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SOUTHWEST PIPELINE PROJECT

SOUTHWEST WATER AUTHORITY

2007 Drinking Water Quality Report

We want to welcome you to our 10th annual Drinking Water Report. This report contains important information about the quality of the drinking water the Southwest Water Authority delivers to you each and every day. We work tirelessly to make the water that comes from your tap as fresh, clear, and good tasting as we can, but we want you to be assured that nothing is of a higher priority to us than drinking water safety.

Here is the treatment process from the source to you.

The raw water intake is located at Lake Sakakawea, a surface water source, about 86 miles northeast of Dickinson. Sodium permanganate is added to the water at this point to reduce tastes and odors in the water. From there the water is pumped 26 miles to Dodge where chlorine and ammonia are added to form chloramines, whose job it is to inactivate microorganisms like Giardia, viruses and bacteria in the water. The water then travels another 60 miles to the Water Treatment Plant in Dickinson where it is treated using the following processes:

- Clarification and softening, where lime, alum, and a flocculant are added to clarify the water and reduce hardness to about 6.5-8 grains per gallon (or 110-140 parts per million).
- Stabilization, where carbon dioxide is added to adjust pH and phosphate is added as a scale and corrosion inhibitor. Fluoride is also added at this point.
- Filtration, where seven dual-media filters remove suspended particles not removed in the clarification and softening process. Filtration can also be effective in the physical removal of the protozoan Cryptosporidium.
- Disinfection, where chloramines are once again added to reduce bacteria to a safe level.

From here, the drinking water is pumped through the distribution system to all our customers, including you.

Let's share a few words about drinking water contaminants.

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 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 naturally-occurring or be the result of oil and gas production and mining activities.

As part of a nationwide program, the North Dakota Department of Health recently completed an assessment of our source water and determined that our water system is moderately susceptible to potential contaminant sources. They also noted that "historically, Southwest Water Authority has effectively treated this source water to meet drinking water standards." Information about the Source Water Assessment can be obtained by calling 701-225-9147 or 1-888-425-0241, or e-mail us at swa@swwater.com.

This is important information about drinking water safety.

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 (1-800-426-4791). Additional information about drinking water is available on EPA's website at www.epa.gov/safewater/.

Consumer Confidence Report for Southwest Pipeline Project
Customers Served by the Dickinson Water Treatment Plant

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.

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/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 (1-800-426-4791).

Now we'll talk about which contaminants were detected in our drinking water.

EPA requires us to monitor for over 90 drinking water contaminants and those that were detected are listed in the table to the right. Test results are from 2007. The State does allow reduced monitoring for certain contaminants because their levels do not change significantly over time. For this reason, some of the test results are more than one year old.

Definitions and abbreviations:

- Action Level or AL: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Maximum Contaminant Level or MCL: 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 or 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 Residual Disinfectant Level or MRDL: 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.
- Maximum Residual Disinfectant Level Goal or MRDLG: 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.
- Parts per billion or ppb: 1 ppb is equivalent to adding 1 pound of a contaminant to 999,999,999 pounds of water (about 120,000,000 gallons).
- Parts per million or ppm: 1 ppm is equivalent to adding 1 pound of a contaminant to 999,999 pounds of water (about 120,000 gallons).
- Treatment Technique or TT: A required process intended to reduce the level of a contaminant in drinking water.
- N/A: Not Applicable • ND: Not Detected • NTU: Nephelometric Turbidity Units

So the bottom line is this.

At Southwest Water Authority, our highest priority is your family's health where drinking water is concerned. With that thought in mind, we are pleased to report that our water system was in compliance with all drinking water regulations in 2007. We want you and all of our valued customers to be informed about their water utility, so if you have any questions about this report or any other concerns, please contact Roger Dick, Water Treatment Plant Manager at 701-225-9147 or Sandy Burwick, CFO/ Office Administrator at 1-888-425-0241, or e-mail us at swa@swwater.com. We encourage you to participate in decisions that may affect our water by attending any of our regularly scheduled meetings, which are held on the first Monday of each month. If you are interested in attending or would like to request agenda time, please contact us at 1-888-425-0241 for information on time and location. If you are aware of non-English speaking individuals who need assistance with the appropriate language translation, please contact us at any of the numbers listed above. In order to allow individuals who consume our drinking water, but who do not receive water bills to learn about our water system, we would appreciate it if our large volume water customers would post copies of this report in conspicuous locations or distribute them to tenants, residents, patients, students, and/or employees.

TABLE OF DETECTED REGULATED CONTAMINANTS

Contaminant (units)	*MCLG*	*MCL*	*Level Detected*	*Detection Range*	*Test Date*	*Exceedance or Violation?*	*Major Sources in Drinking Water*
Total Organic Carbon (TOC) Removal							
Alkalinity (ppm) Source Water	N/A	N/A	159	147 - 159	2007	N/A	Natural erosion, plant activities, and certain industrial waste discharges.
TOC (ppm) Source Water	N/A	TT	2.88	2.70 - 2.88	2007	N/A	Naturally present in the environment.
TOC (ppm) Finished Water	N/A	TT	1.86	1.75 - 1.86	2007	N/A	Naturally present in the environment.
Microbial Contaminants							
Turbidity[1] (NTU)	N/A	TT = .3	0.21	N/A	2007	100% of samples met turbidity limit	Soil runoff.
Inorganic Contaminants							
Copper (ppm)	1.3	AL = 1.3	0.127	N/A	2007	No sites exceeded the Action Level	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
Lead[2] (ppb)	15	AL = 15	7.65	N/A	2007	One site exceeded the Action Level	Corrosion of household plumbing systems; Erosion of natural deposits.
Nitrate-Nitrite (ppm)	10	10	0.06	N/A	2007	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Disinfectants							
Chloramines (ppm)	MRDLG = 4	MRDL = 4.0	2.8	2.51 - 2.91	2007	No	Water additive used to control microbes.
Disinfection By-products							
Total Haloacetic Acids (ppb)	N/A	60	11	8.61 - 13.1	2007	No	By-product of drinking water disinfection.
Total Trihalomethanes (ppb)	N/A	80	6	4.54 - 6.94	2007	No	By-product of drinking water chlorination.
Radioactive Contaminants							
Uranium, Combined (ppb)	0	30	0.388	N/A	2003	No	Erosion of natural deposits.

TABLE OF DETECTED UNREGULATED CONTAMINANTS[3]

Alkalinity, Carbonate (ppm)	N/A	N/A	4	ND - 4	2007	N/A	Natural erosion, plant activities, and certain industrial waste discharges.
Bicarbonate as HCO_3 (ppm)	N/A	N/A	194	176 - 194	2007	N/A	Natural erosion, plant activities, and certain industrial waste discharges.

1 Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of our filtration system.
2 Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.
3 EPA has not established enforceable drinking water standards for unregulated contaminants, but they are monitored to determine whether or not future regulation is warranted.