Village of Wheeling

2007 Annual Drinking Water Quality Report

January 1, 2007 to December 31, 2007

WHAT IS THE WATER QUALITY REPORT?

The Water Quality Report, also known as the Consumer Confidence Report, is an annual report required by the Safe Drinking Water Act (SDWA) that informs consumers on the quality of the Village's drinking water as well as the source of their drinking water.

The Village of Wheeling receives water from Lake Michigan through the Northwest Water Commission, which in turn receives water thorough the City of Evanston. The Village of Wheeling is committed to providing all consumers with safe and reliable drinking water.

WHO CAN I CONTACT FOR INFORMATION ABOUT THIS REPORT?

Please contact Roel Martinez, Water Field Supervisor, at 847-229-4805.

Este informe contiene informacion muy importante sobre el agua que usted bebe. Traduzcalo o hable con alguien que lo entienda bien.

SOURCES OF DRINKING WATER

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and groundwater 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 pickup substances resulting from the presence of animals or from human activity.

Possible contaminants present in water include:

- Microbial contaminants, such as viruses and bacteria, which can come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife;
- Inorganic contaminants, such as salts and metals, which may be naturally occurring or result from urban storm water run-off, industrial or domestic wastewater discharges, oil and gas production, mining or farming;
- Pesticides or herbicides, which may come from a variety of sources such as agriculture, urban storm water run-off 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 storm water run-off and septic systems;
- Radioactive contaminants which can be naturally occurring or be the result of oil and gas production and mining activities.

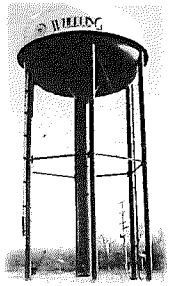
Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency (EPA) Safe Drinking Water Hotline at 800-426-4791.

In order to ensure that tap water is safe to drink, 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 protections 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).

INTERESTING FACTS ABOUT WATER (H2O)....

* 75% of the Earth is covered with water.
* In the US, the average total home use of water per person is about 50 gallons per day.
* A pineapple is made up of about 80% water.
* It takes 12-20 gallons of water to run an automatic dishwasher for *one* cycle.
* A typical garden hose can deliver 50 gallons of water in five minutes.
* Sources of water pollution include fertilizers, oil spills, agriculture runoff, sewage, storm water, and industrial wastes.



SOURCE WATER ASSESSMENT

The Illinois EPA considers all surface water sources of community water supply to be susceptible to potential pollution problems. The very nature of surface water allows contaminants to migrate into the intakes with no protection only dilution, which is the reason for mandatory treatment for all surface water supplies in Illinois. All three of Evanston's intakes are located far enough offshore that shoreline impacts are not considered a factor on water quality. However, at certain times of the year the potential for contamination exists due to the proximity of the North Shore Channel and wet-weather flows. In addition, the proximity to a major shipping land adds to the susceptibility of these intakes. Water supply officials from Evanston are active members of the West Shore Water Producers Association. Coordination regarding water quality situations (i.e. spills, tanker leaks, exotic species, etc) is frequently discussed during the association's quarterly meetings. Lake Michigan, as well all the great lakes, has many different organizations and associations that are currently working to either maintain or improve water quality. Since the predominant land use within Illinois' boundary of Lake Michigan watershed is urban, a majority of watershed protection activities in this document is aimed at this purpose.

2007 Regulated Contaminants Detected

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. Positive	Fecal Coliform or E.coli Maximum Contaminant Level	Total No. of Positive E.coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	5% of monthly samples are positive	2	Fecal coliform or E.coli MCL: a routine sample and a repeat sample are total coliform positive, and one is fecal coliform or E.coli positive		No	Naturally present in the environment

Lead and Copper; Date Sampled: 12/31/2005

Action Level (AL): Concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Action Level Goal (ALG): Llevel of contaminant in drinking water below which there is not known or expected risk to health. ALG's allow for a margin of safety.

Lead MCLG	Lead Action Level (AL)	Lead 90th Percentile	No. of Sites Over Lead AL	Copper MCLG	Copper Action Level (AL)	Copper 90th Percentile	# of Sites Over Copper AL	Likely Source of of Contamination
0	15 ppb	<5 ppb	0	1.3 ppm	1.3 ppm	<0.100 ppm	0	Corrosion of household plumbing systems; erosion of natural deposits

Regulated Contaminants

Maximum Contaminant Level (MCL): Highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the Maximum Contaminant Level Goal as feasible using the best available treatment technology.
Maximum Contaminant Level Goal (MCLG): Level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for margin of safety.
Mg/l: milligrams per litre or parts per million – or one ounce in 7,350 gallons of water.
Ug/l: micrograms per litre or parts per billion – or one ounce in 7,350,000 gallons of water.
N/A: not applicable.
Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.
Maximum Residual Disinfectant Level (MRDL): Highest level of disinfectant allowed in drinking water.
Maximum Residual Disinfectant Level Goal (MRDLG): Level of disinfectant in drinking water below which there is no known or expected risk to health. MRDLG's allow for margin of safety.
Turbidity: Mmeasurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our system and disinfectants.
Note: The State of Illinois requires monitoring of certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of this data may be more than one years old.

