columbus Light and Water. The water is pumped from eight wells drawing from the massive sands of the lower Tuscaloosa Aquifer. No further treatment is performed by base personnel.

Source water assessment and its availability

A Sanitary Survey was completed for 2016 as required 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 the Bioenvironmental Engineering Flight.

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, Columbus Light and Water, by accessing their 2016 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 Air Force Base 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 the Community Water Supplies”, Columbus Light & Water (MS0440003) 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 optimal range of 0.7-1.3 ppm was 10. The percentage of fluoride samples collected in the previous calendar year that was within the optimal range of 0.7-1.3 ppm was 73%.

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. Unless otherwise noted, 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. The EPA or State required monitoring frequency varies for contaminants varies based on risk to the system. 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.

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Your Water	Range	Sample Date	Violation	Typical Source
Disinfectants & Disinfection By-Products							
Haloacetic Acids (HAA5) (ppb)	N/A	60	3.25	1 - 9	2016	No	By-product of chlorination
Total Trihalomethanes (TTHM) (ppb)	N/A	80	4.44	ND – 6.32	2016	No	By-product of chlorination
Chlorine (as Cl ₂) (ppm)	4	4	1.30	0.10 – 1.96	2016	No	Additive to control microbes
Inorganic Contaminants							
Barium (ppm)	2	2	0.0158	N/A	2016	No	Erosion of natural deposits; Discharge from drilling waste or metal refineries
Antimony (ppm)	0.006	0.006	< 0.0005	N/A	2016	No	Discharge from petroleum refineries, fire retardants, ceramics, electronic solder
Arsenic (ppm)	0	0.01	< 0.0005	N/A	2016	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Beryllium (ppm)	0.004	0.004	< 0.0005	N/A	2016	No	Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries
Cadmium (ppm)	0.005	0.005	< 0.0005	N/A	2016	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	N/A	2016	No	Discharge from steel and pulp mills; Erosion of natural deposits
Mercury (ppm)	0.002	0.002	<0.0005	N/A	2016	No	Erosion of natural deposits; Dis charge from refineries and factories; Runoff from landfills; Runoff from cropland
Fluoride (ppm)	4	4	0.828	N/A	2016	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Selenium (ppm)	0.05	0.05	<0.0025	N/A	2016	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Thallium (ppm)	0.002	0.002	<0.0005	N/A	2016	No	Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories
Nitrate (ppm)	10	10	< 0.08	N/A	2016	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite (ppm)	1	1	< 0.02	N/A	2016	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrate-Nitrite	10	10	<0.1	N/A	2016	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Microbiological Contaminants							
Total Coliform (positive samples/month)	0	0	0	0	2016	No	Naturally present in the environment
Inorganic Contaminants							
Contaminants	MCLG	AL	Your Water	# Exceeded AL	Sample Date	Violation	Typical Source

Copper (ppm)	1.3	1.3	< 1.3	0	2015	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppm)	0	15	< 15	0	2015	No	Corrosion of household plumbing systems; Erosion of natural deposits

Unit Descriptions	
Term	Definition
<	Less than or below the limit of detection for a particular analysis method
ug/L	Number of micrograms of substance in one liter of water
ppm	parts per million, or milligrams per liter (mg/L)
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	Number of samples taken monthly that were found to be positive
N/A	Not applicable
ND	Not detected

Important Drinking Water Definitions	
Term	Definition
AL	Action Level: The concentration of a contaminant (lead or copper) that triggers treatment or other requirements for a water system
MCL	Maximum Contaminant Level: The maximum permissible level of a contaminant in water which is delivered to any user of a public water system
MCLG	Maximum Contaminant Level Goal: The maximum level of a contaminant in drinking water at which no known or anticipated adverse effects on the health of a person would occur, and which allows an adequate margin of safety.
MRDL	Maximum Residual Disinfection Level: 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.
MRDLG	Maximum Residual Disinfection Level Goal: The maximum level of a disinfectant added for water treatment at which no known or anticipated adverse effects on the health of persons would occur and which allows an adequate margin of safety.
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
Violation	Exceedance of an AL or MCL
Your Water	The average level recorded for a contaminant.

For more information please contact:

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