

SOUTHEAST WATER USERS DISTRICT

PO BOX 10
MANTADOR ND 58058

APRIL, 2009

ANNUAL DRINKING WATER QUALITY REPORT FOR THE YEAR ENDING 2008

We're pleased to present to you this year's *Annual Drinking Water Quality Report*. 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 continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water sources are wells drawn from the Hankinson Aquifer, located in the Sheyenne Grasslands (SEWUD –E), the Spiritwood Aquifer located at Urbana (SEWUD – C) and the Middle LaMoure Aquifer in Wright Township of Dickey County (SEWUD – W).

We have a wellhead protection plan available from our office that provides more information, such as, potential sources of contamination. Based on that information, your source water has been determined to be moderately susceptible to potential contaminants. We have reviewed the wellhead protection area & determined that no sources would threaten your water supply.

Southeast Water Users District is pleased to announce that your water quality meets all state and federal requirements. The staff of Southeast Water Users tests your water quality daily, and monthly samples are sent in to the State Health Department for bacteriological testing.

If you have any questions about this report or concerning your water utility, please contact Steve Hansen at Southeast Water Users District - East at 242-7432 or 1-800-400-8888. Our office hours are 7:30 a.m. to 5:00 p.m. Monday through Friday. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the third Tuesday of every month at varied locations. If you would like to attend one of the meetings, please call the office for location and times. If you are aware of non-English speaking individuals who need help with the appropriate language translation, please contact Steve Hansen at one of the numbers listed above.

Southeast Water Users District routinely monitors for contaminants in your drinking water according to Federal and State laws. The following tables show the results of our monitoring for the period of January 1, 2004 to December 31st, 2008. The sources of drinking water (both tap 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 water, industrial or domestic wastewater discharges, oil production, mining or farming.

Pesticides and herbicides, which come from a variety of sources such as agriculture, urban storm water run-off 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 storm water run-off 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, the Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

In the following table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) – laboratory analysis indicates that the contaminant is not present

Parts per million (ppm) or Milligrams per liter (mg/l) – one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter (μ g/l)- one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Picocuries per liter (pCi/L) – picocuries per liter is a measure of the radioactivity in water.

Millirems per year (mrem/yr) – measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) – million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) – nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

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

Maximum Contaminant Level - The “Maximum Allowed” (MCL) is 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.

Maximum Contaminant Level Goal - The “Goal”(MCLG) is 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.

SOUTHEAST WATER USERS DISTRICT - EAST

SEWUD – EAST ND3901068

TEST RESULTS

INORGANIC CONTAMINANTS

Chemical Name	Date	MCLG	MCL	HIGHEST COMPLIANCE	LEVEL UNITS	RANGE OF DETECTION	HEALTH EFFECTS LANGUAGE	MAJOR SOURCES IN DRINKING WATER
Arsenic	10/09/08	0	10	7.1	ppb	NA	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 & is linked to other health effects such as skin damage & circulatory problems.	Erosion of natural deposits; Runoff from orchards; runoff from glass and electronics production wastes

DISINFECTANTS

Chlorine Water additive used to control	07/31/08	MRDLG=4	MRDL=4	1.1	ppm	0.73-1.09	Some people who use water containing chlorine well in excess of the MRDL could experience microbes irritating effects to their eyes & nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.	
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Southeast Water Users District - East

	Date	# of Samples	Action Level	90 th %	Samples Exceeding AL	95 th %	Units	
Copper	09/20/07	10	1.3	.833			ppm	Corrosion of household plumbing systems. Erosion of natural deposits; Leaching from wood preservatives.
*Lead	09/20/07	10	15	5.32			ppb	Corrosion of household plumbing systems. Erosion of natural deposits.

