Minot AFB CY 2020 Consumer Confidence Report (CCR)

Minot AFB is pleased to provide you the 2020 Consumer Confidence/Water Quality Report. This report complies with the notification requirements found within 40 CFR 141, *National Primary Drinking Water Regulations* and Air Force Instruction 48-144, *Drinking Water Surveillance Program*. The Minot AFB water system is considered a continuous water system with the City of Minot and as such all water quality data included in this report was collected and furnished by the City of Minot's Water Treatment Plant.

We are pleased to report that Minot AFB's drinking water is safe and meets all state & federal requirements

Table: Detected Regulated Contaminants

Contaminant	*MCLG*	*MCL*	*Level or Range*	*Date Tested*	*Violation*	*Source of Contaminant*
INORGANIC CONTAMINANTS						
Arsenic (ppb)	0	10	1.74	3/16	No	Erosion of natural products; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	2	2	0.00433	3/16	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium (ppb)	100	100	1.37	3/16	No	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride (ppm)	4	4	0.72	3/16	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate + Nitrite (ppm)	10	10	0.045	3/20	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	50	50	1.65	3/16	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
DISINFECTION BYPRODUCTS						
Total Haloacetic Acids (ppb)	-	60	13 (8.65-17)	12/20	No	Byproduct of drinking water chlorination
Total Trihalomethanes (ppb)	-	80	46 (39.26-49.45)	12/20	No	Byproduct of drinking water chlorination
DISINFECTANTS						
Chloramine (ppm)	MRDLG 4	MRDL 4.0	3 (2.09-3.18)	3/20	No	Water additive used to control microbes
OTHER CONTAMINANTS						
Copper (ppm)	1.3	AL=1.3	0.039 90^{th} % Value	8/18	0 Sites Exceeded AL	Corrosion of household plumbing systems; erosions of natural deposits; leaching from wood preservatives
Lead (ppb)	0	AL=15	4.56 90^{th} % Value	8/18	0 Sites Exceeded AL	Corrosion of household plumbing systems
Total Coliforms	0	5% of monthly samples	2%	10/20	No	Naturally present in the environment

Terms for this Report

AL (Action Level): The concentration of a contaminant, if exceeded, triggers treatment or other requirements which a water system must follow.

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health.

MRDL (Maximum Residual Disinfection 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.

MRDLG (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.

ND (Not Detected): Or below the detectable level of the test procedure.

NTU (Nephelometric Turbidity Units): A measure of how clean the water is, caused by suspended matter in the water.

pCi/l (picocuries per liter): A measure of radioactivity in water

ppm (Parts per million) or mg/l (Milligrams per liter): one part by weight of analyte to 1 million parts by weight of the water sample. Roughly equivalent to one drop per 10 gallons of water or one minute in two years.

ppb (Parts per billion) or µg/l (Micrograms per liter): one part by weight of analyte to 1 billion parts by weight of the water sample. Roughly equal to one drop in ten thousand gallons of water or one minute in two thousand years.

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.

WHERE DOES OUR WATER COME FROM?

The City of Minot has two sources of water: the Minot Aquifer and the Sundre Aquifer. The Minot AFB water system is considered a continuous water system with the City of Minot and as such is sourced from the same locations. The Minot Aquifer follows the Souris River in the local vicinity, and the associated source wells are located in the valley to the west of Minot. The Sundre Aquifer comes from the north, travels under Minot, then turns and flows southeast to the county line. The associated source wells are about five miles southeast of town where the aquifer passes under the Souris River. The Minot Water Treatment Plant is located beside the Souris River at:
900 16th Street SW, Minot ND 58701.

THE SAFE DRINKING WATER ACT

The Safe Drinking Water Act (SDWA) was first passed in 1977. It was amended in 1986 and again in 1996. As part of the 1996 amendments, all customers must receive a report on the quality of their drinking water.

This report covers the calendar year 2020. The results provided represent the latest tests performed on our water. Also included are pertinent subjects such as water sources, water quality and a description of terms used.

> Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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) and Prevention guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (800-426-4791).

All regulated substances which have been detected in our water are listed in the table provided on the front of this report. All are well within the established limit.

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

In 2018, the City of Minot was required to test for lead and copper. 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. The City of Minot Water Treatment Plant is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components.

Use water from the cold tap for drinking and cooking. 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 drinking 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.

WELLHEAD PROTECTION

The City of Minot, in cooperation with the North Dakota Department of Environmental Quality, has completed the delineation and contaminant/land use inventory elements of the North Dakota Source Water Protection Program. Based on the information from these elements, the North Dakota Department of Environmental Quality has determined that our source water is “moderately susceptible” to potential contaminants. Copies of the Wellhead Protection Program plan and other relevant information regarding this program can be obtained from City of Minot Engineers Office or Public Works during normal office hours.

A FEW WORDS ABOUT WATER QUALITY

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, in some cases, 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:

Microbial contaminants such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants such as salts and metals, which can be naturally-occurring or result from urban storm run-off, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides which may come from a variety of sources such as agriculture, storm water runoff, and residential uses.

Organic chemicals including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and can also come from gas stations, urban storm water run-off and septic systems.

Radioactive materials which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminates 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 the water poses a health risk. More information about contaminants and potential effects can be obtained by calling EPA’s Safe Drinking Water Hotline (800) 426-4791.

If you have questions regarding this report, please contact 5 OMRS/SGXJ Bioenvironmental Engineering at 723-5151.

You may also attend the Minot City Council Public Works Committee meetings if you have concerns about water quality. Meeting times and dates can be obtained by contacting the City Clerk's office at (701) 857-4752.

If you are aware of non-English speaking individuals who need help with the appropriate language translation, please call (701) 852-0333.

The Safe Drinking Water Act and the Environmental Protection agency deal primarily with the health aspects of water. There are a number of additional constituents common in all ground water in which most people are interested. Among these are minerals, most of which are beneficial, which can impact aesthetic qualities. As the City of Minot has 15 different sources these components can vary. An estimated average of these components are provided below.

Hardness	144 mg/l 8.4 grains per gallon
Total dissolved solids	978 mg/l
Conductivity	1260 umhos/cm
Sodium	218 mg/l
pH	9.0
Calcium	70 mg/l

If you wish to obtain more information please call the Minot Water Treatment Plant at **(701) 857-4760.**