

## Water Source

We serve more than 13,703 customers an average of 2,622,700 gallons of water per day. We get our water from surface water sources. The state has performed an assessment of our source water and they have determined that the relative susceptibility rating for the Yankton public water supply system is medium.

## Yankton's Water Source the Missouri River

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 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 stormwater runoff, 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, 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 naturallyoccurring or be the result of oil and gas production and mining activities. PRSRT STD US POSTAGE D A I D MPLS, MN PERMIT #

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Water Superintendent Box 176 Yankton, SD 57078



# YANKTON Drinking Water Report 2008

Last year we monitored your drinking water for more than 80 possible contaminants. This brochure is a snapshot of the quality of the water that we provided last year. Included are details about where your water comes from, what it contains, and how it compares to the Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies.

For more information about your water and information on opportunities to participate in public meetings, call 668-5251 and ask for Al Viereck or 668-5272 and ask for Jerry Busby, Water Plant Superintendent or call 668- 5270 and ask for John Jonas at the Water Treatment Plant.

#### 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. City of Yankton is responsible for providing high quality drinking water, but cannot control the When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing the 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.

### Terms and abbreviations used in this table:

Maximum Contaminant Level Goal (**MCLG**): 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. Maximum Contaminant Level (**MCL**): the highest level of a contaminant that is allowed in drinking water. The MCLs are set as close to the MCLGs as feasible using the best available treatment technology. Action Level (**AL**): the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow. Treatment Technique (**TT**): a required process intended to reduce the level of a contaminant in drinking water.

Testing Results

Yankton Water

#### **Units of Measurement**

**NTU:** Nephelometric Turbidity Units **ppm:** parts per million, or milligrams per liter **ppb:** parts per billion, or micrograms per liter **NA:** not applicable

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-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/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

### **EPA Drinking Water Information**

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. 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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling

the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791). The table below lists all the drinking water contaminants that we detected during the 2007 calendar year. The presence of these 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 January 1-December 31, 2007. The state requires us to monitor for certain contaminants less than once per year because concentrations of these contaminants are not expected to vary significantly from year to year.

	Contaminant (unit)	Highest Level Detected	Range	Date Tested	MCL	MCLG	Source of Contaminant	
	Barium (ppm)	0.014	_	10/16/2007	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.	
er	Chromium (ppb)	1.1	_	10/16/2007	100	100	Discharge from steel and pulp mills; erosion of natural deposits.	
:	Copper (ppm)	0.0	# sites >1.3 AL - 0	06/27/2006	AL=1.3	0	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.	
	Fluoride (ppm)	1.47	0.87-1.47	11/01/2007	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.	
2	Haloacetic Acids (ppb)	59.1	3.3-59.1	05/08/2007	60	0	By-product of drinking water chlorination.	
	Lead (ppb)	1	# sites >15 AL - 0	06/28/2006	AL=15	0	Corrosion of household plumbing systems; erosion of natural deposits.	
	<b>Nitrate as Nitrogen</b> (ppm)	0.5	_	03/26/2007	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.	
╞	Selenium (ppb)	2.1	_	10/16/2007	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.	
	<b>Total Trihalomethanes</b> (ppb)	141	36.7-141	08/29/2007	80	0	By-product of drinking water chlorination.	
	Turbidity (NTU)	0.46	98% samples below 0.3	03012007	TT	N/A	Soil runoff. Turbidity is a measure of clarity of the water.	

Violation Type	Parameter	Date	Health Effects	Action Taken by Yankton
Exceedentce of Allowable Containment Level	Pentachlorophenol	01/01/2007 to 4/1/2007	Some people who drink water containing pentachloropheol in excess of the MCL over many years could experience problems with their liver or kidneys, and may have an increased risk of getting cancer.	Below detection limit. Public notification completed in 2007
Exceedentce of Allowable Containment Level	Trihalomethane	07/01/2007	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.	Public notification until running aver- age meets the required MCL. Currently seeking an alternate supply of source water.
Exceedentce of Allowable Containment Level	Trihalomethane 10/01/2007		Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.	Public notification until running average meets the required MCL. Currently seeking an alternate supply of source water.