Water Quality Report - 2009

Water Division

JAMES R. FOUTS, MAYOR

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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

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.

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 (800-426-4791).

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 storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes, petroleum production and gas stations, and urban storm water 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 tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Our water is treated according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. The state and EPA require the City of Warren Division of Water Supply and the Detroit Water Department to test our water on a regular basis to ensure its safety. We have met all the monitoring and reporting requirements for 2009.

Your water comes from the Detroit Water & Sewerage Department Northeast Water Plant located on Eight Mile Road in Detroit. The source water comes from the Detroit River, situated within Lake St. Clair, Clinton River, Detroit River, Rouge River, Ecorse River, in the U.S. and parts of the Thames River, Little River, Turkey Creek and Sydenham watersheds in Canada. Water Plants treat the water to remove several contaminants. They also add disinfectant to protect you against microbial contaminants. The Michigan Department of Environmental Quality in partnership with the U.S. Geological Survey, the Detroit Water and Sewerage Department, and the Michigan Public Health Institute performed a source water assessment in 2004 to determine the susceptibility of potential contamination. The susceptibility rating is on a seven-tiered scale from "very low" to "very high" based primarily on geologic sensitivity, water chemistry, and contaminant sources. The susceptibility of our Detroit River source water intakes were determined to be highly susceptible to potential contamination. However, all four Detroit water treatment plants that use source water from Detroit River have historically provided satisfactory treatment of this source water to meet drinking water standards. DWSD has initiated source-water protection activities that include chemical containment, spill response, and a mercury reduction program. DWSD participates in a National Pollutant Discharge Elimination System permit discharge program and has an emergency response management plan. If you would like more information or for a complete copy of the report, please contact Mary Lynn Semegen of the Detroit Water and Sewerage Department at (313) 926-8102.

Unregulated contaminants are those for which EPA has not established drinking water standards. Monitoring helps the EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants. Beginning in July of 2008 – April 2009, the Detroit Water and Sewerage Department (DWSD) began monitoring quarterly for unregulated contaminants under the Unregulated Contaminant Monitoring Rule 2 (UCMR2). All the UCMR2 contaminants monitored on List 1 and List 2 in 2008 - 2009 were undetected.

Information about lead:
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 Warren 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 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 http://www.epa.gov/safewater/lead.

We will update this report annually and will keep you informed of any problems that may occur throughout the year, as they happen. For more information about safe drinking water, visit the U.S. Environmental Protection Agency at www.epa.gov/safewater/. For more information about your water, questions or comments on the contents of this report, or dates and times of public meetings regarding drinking water quality, please call (586) 759-9200 and ask for David Koss, Assistant Superintendent, Water Division.

The table below and on the next page list all the drinking water contaminants that were detected during the 2009 calendar year. The presence of these contaminants in the water does not necessarily indicate the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done between January 1 and December 31, 2009. The state allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. All of the data is representative of the water quality but some are more than 1 year old.

Key to Detected Contaminants Tables		
Symbol	Abbreviation for	Definition/Explanation
MCLG	Maximum Contaminant Level Goal	The level of contaminant in drinking water below which there is no known or expected risk to health. MCLG allows 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.
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.
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.
ppb	Parts per billion (one in one billion)	The ppb is equivalent to micrograms per liter. A microgram = 1/1000 milligram.
ppm	Parts per million (one in one million)	The ppm is equivalent to milligrams per liter. A milligram = 1/1000 gram.
NTU	Nephelometric Turbidity Units	Measures the cloudiness of water.
ND	Not Detected	
TT	Treatment Technique	A required process intended to reduce the level of a contaminant in drinking water.
AL	Action Level	The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.
HAA5	Haloacetic acids	HAA5 is the total of bromoacetic, chloroacetic, dibromoacetic, dichloroacetic, and trichloroacetic acids. Compliance is based on the total.
TTHM	Total Trihalomethanes	Total Trihalomethanes is the sum of chloroform, bromodichloromethane, dibromochloromethane, and bromoform. Compliance is based on the total.
n/a	Not applicable	

