Water Quality Report for 2012

Village of Plainfield Source Water Assessment Summary

The Village of Plainfield purchases Lake Michigan Water from the City of Chicago. We want our valued customers to be informed about their water quality. If you would like to learn more, please attend any of the Village's regularly scheduled board meetings held at 7:00 p.m. on the first and third Monday of each month, at the Village Hall, 24401 Lockport Street, in Downtown Plainfield. If you have questions or concerns regarding this information, please contact the Water Division at (815) 436-3577.

To view a summary version of the completed Source Water Assessments, including: importance of source water; susceptibility to contamination determination; and documentation/recommendation of source water protection efforts, you may access the Illinois Environmental Protection Agency (IEPA) web site at http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl.

The Illinois Environmental Protection Agency (IEPA) considers all surface water sources of the community water supply to be susceptible to potential pollution problems. The very nature of surface water allows contaminants to migrate into the intake with no protection only dilution. This is the reason for mandatory treatment of all surface water supplies in Illinois. Chicago's offshore intakes are located at a distance that shoreline impacts are not usually considered a factor on water quality. At certain times of the year, however, the potential for contamination exists due to wet-weather flows and river reversals. In addition, the placement of the crib structures may serve to attract waterfowl, gulls, and terns that frequent the Great Lakes area, thereby concentrating fecal deposits at the intake and thus compromising the source water quality. Conversely, the shore intakes are highly susceptible to storm water runoff, marinas, and shoreline point sources due to the influx of groundwater to the lake.

Water Conservation

The Village of Plainfield's year round ordinance for outside water use/lawn sprinkling is as follows:

- Lawn sprinkling for even numbered addresses on even numbered calendar days is permitted between the hours of 6-10 am and/or 6-10 pm.
- Lawn sprinkling for odd numbered addresses on odd numbered calendar days is permitted between the hours of 6-10 am and/or 6-10 pm.
- The watering of gardens, trees, shrubs, and flowers (by use of a handheld hose or watering can) is permitted anytime.

If there are any questions concerning these water restrictions, please call the Public Works Department at (815) 436-3577.

Educational Statement for Plainfield's Drinking Water

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, inorganic contaminants, pesticides and herbicides, organic chemical contaminants, and radioactive contaminants.

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 at (800) 426-4791. In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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.

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 compounds associated with service lines and home plumbing. The Village of Plainfield 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 are available from the Safe Drinking Water Hotline and online at http://www.epa.gov/safewater/lead.

Violation Table for Lead and Copper Rule

The lead and copper rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.

Violation Type	Violation Begin	Violation End
None		

Water Quality Data Table Footnotes & Definitions

Turbidity: Turbidity is a measurement of the cloudiness of the water. We monitor it because it is a good indicator of water quality and the effectiveness of the filtration system and disinfectants.

Fluoride: Fluoride is added to the water supply to help promote strong teeth. The Illinois Department of Public Health recommends an optimal range of 0.9 mg/l to 1.2 mg/l.

Sodium: There is not a state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult a physician about the level of sodium in the water.

Radium 226 and 228: The naturally occurring radium is only present in our three (3) backup wells. These wells are for emergency use only. A routine sample is taken every month as required by the EPA.

Gross Alpha: The naturally occurring gross alpha is only present in our three (3) backup wells. These wells are for emergency use only. A routine sample is taken every month as required by the EPA.

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers additional treatment measures by the public water system.

Maximum Contaminant Level (MCL): 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.

Maximum Contaminant Level Goal (MCLG): 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.

Maximum Residual Disinfectant Level (MRDL): The high level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): 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.

ppb: Parts Per Billion. One part per billion is comparable to one penny in $10,000,000.

ppm: Parts Per Million. Equivalent to milligrams per liter. One part per million is comparable to one penny out of $10,000.

pCi/l: Picocuries per liter.

ug/l: Unigrams per liter.

2012 Test Data

Lake Michigan Test Results

Substance	Highest level or 90th percentile		Range	Units	MCLG	MCL Action Level	Action Level Violation?		Possible source
Barium	0.0204		0.0194-0.0204	ppm	2	2	No		Drilling waste discharge.
Fluoride	0.85		0.84-0.85	ppm	4	4	No		Erosion of natural deposits.
Nitrate-Nitrite	0.34		0.34-0.34	ppm	10	10	No		Run off from fertilizer use; leaching from septic tanks; erosion of natural deposits.
Nitrate as N	0.34		0.34-0.34	ppm	10	10	No		Run off from fertilizer use; leaching from septic tanks; erosion of natural deposits.
Sodium	7.07		6.88-7.07	ppm	n/a	n/a	No		Erosion of natural deposits.

Village of Plainfield Distribution Test Results

Disinfectants & Disinfection By-products	Highest level detected	Collection date	Range of levels detected	Units	MCLG	MCL	Violation		Likely source of contamination
Chlorine	0.5	2012	0.4475-0.5425	ppm	MRDLG=4	MRLD=4	No		Water additive used to control microbes.
Haloacetic Acids (HAA5)	13	2012	1.4-16.1	ppb	No goal for the total	60	No		By-product of drinking water chlorination.
Not all sample results may have been used for calculating the highest level detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.									
Total Trihalomethanes (TThm)	40	2012	20-49.4	ppb	No goal for the total	80	No		By-product of drinking water chlorination.
Inorganic Contaminants	**Highest level detected**	**Collection date**	**Range of levels detected**	**Units**	**MCLG**	**MCL**	**Violation**		**Likely source of contamination**
Barium	0.0214	2011	0.0214-0.0214	ppm	2	2	No		Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride	1.18	2011	1.18-1.18	ppm	4	4	No		Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Iron*	0.143	2011	0.143-0.143	ppm		1	No		This contaminant is not currently regulated by the USEPA. However, the State of Illinois regulates it. Erosion of natural deposits.
Sodium*	86	2011	41-86	ppm			No		Erosion from naturally occurring deposits; used in water softener regeneration.
Radioactive Contaminants	**Highest level detected**	**Collection date**	**Range of levels detected**	**Units**	**MCLG**	**MCL**	**Violation**		**Likely source of contamination**
Combined Radium 226/228	11.7	2011	11.7-11.7	pCi/l	0	5	No		Erosion of natural deposits.
Gross Alpha excluding radon and uranium	31.9	2011	31.51-31.9	pCi/l	0	15	No		Erosion of natural deposits
Uranium	0.5811	2011	0.5811-0.5811	ug/l	0	30	No		Erosion of natural deposits.
Lead and Copper	**90th percentile**	**Date sampled**		**Units**	**MCLG**	**Action Level (AL)**	**Violation**	**# sites over AL**	**Likely source of contamination**
Copper	0.156	2012		ppm	1.3	1.3	No	0	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems.

*Iron and Sodium: These substances are naturally occurring and presently do not have ideal goal levels. The numbers are provided for informational purposes. Iron is not regulated by the USEPA but the State of Illinois has a mcl for water supplies serving a population of 1000 or more.