SOUTHEAST WATER USERS DISTRICT – CENTRAL

Barnes Rural Water District Supply-ND0201058

TEST RESULTS

INORGANIC CONTAMINANTS

Chemical Name	Date	MCLG	MCL	HIGHEST COMPLIANCE	UNITS	RANGE OF DETECTION	MAJOR SOURCES IN DRINKING H2O	HEALTH EFFECTS LANGUAGE
Chlorine control microbes	07/31/08			MRDLG=4	MRDL=4	3.7 ppm 3.49 -3.88	Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes & nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.	Water additive used to

TOTAL ORGANIC CARBON REMOVAL

ALKALINITY	11/17/08			386	ppm	368-386		
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UNREGULATED CONTAMINANTS

BICARBONATE AS HCO3	11/17/08			471	ppm	448-471		
CALCIUM	11/17/08			72.8	ppm	55.6-72.8		
CONDUCTIVITY @25 C UMHOS/CM	11/17/08			1280	umho/cm	1250-1280		
ORTHO-PHOSPHATE	11/17/08			1.1	ppm	.992-1.1		
PH	11/17/08			7.65	PH	7.05-7.65		
TDS	11/17/08			794	ppm	775-794		

Southeast Water Users District - Central - Barnes Supply – ND3701465

	Date	# of Samples	Action Level	90 th %	Samples Exceeding AL	95 th %	Units	
Copper	08/25/06	5	1.3	0.9			ppm	Corrosion of household plumbing systems. Erosion of natural deposits; Leaching from wood preservatives.
*Lead	08/25/06	5	15	2			ppb	Corrosion of household plumbing systems. Erosion of natural deposits.
***IDSE TTHM	08/28/06			2.68			ppb	

***** Initial Distribution System Evaluation**

SOUTHEAST WATER USERS DISTRICT – CENTRAL

City of Lisbon Supply ND3700574

TEST RESULTS

Inorganic Contaminants

Chemical Name	Date	MCLG	MCL	HIGHEST COMPLIANCE	UNITS	RANGE OF DETECTION	MAJOR SOURCES IN DRINKING H2O	HEALTH EFFECTS LANGUAGE
Arsenic	10/09/07	0	10	1.4	ppb	NA	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.	Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

fertilizer and aluminum factories

pain & tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth, usually in children less than 9 years old. Mottling, also known as fluorosis, may include brown staining and/or pitting of the teeth, & occurs only in developing teeth before they erupt from the gums.

Nitrate & Nitrite 2/11/08

10 10

0.32

ppm

NA

Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill & if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.

**Southeast Water Users District – Central
City of Lisbon Supply**

Chemical Name **Date**

MCLG **MCL**

**HIGHEST
COMPLIANCE**

UNITS

**RANGE OF
DETECTION**

**MAJOR SOURCES
IN DRINKING H2O**

**HEALTH EFFECTS
LANGUAGE**

DISINFECTION BYPRODUCTS

(HAA5)

12/31/08

60

12

ppb

N/A

Some people who drink water containing haloacetic acids in excess of the MCL over any years may have an increased risk of cancer.

By-product of drinking water disinfection

(TTHM)	12/31/08	80	76	ppb	N/A	By-product of drinking water trihalomethanes in excess of the MCL over many years may experience problems with liver, kidneys, or central nervous systems, & may have in increased risk of getting cancer.	disinfection.
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DISINFECTANTS

CHLORINE	04/30/08	MRDLG=4	MRDL=4	1.1	ppm	0.49 – 2.17	Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes & nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.	Water additive used to control microbes
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Southeast Water Users District – Central – ND3701448

	Date	# of Samples	Action Level	90 th %	Samples Exceeding AL	95 th %	Units	
Copper	08/26/06	10	1..3	.0278			ppm	Corrosion of household plumbing systems. Erosion of natural deposits; Leaching from wood preservatives.
*Lead	08/26/06	10	15	0			ppb	Corrosion of household plumbing systems. Erosion of natural deposits.

