

BISMARCK WATER TREATMENT FACILITY

2012 ANNUAL REPORT ON THE QUALITY OF TAP WATER

We are happy to report that again in 2012 the City of Bismarck's drinking water continued to meet all EPA and State Standards of quality and safety. This report is part of maintaining our compliance with the Environmental Protection Agency's guidelines to provide information on tap water produced by the Bismarck Water Treatment Facility. This report provides you with specific test results to show the quality of Bismarck's water and compares those results to EPA standards for drinking water. It will also give you some general information about health and sources of contamination. We hope you find this information to be useful.

2012 Tap Water Profile

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|---------------------------------------|-------------------------------|
| <i>Average Total Hardness</i> | 130 mg/l or 7.6 grains/gallon |
| <i>Average Total Alkalinity</i> | 69 mg/l |
| <i>Average pH</i> | 8.7 |
| <i>Average Fluoride</i> | 0.68 mg/l |
| <i>Average Daily Water Production</i> | 10.3 million gallons |
| <i>Highest Daily Water Production</i> | 24.0 million gallons |

Bismarck's Water Source

The Bismarck Water Treatment Facility draws all of its water from the Missouri River upstream of the Memorial Bridge. Our public water system, in cooperation with the ND Department of Health, has completed the delineation and contaminant/land use inventory elements of the ND Source Water Protection Program. Based on the information from these elements, the ND Department of Health has determined that our source water is moderately susceptible to potential contaminants. A copy of this report is available by contacting the Water Department at 355-1700.

Sources of Contamination

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, spring, 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:

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

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

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

(D) **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 runoff and septic systems.

(E) **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 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).

EPA requires us to monitor for more than 80 potential contaminants. The regulated contaminants that have been detected in Bismarck's drinking water are shown on the attached table. The table also shows the maximum level that was detected and compares this to the EPA drinking water standards. These results show that Bismarck's water meets all EPA water quality requirements.

Health Information

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

Concerning Lead in Our Water

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. Bismarck Water Treatment Facilities 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 (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

To Learn More

We encourage public interest and participation in our community's decisions affecting drinking water. Regular City Commission meetings are held on the second and fourth Tuesday of each month in the Tom Baker Meeting Room at the City/County Building at 221 North 5th Street. The public is welcome to attend. These meetings are also televised on Dakota Media Access, Channel 2. You can learn more about the Bismarck Water Treatment Facility at www.bismarck.org. Water quality data for community water systems throughout the United States is available at www.waterdata.com.

We would appreciate the cooperation of large volume water customers in posting copies of this report in conspicuous locations or distributing them to tenants, residents, patients, students, or employees, so individuals who consume the water, but do not receive a bill can learn more about our water system. Extra copies of this report are available at the Water Plant, the Public Works Department (601 S 26th Street) or the Bismarck Public Library (515 N 5th Street).

If you have questions about this report or would like more information please call:

- Brian Young, Water Plant Superintendent — 355-1662
- Keith Demke, Director of Utility Operations — 355-1704
- For questions about your water bill call — 355-1732