Northeast Water Treatment Plant

2009 Regulated Detected Contaminants Tables

Contaminant	Test Date	Units	Health Goal MCLG	Allowed Level MCL	Level Detected	Range of Detection	Violation Yes/No	Major Sources in Drinking Water
Inorganic Chemicals – Annual Monitoring at Plant Finished Water Tap								
Fluoride	8/31/09	ppm	4	4	0.93	n/a	No	Erosion of natural deposits; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate	8/31/09	ppm	10	10	0.22	n/a	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Barium	6/9/2008	ppm	2	2	0.01	n/a	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Selenium	6/9/2008	ppb	50	50	1	n/a	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Disinfectant Residuals and Disinfection By-Products – Monitoring in Distribution System								
Total Trihalomethanes (TTHM)	Feb-Nov 2009	ppb	n/a	80	23.4	13.1 - 40.9	No	By-product of drinking water chlorination.
Haloacetic Acids (HAA5)	Feb-Nov 2009	ppb	n/a	60	13.1	1.2 - 19.3	No	By-product of drinking water disinfection.
Disinfectant (Total Chlorine) Residual)	Jan-Dec 2009	ppm	MRDGL 4	MRDL 4	0.67	0.52 - 0.74	No	Water additive used to control microbes.

2009 Turbidity – Monitored every 4 hours at Plant Finished Water Tap			
Highest Single Measurement Cannot Exceed 1 NTU	Lowest Monthly % of Samples Meeting Turbidity Limit of 0.3 NTU (minimum 95%)	Violation Yes/No	Major Sources in Drinking Water
0.20 NTU	100%	No	Soil Runoff.
Turbidity is a measure of the cloudiness of water. We monitor it because it is a good indicator of the effectiveness of our filtration system.			

2009 Microbiological Contaminants – Monthly Monitoring in Distribution System					
Contaminant	MCLG	MCL	Highest Number Detected	Violation Yes/No	Major Sources in Drinking Water
Total Coliform Bacteria	1	Presence of Coliform bacteria In 5% of monthly samples.	1 in one month	No	Naturally present in the environment.
E.coli *or fecal* coliform bacteria	0	A routine sample and a repeat sample are total coliform positive, and one is also fecal or E.coli positive.	0 in entire year	No	Human waste and animal fecal waste.

2008 Lead and Copper Monitoring at Customers' Tap								
Contaminant	Test Date	Units	Health Goal MCLG	Action Level AL	90th Percentile Value*	Number of Samples Over AL	Violation Yes/No	Major Sources in Drinking Water
Lead	2008	ppb	0	15	2	1	No	Corrosion of household plumbing system; Erosion of natural deposits.
Copper	2008	ppm	1.3	1.3	0.058	0	No	Corrosion of household plumbing system; Erosion of natural deposits; Leaching from wood preservatives.
*The 90th percentile value means 90 percent of the homes tested have lead and copper levels below the given 90th percentile value. If the 90th percentile value is above the AL additional requirements must be met.								

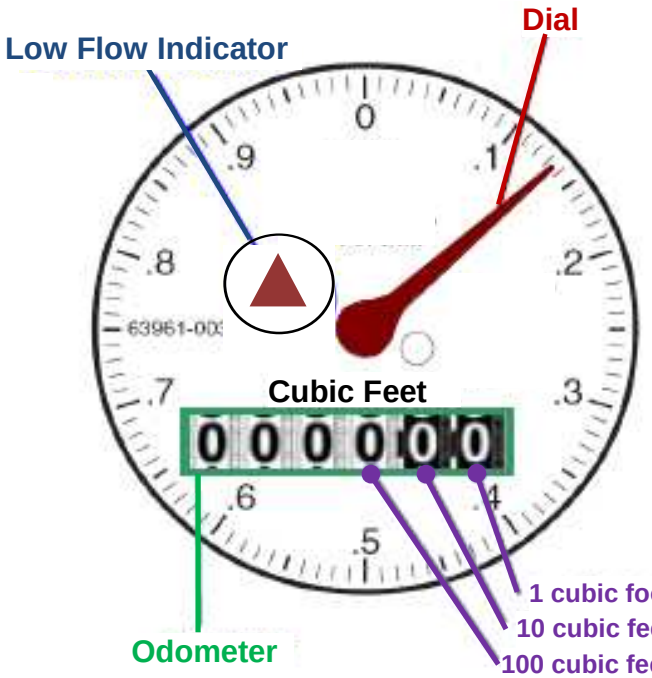
Regulated Contaminant	Treatment Technique	Running Annual Average	Monthly Ratio Range	Violation Yes/No	Typical Source of Contaminant
Total Organic Carbon (ppm)	The Total Organic Carbon (TOC) removal ratio is calculated as the ratio between the actual TOC removal and the TOC removal requirements. The TOC was measured each month and because the level was low, there is no requirement for TOC removal.				Erosion of natural deposits.

