

# CITY OF HIGHLAND PARK

## 2007 WATER QUALITY REPORT

The U.S. Environmental Protection Agency (EPA) and the Michigan Department of Environmental Quality (MDEQ) require us to annually report to you the quality of your drinking water. While a statutory requirement, Highland Park considers it a priority to inform you, our customers, about the safety of the water you drink and the importance of protecting our water supply. Last year, as in years past, your tap water met all EPA and state drinking water health standards.

### What is the Source of our Water?

The City of Highland Park draws water from Lake St. Clair at an intake station shared with the City of Grosse Pointe Farms. The raw water is pumped back to the City of Highland Park's treatment plant located at Dequindre Avenue and the Davison Access Drive. At the treatment plant, a variety of treatment processes occur. For example, water is settled and filtered for impurities. Chlorine is added to disinfect the water before it reaches your tap. Other chemicals also are added that control contaminants such as lead and copper.

### Substances that May be in Drinking Water

To ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration (FDA) 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.

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. 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 urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

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.

More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

## **INFORMATION ABOUT YOUR DRINKING WATER**

### **SOURCE WATER ASSESSMENT**

Your source water is drawn from an intake structure located in Lake St. Clair, 2500 feet from the shore and is shared with Grosse Pointe Farms Water Supply. The State performed an assessment of our source water in 2003 to determine the susceptibility or the relative potential of contamination.

Our source water has been determined to have high susceptibility. This determination does not imply poor water quality; rather, it signifies the system's potential to become contaminated. Our Water Treatment Plant has, historically, effectively treated this source water to meet drinking water standards. If you would like to know more about the report, please contact Antoine Pogue, Water Operations Director, at (313) 883-4479.

#### **PUBLIC PARTICIPATION:**

The City Council meets every third Monday of each month. For further information, please call (313) 252-0050 extension 203.

## Health Concerns

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer and 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. The EPA and Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

## Lead in 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.

City of Highland Park 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>.

## KEY to Detected Contaminants Tables

- 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.
- 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.
- 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.
- NTU:** Nephelometric Turbidity Units
- NA:** Not Applicable or Not Available
- ppm:** Parts Per Million or Milligrams Per Liter (mg/l)
- ppb:** Parts Per Billion or Micrograms Per Liter (ug/l)
- TTHM:** Total Trihalomethanes  
Total Trihalomethanes is the sum of chloroform, bromodichloromethane, dibromochloromethane, and bromoform.  
Compliance is based on the total.

## City of Highland Park Water System 2007 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
<b>Inorganic Chemicals – Monitoring at Plant Finished Water Tap</b>								
Fluoride	08/14/07	ppm	4	4	0.70	NA	No	Erosion of natural deposits; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Barium	09/13/04	ppm	2	2	0.017	N/A	No	Discharge of drilling wastes; Discharge of metal refineries; Erosion of natural deposits
<b>Disinfectant Residuals and Disinfection By-Products – Monitoring in Distribution System</b>								
Total Trihalomethanes (TTHM)	Feb-Nov 2007	ppb	NA	80	19.8	6.8-36	No	By-product of drinking water chlorination
Haloacetic Acids (HAA5)	Feb-Dec 2007	ppb	NA	60	16.8	8-16	No	By-product of drinking water disinfection
Disinfectant (chlorine) Residual (ppm)	Jan-Dec 2007	ppm	MRDGL 4	MRDL 4	0.93	0.68-0.99	No	Water additive used to control microbes

### 2007 Turbidity

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
0.26 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.

### 2007 Microbiological Contaminants – Monthly Monitoring in 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	in one month 0	No	Naturally present in the environment.
<i>E. coli</i> or fecal coliform bacteria	0	A routine sample and a repeat sample are total coliform positive, and one is also fecal or <i>E. coli</i> positive.	entire year 0	No	Human waste and animal fecal waste.

### Lead and Copper Monitoring at Customers' Tap

Contaminant	Test Date	Units	Health Goal MCLG	Action Level AL	90 <sup>th</sup> Percentile Value*	Number of Samples Over AL	Violation yes/no	Major Sources in Drinking Water
Lead	Jun-Sep 2007	ppb	0	15	2	0	No	Corrosion of household plumbing system; Erosion of natural deposits.
Copper	Jun-Sep 2007	ppb	1300	1300	0	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 Contaminants	Test Date	Units	Health Goal MCLG	Allowed Level MCL	Level Detected	Violation Yes/No	Major Sources in Drinking Water
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 quarterly and because the level was low, there is no requirement for TOC removal.					No	Erosion of natural deposits

### 2007 Special Monitoring

Contaminant	MCLG	MCL	Level Detected	Source of Contamination
Sodium (ppm)	NA	NA	6	Erosion of natural deposits

Unregulated contaminants are those for which EPA has not established drinking water standards. Monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.