



2009 ANNUAL

WATER QUALITY REPORT

Water testing performed in 2009

Presented By:

**Elk River
Municipal Utilities**

PWS ID#: 1710004

Maintaining High Standards

Once again Elk River Municipal Utilities (ERMU) is proud to present our annual water quality report. This report covers all testing performed between January 1, 2009, and December 31, 2009. In spite of our hard economic time, we have maintained our high standards in an effort to continue delivering the best quality drinking water possible. There may be other hurdles in the future, but know that we will always stand behind you and the drinking water we work diligently to provide.

ERMU is pleased to report that our drinking water is safe and meets federal and state requirements.

We encourage you to share your thoughts with us on the information contained in this report. Should you ever have any questions, we are always available to assist you.

“WHEN THE WELL’S DRY, WE KNOW
THE WORTH OF WATER. – Benjamin Franklin”

Important Health Information

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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or www.epa.gov/safewater/hotline/.



Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration 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 these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may 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 may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Questions?

For more information about this report, or for any questions relating to your drinking water, please call David Berg, Water Department Superintendent, at (763) 441-2020.



Source Water Assessment

The water provided to customers may meet drinking water standards, but the Minnesota Department of Health has determined that one or more of the sources of water is potentially susceptible to contamination. If you wish to obtain the entire source water assessment regarding your drinking water, please call (651) 201-4700 or (800) 818-9318 (and press 5) during normal business hours. Also, you can view it online at www.elkriverutilities.com.

Elk River Utilities routinely monitors for contaminants in your drinking water according to federal and state laws.

Meter Change-Out Program

Do you have the latest meter technology? Get it today, at no cost to you! We are replacing ALL water meters to be sure meters are properly calibrated and giving accurate reads. This new electronic reading device can be exchanged in less than 15 minutes. Schedule your appointment today!

Monday through Friday, 7:30 a.m. to 2:30 p.m.

Able to set-up other times if necessary

Call (763) 441-2020 to schedule your appointment today!



Where Does My Water Come From?

ERMU customers are supplied with water from eight (8) wells ranging from 225 to 406 feet in depth. Our wells draw ground water from the Mt. Simon Hinckley Aquifer. ERMU's water system contains over 75 miles of water mains, which serve approximately 4,400 customers. Our treatment facilities provide roughly over 850 million gallons of clean drinking water every year. We currently have four (4) water towers that have a total capacity of 5,000,000 gallons of water.



Water Conservation Tips & Restrictions

RESTRICTIONS

No watering between 10:00 a.m. and 6:00 p.m.

Those with even addresses may sprinkle on even days prior to 10:00 a.m. and after 6:00 p.m. Those with odd addresses may sprinkle on odd numbered days.

WATER CONSERVATION TIPS

Water early in the morning, between 4:00 a.m. and 10:00 a.m., for the best lawn health and conservation of water! Reduce chances of turf disease.

Leave grass longer during hot weather (2.5" to 3.5") to promote deeper roots.

Use soak and cycle methods—water one area for 5 minutes, change to another area for 5 minutes. Alternate those same areas for 2–3 SHORT cycles (15 minutes total duration). This reduces runoff and limits the water passing through the root depth (intended watering zone), which parallels water waste.

New SMART Irrigation REBATE!

- \$250.00 Rebate for single-family homes (Average use of 500 units or less)
- \$500.00 Rebate for most commercial/association customers (Average use of 500+ units)

Install a SMART Irrigation controller and see results!

- 24/7 weather information transferred via satellite signal
- Save up to 50 percent of your water used to irrigate
- Specify vegetation and soil types per zone
- Soak & Cycle Mode—Reduces runoff and water waste
- Save maintenance time, water, and money!

Pick up your application and rebate information at the ERMU Office.

Lead and Drinking 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. We are responsible for providing high-quality drinking water but cannot control the variety of materials used in plumbing components. 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 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 www.epa.gov/safewater/lead.

ERMU NEEDS YOUR HELP!

We are in need of thirty (30) residential volunteers to provide us with small water samples for our state lead and copper samples. Please contact our office at (763) 441-2020 if you are willing to participate. The samples are needed in August of 2010 and are very simple and fast! Test your water for free!

Sampling Results

In the past year we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water.

The state allows us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Barium (ppm)	2009	2	2	0.02	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorine ¹ (ppm)	2009	[4]	[4]	0.73	0.6–0.8	No	Water additive used to control microbes
Combined Radium (pCi/L)	2009	5.4	0	1	ND–1.5	No	Erosion of natural deposits
Ethylbenzene (ppb)	2009	700	700	0.17	ND–0.5	No	Discharge from petroleum refineries
Fluoride (ppm)	2009	4	4	1.33	NA	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAA] (ppb)	2009	60	0	2.3	NA	No	By-product of drinking water disinfection
Nitrate (ppm)	2009	10	10	2.2	ND–2.2	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2009	80	NA	4.7	NA	No	By-product of drinking water disinfection
Xylenes (ppm)	2009	10	10	0.001	ND–0.0031	No	Discharge from petroleum factories; Discharge from chemical factories

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2009	1.3	1.3	0.44	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	2009	15	NA	2	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits

UNREGULATED AND OTHER SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Radon ² (pCi/L)	2009	300	NA	151	105–182	No	Naturally occurring radioactive gas
Sodium (ppm)	2009	NA	NA	3.9	NA	No	Erosion of natural deposits

¹For Chlorine, the Amount Detected is the highest quarterly average and the Range is the highest and lowest monthly averages.

²Because radon in indoor air poses a much greater health risk than radon in drinking water, an Alternative Maximum Contaminant Level (AMCL) of 4,000 pCi/L may apply in states that have adopted an Indoor Air Program, which compels citizens, homeowners, schools, and communities to reduce the radon threat from indoor air. For states without such a program, the Maximum Contaminant Level (MCL) of 300 pCi/L may apply. Minnesota plans to adopt an Indoor Air Program once the radon rule is finalized.

Definitions

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

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.

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.

MRDLG (Maximum Residual Disinfectant 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.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

pCi/L (picocuries per liter): A measure of radioactivity.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).