2009 Special Monitoring

Contaminant	MCLG	MCL	Level Detected	Source of Contamination
Sodium (ppm)	n/a	n/a	5.22	Erosion of natural deposits.

Information and tables provided by Detroit Water and Sewerage Department (DWSD) ML Semegen.

Know your water meter and how it works!



Your water meter looks similar to this one on the left:

Dial: One full rotation of the dial equals 1 cubic foot of water or 7.48 gallons and advances the far right digit on the odometer.

Low flow or leak indicator: Any water passing through the meter is detected, including small leaks which will register on the odometer

Odometer: The odometer records total water use in a similar way as the odometer of your car records mileage driven. The water meter odometer records water use in cubic feet and displays as follows: The digits from right to left represent 1 cubic foot, 10 cubic feet, 100 cubic feet and so on. Like a car odometer, the water meter odometer cannot be altered.

The City of Warren measures water consumption by units for billing purposes: 1 unit of water billed = 100 cubic feet or 748 gallons. *Example:* 2 units on your water bill = 200 cubic feet or 1,496 gallons of water.

Did you receive an estimated water bill? Help us to help you!

Sometimes water meters cannot be read due to meter stoppage, failure in the remote reader or the meter reader cannot obtain the reading receptacle. You can help us with this problem. In order to correct your bill, we ask that you read your water meter and call us with the reading. It's easy. Locate your water meter. It may be in a laundry room, basement or utility room. Once you have located the meter, write down all six (6) digits on the odometer from left to right. Then call the Water Division at 586 759-9200. Our operators will make the necessary corrections and update your billing records.

City of Warren - Direct payment of water utility bills

The City of Warren offers, free of charge, the option to have your water utility bill automatically deducted from your checking or savings account. You will receive your monthly statement at least 10 days in advance indicating the amount to be deducted. Your automatic payment will be reflected on your next bill and itemized on your checking or savings account statement. For more details, call Customer service at 586-759-9200.

Attention: Water & sewer customers who are delinquent

The City of Warren plans to more aggressively pursue collections in the coming months. Accounts that have been habitually delinquent will be sent reminders to pay past due balances within a reasonable time period. **Those who fail to comply and make no effort to work with the City staff to bring their accounts current will be subject to discontinuance of service.** The City cannot however, continue to function and provide quality services to the citizens and businesses of Warren without adequate funding. It is unfair for the Water and Sewer System to pass the burden of customers who do not pay for services on to those who do. Please pay your bill on time!

We apologize for the inconvenience!

As you may know, there are critical times of the year when the department experiences a magnitude of water main breaks. These breaks can cause loss of water service and damage to property and streets. If we have dug in front of your home or business to repair a water main break, we apologize for the inconvenience and will do everything possible to restore your property to a temporary suitable condition. If at any time you may see some settling of our excavation areas, please call the Water Division immediately. We will send someone out to make the area safe.

Once weather permits, the department will make a reasonable attempt to restore your property to conditions prior to the water main break incident. Once the repairs are complete, we ask that you help secure the area to allow the concrete to cure properly and water the areas where new seed or sod has been placed. If you have any questions about the repairs, please contact the Water Division at 586 759-

Elected Officials

James R. Fouts
Mayor

Paul Wojno
City *Clerk*

Carolyn Kurkowski-Moceri
City Treasurer

City Council

Mary M. Kamp
Council President

Donna Kaczor Caumartin
Council Vice President

Keith Sadowski
Council Secretary

Scott C. Stevens
Asst. Council Secretary

Robert Boccomino
Councilman

Patrick Green
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Mark Liss
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