

2018 Annual Drinking Water Quality Report

Hankinson, ND



This report is designed to inform you about the safe clean water we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to protect our water resources. We are committed to ensuring the quality of your water.

Beginning November 7, 2006, the city's drinking water has been supplied from an aquifer by Southeast Water Users, Mantador, N.D.

A wellhead protection program or Source Water Assessment Program has been implemented by Southeast Water Users and is available from their office in Mantador.

Southeast Water Users, in cooperation with the North Dakota Department of Health, 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 Health has determined that our source water is moderately susceptible to potential contaminants.

If you have any questions about this report or concerning your water utility, please contact Southeast Water Users at 701-242-7432, or our Water and Sewer Supervisor, Ron Hubrig, at 701-242-7885. We want our valued customers to be informed. If you want to learn more, please attend any of our regularly scheduled city council meetings held on the first Monday of every month at 6:00 p.m. in City Hall. If you are aware of non-English speaking individuals who need help with the appropriate language translation, please call City Hall at 701-242-7885.

The City of Hankinson would appreciate it if large volume water customers would post copies of this year's Annual Drinking Water Quality Report in conspicuous locations or distribute them to tenants, residents, patients, students, and/or employees, so individuals who consume the water, but do not receive a water bill, can learn about our water system.

Southeast Water Users and the City of Hankinson routinely monitor for

contaminants in your drinking water according to Federal and State laws. The table on page 2 shows the results of monitoring through December 31, 2018.

As authorized and approved by EPA (Environmental Protection Agency), the state has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year.

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:

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 stormwater runoff, industrial, or domestic wastewater discharges, oil & gas production, mining, or farming.

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

Radioactive Contaminants, 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 which limit the amount of certain contaminants in water provided by public water systems. Food and Drug

Administration (FDA) regulations establish limits for contaminants 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 that the water poses a health risk. More information about contaminants and potential effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

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 and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life, and our children's future.

Copies of this report are available upon request at City Hall. Please call our office at 701-242-7885, if you have questions.

WATER QUALITY DATA TABLE

The table below lists all of the drinking water contaminants that were detected during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. 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 us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

SOUTHEAST WATER USERS DISTRICT (EAST) - ND3901068

LEAD/COPPER*	Date	# Samples	Action Level(AL)	90th Percentile	Samples Exceed AL	Units
COPPER 90TH PERCENTILE	8/24/2016	20	1.3	0.636	0	ppm
LEAD 90TH PERCENTILE	8/24/2016	20	15	3.45	0	ppb
INORGANIC CONTAMINANTS**	Date	MCL	MCLG	High Comp.	Units	Range
ARSENIC	3/24/2016	10	0	8.94	ppb	N/A
BARIUM	4/9/2018	2	2	0.247	ppm	N/A
CHROMIUM	4/9/2018	100	100	1.58	ppb	N/A
FLUORIDE	4/9/2018	4	4	0.733	ppm	N/A
RADIOACTIVE CONTAMINANTS	Date	MCL	MCLG	High Comp.	Units	Range
GROSS ALPHA, INCLUDING RA, EXCLUDING RN & U	1/17/2017	15	15	0.5	pCi/l	N/A
RADIUM, COMBINED (226, 228)	1/17/2017	5		0.96	pCi/l	N/A
URANIUM, COMBINED	1/17/2017	30		2.49	ppb	N/A
DISINFECTANTS	Date	MCL	MCLG	High Comp.	Units	Range
CHLORINE	12/31/2018	MRDL=4.0	MRDLG=4	1.2	ppm	1.05 to 1.35
UNREGULATED CONTAMINANTS***	Date	MCL	MCLG	High Comp.	Units	Range
ALKALINITY, TOTAL	4/9/2018			228	ppm	N/A
BICARBONATE AS HCO3	4/9/2018			279	ppm	N/A
CALCIUM	4/9/2018			75.4	ppm	N/A
CHLORIDE	4/9/2018			5.19	ppm	N/A
CONDUCTIVITY @ 25 C UMHOS/CM	4/9/2018			478	umho/cm	N/A
HARDNESS, TOTAL (AS CaCO3)	4/9/2018			247	ppm	N/A
MAGNESIUM	4/9/2018			14.2	ppm	N/A
NICKEL	4/9/2018			0.00467	ppm	N/A
PH	4/9/2018			7.69	PH	N/A
POTASSIUM	4/9/2018			2.4	ppm	N/A
SODIUM ADSORPTION RATIO	4/9/2018			0.08	obsvns	N/A
SULFATE	4/9/2018			25.8	ppm	25.7-25.8
TDS	4/9/2018			265	ppm	N/A
ZINC	4/9/2018			0.112	ppm	N/A
STAGE 2 DISINFECTION BYPRODUCTS (TTHM/HAA5)	Date	MCL	MCLG	High Comp.	Units	Range
HAA5 System-Wide	12/31/2018	60		19	ppb	N/A
TTHM System-Wide	12/31/2018	80		24	ppb	N/A

