

2009



Annual Water Quality Report for the City of Grosse Pointe

City of Grosse Pointe
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Grosse Pointe, MI 48230

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Internet Resources

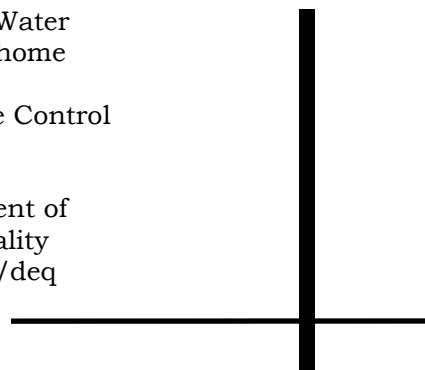
City of Grosse Pointe
www.grossepointecity.org

City of Grosse Pointe Farms
www.grossepointefarms.org

U.S. EPA Office of Water
www.epa.gov/watrhome

Centers for Disease Control
www.cdc.gov

Michigan Department of
Environmental Quality
www.michigan.gov/deq



Report Overview

This report covers the drinking water quality for the City of Grosse Pointe for the calendar year 2009. This information is a snapshot of the quality of the water that we provided to you in 2009. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards.

The City of Grosse Pointe is proud to report that the water you drink is safe. All detected contaminants fall well below the water quality standards set by the EPA. The City of Grosse Pointe Farms, the City of Grosse Pointe's water supplier, has a history of great performance. The American Water Works Association, Michigan Section bestowed our drinking water with the regional Best Tasting Water Award for 1995 and 1998. Additionally, our drinking water system received the *American Water Works Association Landmark Award* in 1994 for providing safe drinking water to our customers for over 50 years!

- **Contaminants and their presence in water:** 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 EPA's Safe Drinking Water Hotline (800-426-4791)
 - **Sources of drinking water:** The sources of drinking water (both tap water and bottles water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Our water comes from Lake St. Clair. The source water assessment has been completed for our water system. Our source water assessment has a classification of High Susceptibility. To review the Source Water Assessment, please contact Grosse Pointe Farms at 313-885-6600.
 - **Vulnerability of Sub-populations:** 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 systems 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).
 - **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 Grosse Pointe 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 800-426-4791 or at <http://www.epa.gov/safewater/lead>.
- In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which provide the same protection for public health.
- 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 storm water 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 and residential uses.
 - ♦ **Radioactive contaminants**, which are naturally occurring or be the result of oil and gas production and mining activities.
 - ♦ **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.

Contamination from Cross-Connections

Cross-connections that could contaminate drinking water distribution lines are a major concern. A cross-connection is formed at any point where a drinking water line connects to equipment (boilers), systems containing chemicals (air conditioning systems, fire sprinkler systems, irrigation systems or water sources of questionable quality). Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking water line (backpressure). Contamination can also occur when the pressure in the drinking water line drops due to fairly routine occurrences (main breaks, heavy water demand), causing contaminants to be sucked out from the equipment and into the drinking water line (backsiphonage).

Outside water taps and garden hoses tend to be the most common sources of cross-connection contamination at home. The garden hose creates a hazard when submerged in a swimming pool or when

attached to a chemical sprayer for weed killing. Garden hoses that are left lying on the ground may be contaminated by fertilizers, cesspools, or garden chemicals. Improperly installed valves in your toilet could also be a source of cross-connection contamination.

Community water supplies are continually jeopardized by cross-connections unless appropriate valves, known as backflow prevention devices, are installed and maintained. We have surveyed all industrial, commercial and institutional facilities in the service area to make sure that all potential cross-connections are identified and eliminated or protected by a backflow preventer. We also inspect and test each backflow preventer to make sure that is providing maximum protection.

For more information, visit the website of the American Backflow Prevention Association (www.abpa.org) for a discussion on current issues.

Table Definitions (Table on page 4)

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 contamination.

NA: Not Applicable

ND: Not detected

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water.

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).

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

Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. Meetings take place at City Hall, 17147 Maumee, Grosse Pointe, MI. Meeting times are available on our website at www.grossepointecity.org or you can call (313) 885-5800 or Grosse Pointe Farms Water Department at (313) 885-6600 for additional information.

We will update this report annually and will keep you informed of any problems that may occur throughout the year, as they happen. Copies are available at City of Grosse Pointe, 17147 Maumee, Grosse Pointe. Questions regarding your water or this report please contact the Grosse Pointe Water Dept. at 313-417-1181 or Grosse Pointe Farms Water Dept. at 313-885-6600.

EPA Responsibility

Under the Safe Drinking Water Act (SDWA), the U.S. Environmental Protection Agency (U.S. EPA) is responsible for setting national limits for hundreds of substances in drinking water and also specifies various treatments that water systems must use to remove these substances. Each system continually monitors for these substances and reports their findings to the U.S. EPA. The U.S. EPA uses this information to ensure that consumers are receiving clean water.

REGULATED SUBSTANCES

SUBSTANCE (UNITS)	YEAR SAMPLED	MCL (MRDL)	MCLG (MRDLG)	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Barium (ppm)	2004	2	2	0.02	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorine (ppm)	2009	(4)	(4)	0.83	0.63-1.07	No	Water additive used to control microbes
Nitrate (ppm)	2009	10	10	0.5		No	Runoff from fertilizer use. Leaching from septic tanks and sewage. Natural erosion.
Fluoride (ppm)	2009	4	4	1.10	NA	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAA5] (ppb)	2009	60	NA	12.3	8-23	No	By-product of drinking water disinfection
Selenium (ppb)	2004	50	50	2	NA	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
TTHMs [Total Trihalomethanes] (ppb)	2009	80	NA	32	15-43	No	By-product of drinking water disinfection
Turbidity ¹ (NTU)	2009	TT	NA	0.26	0.09-0.26	No	Soil runoff
Turbidity (percent samples meeting standard)	2007	TT	NA	100%	NA	No	Soil runoff

Total Organic Carbon (TOC) Removal ratio is calculated as the ratio between the actual TOC removal and the ROC removal requirements. The TOC was measured quarterly and because the level was low, there is no requirement for TOC removal.

2008 Microbial Contaminants—Monthly Monitoring of the Distribution System

Contaminant	MCLG	MCL	Highest Number Detected	Violation Yes/No	Major sources in drinking water
Total coliform bacteria	0	Presence of coliform bacteria >5% of monthly samples	0%	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%	No	Naturally present in the environment

Tap water samples were collected for lead and copper analyses from 10 homes throughout the service area

SUBSTANCE (UNITS)	YEAR SAMPLED	ACTION LEVEL	MCLG	AMOUNT DETECTED (90TH % TILE)	HOMES ABOVE ACTION LEVEL	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2007	1.3	1.3	.423	0	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	2007	15	0	4	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

*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.

UNREGULATED SUBSTANCES

SUBSTANCE (UNITS)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Sodium (ppm)	2008	11	NA	Erosion of natural deposits

¹ Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.