Drinking Water Report

The City of Duluth is issuing the results of monitoring done on its drinking water for the period from January 1 to December 31, 2008. The purpose of this report is to inform consumers on laboratory testing of the drinking water and heighten awareness of the need to protect precious water resources.

Lake Superior Supplies Duluth With Drinking Water

The source water supply for the City of Duluth is a surface water source: Lake Superior. The Minnesota Department of Health has determined that one or more sources of your drinking water is susceptible to contamination. If you wish to obtain the entire source water assessment regarding your drinking water, please call **1-800-818-9318** during normal business hours. Also you can view it online at www.health.state.mn.us/divs/eh/water/swp/swa.

Drinking Water Information

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, radio-active material, and can pick up substances resulting from the presence of animals or human activity. Contaminants that may be present in souce 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

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Drinking Water Information Continued . . .

petroleum productions, 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.

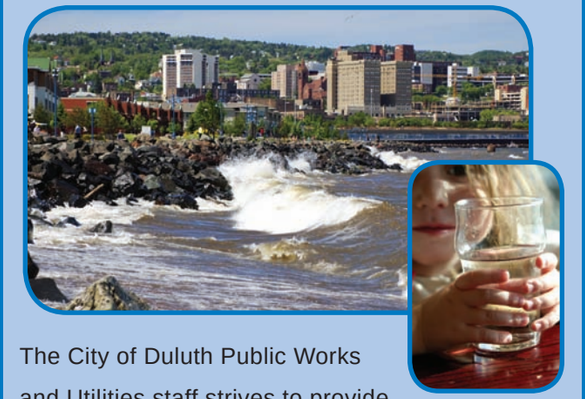
Special Health Information

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

5/09

City of Duluth
2008 Drinking Water Quality Report



The City of Duluth Public Works and Utilities staff strives to provide safe, quality drinking water and high quality service to residents. We encourage you to contact us and tell us about your water quality and service. We also encourage water customers to learn more about drinking water quality issues. If you have questions or want information about opportunities for public participation in decisions that may affect water quality, please contact the Duluth Public Works and Utilities chemist at 218-525-0834.

Results of Monitoring

This year again brings good news:

No contaminants were found at levels that violated federal drinking water standards. The table on the right shows the contaminants that were detected in trace amounts last year.

Key to Abbreviations:

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.

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.

The MCL for lead and copper is known as the Action Level (AL). This is the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

Ninety percent of the samples tested must be less than the action level for compliance. Some contaminants do not have Maximum Contaminant Levels established for them. These "unregulated contaminants" are assessed using state standards known as health risk limits to determine if they pose a threat to human health. If unacceptable levels of an unregulated contaminant are found, the response is the same as if an MCL has been exceeded; the water system must inform its customers and take other corrective actions.

Other Definitions:

pCi/L ~ PicoCuries per liter
A measure of radioactivity.

ppb ~ Part per billion
Also expressed as micrograms per liter (ug/l).

ppm ~ Part per million
Also expressed as milligrams per liter (mg/l).

nd ~ Not detected.

MRDL~ Maximum Residual Disinfectant Level

MRDLG ~ Maximum Residual Disinfectant Level Goal

NTU ~ Nephelometric Turbidity Units

DULUTH DRINKING WATER TABLE FOR 2008

Detected Substance (units) MCL (highest level allowed in water by EPA) MCLG (level where there is no known health risk)	Results for Duluth Tap Water Level Found	 Range of Detections	Typical Source of Substance in Drinking Water
Inorganic substances: minerals, salts, and metals with natural and man-made origins			
Fluoride (ppm) MCL: 4.0; MCLG: 4.0	1.15	1.1-1.2	Additive for strong teeth; erosion of natural deposits; fertilizer and aluminum factory discharge.
Nitrate as Nitrogen (ppm) MCL: 10.0; MCLG: 10.0	0.34	N/A	Erosion of natural deposits; Runoff from fertilizer use; leaching from septic tanks, and sewage.
Chlorine (ppm) MRDL: 4.0; MRDLG: 4.0	Highest Quarterly Avg. 0.98	Monthly Avg. 0.8-1	Water additive used to control microbes.
Copper (ppm) (3/29/07) AL: 1.3 (90% of samples tested must be <1.3 ppm)	90% of samples <0.03	0 out of 30 samples tested >1.3ppm	Corrosion of household plumbing systems; erosion of natural deposits.
Lead (ppb) (3/29/07) AL: 15 (90% of samples must be <15ppb) MCLG: N/A	90% of samples <11.0	1 out of 30 homes >15 ppb	Corrosion of household plumbing systems; erosion of natural deposits.
Sodium (ppm) (5/18/07) No established EPA limits	4.5	—	Erosion of natural deposits.
Sulfate (ppm) (5/18/07) No established EPA limits	6.91	—	Erosion of natural deposits.
Turbidity (NTU) MCLG: N/A; MCL:TT	*0.050 * Highest single measurement. ** Lowest monthly percentage of samples meeting limits.	**100%	Soil Runoff.
Radiologicals: naturally-occurring radioactive substances			
Combined Radium (pCi/L) (12/23/02)	0.91	—	Erosion of natural deposits
Organic substances: usually of man-made origin			
Total Thihalomethanes (ppb) MCL: 80; MCLG: 0	14.13	7.4-19.5	By-product of drinking water disinfection.
Haloacetic Acids (ppb) MCL: 60; MCLG: None set	9.65	6-12.7	By-product of drinking water disinfection.