**SOUTHEAST WATER USERS DISTRICT - CENTRAL
TEST RESULTS**

Core Supply-ND3701466

Chemical Name	Date	MCLG	MCL	HIGHEST COMPLIANCE	UNITS	RANGE OF DETECTION	MAJOR SOURCES IN DRINKING H2O	HEALTH EFFECTS LANGUAGE
***IDSE (HAA5)	08/28/06		NO MCL	23.34	ppb	NA	Some people who drink water containing haloacetic acids in excess of the MCL over any years may have an increased risk of cancer.	By-product of drinking water disinfection

*****IDSE
(TTHM)**

08/28/06

NO MCL

41.88

ppb

NA

Some people who drink water containing

By-product of drinking water trihalomethanes in excess of the MCL over many years may experience problems with liver, kidneys, or central nervous systems, & may have in increased risk of getting cancer.

disinfection

*****IDSE - Initial Distribution System Evaluation**

Southeast Water Users District - Central - ND3701466

	Date	# of Samples	Action Level	90th %	Samples Exceeding AL	95th %	Units	
Copper	08/29/06	5	1.3ppm	1			ppm	Corrosion of household plumbing systems. Erosion of natural deposits. Leaching from wood preservatives.
*Lead	08/29/06	5	15 ppb	1			ppm	Corrosion of household plumbing systems. Erosion of natural deposits.

**SOUTHEAST WATER USERS – WEST
TEST RESULTS**

Southeast Water Users District – West ND1101442

Inorganic Contaminants

Chemical Name	Date	MCLG	MCL	HIGHEST COMPLIANCE	RANGE OF UNITS	DETECTION	HEALTH EFFECTS LANGUAGE	MAJOR SOURCES IN DRINKING WATER
Arsenic	10/22/07	0	10	2.63	ppb	NA	While your drinking water meets EPA 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 & is linked to other health effects such as skin damage & circulatory problems.	Erosion of natural deposits; Runoff from orchards; runoff from glass and electronics production wastes
Nitrate & Nitrite	02/19/08	10	10	0.05	ppm	N/A	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become Seriously ill &, if untreated, may die. Symptoms include shortness of breath & blue baby syndrome.

DISINFECTION BY-PRODUCTS

(HAA5)	12/31/08		60	10	ppb	N/A	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of cancer.	By-product of drinking water disinfection
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(TTHM)	12/31/08	80	64	ppb	N/A	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with liver, kidneys, or central nervous systems, & may have in increased risk of getting cancer.	By-product of drinking water disinfection
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DISINFECTANTS

Chlorine	6/30/08	MRDLG=4	MRDL=4.0	1.7	ppm	1.28 – 1.82	Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes & nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.	Water additive used to control microbes
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Southeast Water Users District - West

	Date	# of Samples	Action Level	90 th %	Samples Exceeding AL	95 th %	Units	
Copper	11/19/08	20	1.3ppm	0.556			ppm	Corrosion of household plumbing systems. Erosion of natural deposits. Leaching from wood preservatives.
*Lead	11/19/08	20	15 ppb	3.09			ppb	Corrosion of household plumbing systems. Erosion of natural deposits.

TOTAL ORGANIC CARBON REMOVAL

ALKALINITY	11/17/08	345	ppm	321-345
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UNREGULATED CONTAMINANTS

BICARBONATE AS HCO3	11/17/08	421	ppm	392-421
CALCIUM	11/17/08	145	ppm	93.3-145
CONDUCTIVITY @25 C UMHOS/CM	11/17/08	1470	umho/cm	1260-1470
ORTHO-PHOSPHATE	11/17/08	0.767	ppm	0.026-0.767
PH	11/17/08	7.56	PH	6.84-7.56
TDS	11/17/08	911	ppm	781-911

*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 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>.

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.

As you can see by the table, our system had no violations. We are proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some contaminants have been detected. The EPA has determined that your water IS SAFE at these levels.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All 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 health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

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 microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Southeast Water Users District is very pleased to inform you that your rural water system has received the "Certificate of Compliance" from the North Dakota Department of Health, for maintaining satisfactory microbiological quality in the drinking water supply utilized by the Southeast Water Users District during the time period October 1, 2007 to September 30, 2008.

Southeast Water Users District would appreciate it if large volume water customers post copies of the CCR 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 District and staff work around the clock to provide top quality water to every tap. 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.

