

# Public Notice

## CITY OF INTERNATIONAL FALLS 2009 Consumer Confidence Report

### Background

In the paragraphs to follow, the City of International Falls is issuing the results of monitoring done on drinking water produced by the City during the period from January 1, 2009 to December 31, 2009. The information contained in this document constitutes the City of International Falls **2009 Drinking Water Report**, hereinafter referred to as the **2009 Consumer Confidence Report (CCR)**.

The following is a brief review of administrative matters relative to origination of the Safe Drinking Water Act, Consumer Confidence Reports, the role of the United States Environmental Protection Agency (EPA) and the State of Minnesota Department of Health (MDH).

Consumer Confidence Reports, which are essentially water quality reports, were mandated by the federal government as part of The Safe Drinking Water Act (SDWA) Amendments of 1996, signed into law by President Clinton on August 6, 1996. Additional information regarding the Safe Drinking Water Act is available by calling the EPA at 1-800-426-4791 or by viewing the EPA web site at [www.epa.gov/safewater](http://www.epa.gov/safewater).

The SDWA amendments were intended to establish a new emphasis on preventing contamination problems in drinking water by encouraging source water protection and enhanced water system management. The underlying assumption is that drinking water coming out of a water treatment plant is likely to be better if raw water going into the plant is cleaner and less contaminated.

The SDWA amendment transform the previous law by replacing the after-the-fact, regulatory focus with a more proactive, environmental statute that is intended to better provide for the sustainable use of water by our nation's public water systems and their customers.

On a federal level, administration and enforcement of the SDWA is the responsibility of the Environmental Protection Agency (EPA). On a state level, administration and enforcement of the SDWA is the responsibility of the Minnesota Department of Health (MDH). On a local level, administration and enforcement of the SDWA and related water quality standards is the responsibility of the City of International Falls and its water treatment plant operators. It should be noted that all operators at the International Falls water treatment plant are duly trained and licensed by the MDH to operate and maintain a water treatment facility in compliance with state and federal drinking water standards.

Water systems are required to summarize annual monitoring and testing results and present the findings to its customers in the form of Consumer Confidence Reports. SDWA requirements for publishing and/or distribution of the CCR vary based on the number of customers served by the community water system. We publish the CCR in the local newspaper, however the CCR is available upon request. **Requests for copies of the CCR or any other questions about the City of International Falls drinking water should be directed to Bruce Wilson, Chief Water Plant Operator at 1-218-283-2990 or e-mail at [brucew@ci.international-falls.mn.us](mailto:brucew@ci.international-falls.mn.us).** Copies of the CCR will be provided free of charge.

### Introduction

The City of International Falls is issuing the results of monitoring done on its drinking water for the period from January 1, 2009 to December 31, 2009. The purpose of this report is to advance water consumer's understanding of drinking water and heighten awareness of the need to protect precious water resources.

### Source of Water

The City of International Falls provides drinking water to its consumer's from water drawn from the Rainy River which is a surface water source, as opposed to being on a well(s) system. The water intake is located in approximately 26 feet of water, 5 feet off of the river bottom, which provides a consistent, very soft, high quality raw water.

The City of International Falls pays the Minnesota Department of Natural Resources (DNR), on a per-gallon basis, for water removed from Rainy River, by the City, for treatment at the City's water treatment plant.

The water that the City provides to its customers meets drinking water standards but the Minnesota Department of Health has also made a determination as to how vulnerable the source of water may be to future contamination incidents. The City, the MDH and the DNR have ongoing programs to monitor and test water quality in Rainy River in an effort to maintain the quality of the source water resource. If you wish to obtain the entire source water assessment regarding your drinking water, please call 1-651-201-4700 or 1-800-818-9318 (and press 5) during normal business hours. Also, you can view it on line at [www.health.state.mn.us/divs/eh/water/swp/swa](http://www.health.state.mn.us/divs/eh/water/swp/swa).

### Results of Monitoring

No contaminants were detected at levels that violated federal drinking water standards. However, some contaminants were detected in trace amounts that were below legal limits. Tables 1-6 listed below show the contaminants that were detected in trace amounts last year. Some contaminants are sampled less frequently than once a year, as a result, not all contaminants were sampled for in 2009. If any of these contaminants were detected the last time they were sampled for, they are included in the table along with the date that the detection occurred.

International Falls Water Treatment Plant Operators test and monitor raw water and finished water several times throughout each day while drinking water is being produced at the plant. All City testing results are recorded by the water plant operators in a daily report logbook at the water plant. Test results are available for review by the public - please call Bruce Wilson at the water plant (1-218-283-2990) to schedule an appointment. Testing is done manually by staff and testing is also done automatically by computerized on-line, turbidity meters, chlorine analyzer and particle counter.

The City submits a monthly report to the MDH summarizing the previous month's testing data. Simultaneously, with no prior notice to or coordination with the City, MDH collects water samples at random locations in International Falls. MDH staff analyzes the samples implementing the same tests used by City water plant staff. For Quality Assurance and Quality Control purposes, MDH compares their test results against the City's test results.

As shown in the charts below, the City performs numerous tests on its finished drinking water. In addition to those tests performed by the City, the MDH hires independent labs to perform several other tests aimed at detecting less common, and often times more obscure, minerals and impurities. Testing equipment necessary for performing these tests is very expensive and therefore is neither practical nor cost effective for municipal water systems, such as the City of International Falls, to purchase and own. Instead, the City reimburses the MDH for their costs associated with hiring an independent lab to perform the highly specialized tests on the City's finished water. It should be noted that the MDH requires specialized testing by independent labs for all municipal water systems in the State of Minnesota. Similarly, all Minnesota municipal water systems must reimburse the MDH for associated testing costs.