CITY OF HANKINSON - ND3900443

LEAD/COPPER*	Date	# Samples	Action Level (AL)	90th Percentile	Samples Exceed AL	Units
COPPER 90TH PERCENTILE	8/7/2017	10	1.3	0.48	0	ppm
LEAD 90TH PERCENTILE	8/7/2017	10	15	1.64	0	ppb
DISINFECTANTS	Date	MCL	MCLG	High Comp.	Units	Range
CHLORINE	3/31/2018	MRDL=4.0	MRDLG=4	0.7	ppm	0.26 to 0.98
STAGE 2 DISINFECTION BYPRODUCTS (TTHM/HAA5)	Date	MCL	MCLG	High Comp.	Units	Range
HAA5 System-Wide	12/31/2018	60		16	ppb	N/A
TTHM System-Wide	12/31/2018	80		27	ppb	N/A

*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. Southeast Water Users District and the City of Hankinson are 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>.

** While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. 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, which is a mineral known to cause cancer in humans, at high concentrations and is linked to other health effects, such as skin damage and circulatory problems.

*****Unregulated Contaminants** are used to evaluate and prioritize contaminants on the Drinking Water Contaminant Candidate List, a list of contaminants EPA is considering for possible new drinking water standards. Data collected through the monitoring of these contaminants will help to ensure that future decisions on drinking water standards are based on sound science. Not all systems are required to monitor for these contaminants.

LIKELY SOURCES OF CONTAMINANTS IN DRINKING WATER

COPPER—Corrosion of household plumbing systems; Erosion of natural deposits

LEAD—Corrosion of household plumbing systems; Erosion of natural deposits

ARENIC—Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes

BARIIUM—Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits

CHROMIUM—Discharge from steel and pulp mills; Erosion of natural deposits

FLUORIDE—Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories

CHLORINE—By-product of drinking water disinfection

GROSS ALPHA, COMBINED RADIUM and COMBINED URANIUM—Erosion of natural deposits.

HAA5—Haloacetic Acids—by-product of drinking water disinfection

TTHM—By-product of drinking water disinfection

IMPORTANT DRINKING WATER DEFINITIONS

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 technology.

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.

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: 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

Highest Compliance Level: The highest level of that contaminant used to determine compliance with a National Primacy Drinking Water Regulation.

Range of Detections: The lowest to the highest result value recorded during the required monitoring timeframe for systems with multiple entry points.

Abbreviations: ppb—parts per billion or micrograms per liter; ppm—parts per million or milligrams per liter; ppt—parts per trillion or nanograms per liter; ppq—parts per quadrillion or picograms per liter; NA—not applicable; ND—none detected; pCi/L—picocuries per liter (a measure of radioactivity), umho/cm = micromhos per centimeter (a measure of conductivity), obsvsn = observations/field at 100 Power, IDSE = Initial Distribution System Evaluation.