In the following, we have provided a list of abbreviations and definitions of key technical terms that are used throughout this report to characterize or summarize Results of Monitoring conducted at the water plant during the 2009 calendar 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. MCLG's allow for a margin of safety.

**MCL** – Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

**TT** – Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

**NTU** – Nephelometric Turbidity Unit, used to measure clarity in drinking water.

**MRDL** – Maximum Residual Disinfectant Level.

**MRDLG** – Maximum Residual Disinfectant Level Goal.

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

**90th Percentile Level:** This is the value obtained after disregarding 10 percent of the samples taken that had the highest levels. For example, in a situation in which 10 samples were taken, the 90th Percentile Level is determined by disregarding the highest result, which represents 10% of the samples. Note: In situations in which only 5 samples are taken,

the average of the two with the highest levels is taken to determine the 90th Percentile Level.

**pCi/l** – PicoCuries per liter (a measure of radioactivity).

**ppm** – Parts per million, which can also be expressed as milligrams per liter (mg/l).

-example: testing to this scale is like testing or looking for one(1) particular drop of liquid in a full 55 gallon barrel.

**ppb** – parts per billion, which can also be expressed as micrograms per liter (ug/l).

-example: 1 ppb testing is testing or looking for one(1) particular second within 11,574 days or 31.7 years.

**N/A** – Not Applicable (does not apply).

**TABLE 1**

Contaminant (units)	MCLG	MCL	Level Found		Typical Source of Contaminant
			Range	Average /Result	
Total Coliform Bacteria	0 Positives	0 Positives	0	0	Naturally occurring from animal species and anthropogenic sources.

**TABLE 2**

Contaminant (units)	MCLG	MCL	Level Found		Typical Source of Contaminant
			Range (2009)	Average /Result*	
Combined Radium (pCi/l) (10/23/2002)	0	5.4	N/A	1.0	Erosion of natural deposits.
Fluoride (ppm)	4.0	4.0	1.0-1.1	1.08	State of Minnesota requires all municipal water systems to add fluoride to the drinking water to promote strong teeth. Erosion of natural deposits. Discharge from fertilizer and aluminum factories.
Haloacetic Acids (HAA5) (ppb)	0	60.0	28-48.8	49.2	By-product of drinking water disinfection.
Nitrate (as Nitrogen) (ppm)	10.0	10.0	N/A	0.1	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
TTHM (Total trihalomethanes) (ppb)	0	80.0	23.9-61.5	60.3	By-product of drinking water disinfection.

\* This is the value used to determine compliance with federal standards. It sometimes is the highest value detected and sometimes is an average of all the detected values. If it is an average, it may contain sampling results from a previous year.

**TABLE 3**

Contaminant (units)	MCLG	MCL	**	***	Typical Source of Contaminant
Turbidity (NTU)	N/A	TT	100%	0.14	Soil runoff.

\*\* Lowest Monthly Percentage of Samples Meeting the Turbidity Limits (100% is the best possible result).

\*\*\* Highest Single Measurement (If more than 5% of the monthly NTU readings exceed 0.50 NTU, then MCL exceedance has occurred).

Turbidity (NTU) is a measure of the clarity of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set by the U.S. Environmental Protection Agency (EPA).

**TABLE 4**

Contaminant (units)	MRDLG	MRDL	****	*****	Typical Source of Contaminant
Chlorine (ppm)	4.0	4.0	1.0-1.2	1.2	Water additive used to control microbes.

Microbes - germs that can make you sick

\*\*\*\*Highest and Lowest Monthly Average.

\*\*\*\*\*Highest Quarterly Average.

**TABLE 5**

Contaminant (units)	MCLG	AL	90% Level	# sites over AL	Typical Source of Contaminant
Copper (ppm) (08/05/2008)	N/A	1.3	nd	0 out of 20	Corrosion of household plumbing systems; Erosion of natural deposits.
Lead (ppb) (08/05/2008)	N/A	15.0	2	0 out of 20	Corrosion of household plumbing systems; Erosion of natural deposits.

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. The City of International Falls is 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 cold water tap until the water is cold, which usually takes 30 seconds to 2 minutes, before using the water for drinking or cooking. It is not recommended to use the hot water from your tap 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 <http://www.epa.gov/safewater/lead>.

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. In the table that follows are the unregulated contaminants that were detected:

**TABLE 6**

Contaminant (units)	Level Found		Typical Source of Contaminant
	Range (2009)	Average/Result	
Sodium (ppm) (5/17/2007)	N/A	19.0	Erosion of natural deposits.
Sulfate (ppm) (5/17/2007)	N/A	2.69	Erosion of natural deposits.

### Compliance with National Primary Drinking Water Regulations

The available sources of drinking water (for 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.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in drinking water provided by public water systems. 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 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 at 1-800-426-4791.

**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 are available from the Safe Drinking Water Hotline at 1-800-426-4791.**

This concludes the City of International Falls 2009 Consumer Confidence Report. In June 2011, the City will prepare the year 2010 Consumer Confidence Report, which will be published in the Journal and made available to the public, upon request. If you have any questions regarding the information contained in this CCR, please contact Bruce Wilson, Chief Water Plant Operator at 1-218-283-2990. Thank you for your interest in this matter.