Disinfectant & Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contaminant
TTHMs Total (Total Trihalomethanes)	10/09/07	34.0	17.8-34.0	N/A	80	ppb	No	By-product of drinking water chlorination
Total Haloacetic Acids (HAA5)	10/09/07	18.0	9.3-18.0	N/A	60	ppb	No	By-product of drinking water, chlorination
Chlorine	12/31/07	0.9 mg/L	0.84-0.86	MRDLG=4	MRDL=4	ppm		Water additive used to control microbes

2007 Evanston Water Quality Data
Detected Substances

Substance	Goal	Highest Allowed (MCL)	Evanston Result	Evanston Minimum	Evanston Maximum	Source of Contamination
Turbidity (Cloudiness)	N/A	TT=Monitored by % exceeding 0.3 NTU and max allowed is 1 NTU	98.9% of samples meet 0.3 NTU	0.06	0.46	Soil Runoff
Fluoride (ppm)	4	4	1.0	0.90	1.13	Added to promote dental health
Sodium (ppm)	N/A	N/A	6.8	6.8	6.8	Runoff and natural erosion
Lead (ppb)	N/A	Action Level=15	<5	<5	5.8	Corrosion of household plumbing
Copper (ppm)	N/A	Action Level=1.3	0.13	<0.1	0.58	Corrosion of household plumbing
Disinfection By-Products	**Goal (MCLG)**	**Highest Allowed ((MCL)**	**Evanston Result**	**Evanston Minimum**	**Evanston Maximum**	**Source of Contamination**
Total Trihalomethanes(ppb)	N/A	80	36.9	16.5	36.9	By-product of drinking chlorination
Total Haloacetic Acids (ppb)	N/A	60	10.0	7.3	10.0	By-product of drinking chlorination
Chlorine	N/A	4 MRLDG	0.4	0.3754	0.5395	Water additive used to control microbes

Total Organic Carbon: The total percentage of total organic carbon (TOC) removal was measured each month and the system met all TOC requirements set by IEPA, unless a TOC violation is noted in the violation section.

2007 Water Quality Data – Evanston, Illinois: Non-Detected Contaminants

Radioactive Contaminants	MCLG	MCL	Level Found
Alpha-Emitters (Pci/l)	0	15	nd
Radium-228 (Pci/l)	0	1	nd
Inorganic Contaminants			
Arsenic (ppb)	0	10	nd
Barium (ppb)	2	2	nd
Cadmium (ppb)	5	5	nd
Chromium (ppb)	100	100	nd
Cyanide	200	200	nd
Iron (ppb)	n/a	1000	nd
Mangnaese (ppb)	n/a	150	nd
Mercury, Organic (ppb)	2	2	nd
Nickel	n/a	100	nd
Selenium	50	50	nd
Sulfate			nd
Antimony (ppb)	6	6	nd
Beryllium (ppb)	4	4	nd
Thallium (ppb)	0.5	2	nd
Zinc (ppb)	n/a	5000	nd
Nitrate as N (NO3)	10	10	nd
Nitrite as Nitrogen (ppm)	1	1	nd
Copper (ppm)	0	AL=1.3	nd
Lead (ppb)	0	AL=15	nd
Synthetic Organic Contaminants			
Endrin (ppb)	2	2	nd
BHC-Gamma (Lindane)	200	200	nd
Methoxychlor (ppb)	40	40	nd
Toxaphene (ppb)	0	3	nd
Diquat (ppb)	20	20	nd
Dalapon (ppb)	200	200	nd
Endothall (ppb)	100	100	nd
Glyphosphate	0.7	0.7	nd
Di(2-ethlhexyl)adipate (ppb)	400	400	nd
Oxamyl (Vydate) (ppb)	200	200	nd
Simazine	4	4	nd
Di(2-ethylhexyl)phalate	0	6	nd
Pichloram (ppb)	500	500	nd
Dinoseb (ppb)	7	7	nd
Hexachlorocyclopentadiene (ppt	50	50	nd
Aldicarb sulfoxide	n/a	n/a	nd
Aldicarb sulfone	n/a	n/a	nd
Carbofurna (ppb)	40	40	nd
Aldicarb	n/a	n/a	nd
Atrazine (ppb)	3	3	nd
Alachlor (Lasso) (ppb)	0	2	nd
Heptachlor	0	100	nd
Heptachlor Epoxide (ppt)	0	100	nd

Synthetic Organic Contaminants	MCLG	MCL	Level Found
Dieldrin	n/a	1	nd
2,4-Dichloro-phenoxyacetic Acid (2,4-D) (ppt	10	10	nd
2,4,5-TP (Silvex) (ppb)	50	50	nd
Hexachlorobenzene (ppb)	0	1	nd
Benzo (A) Pyrene (ppb)	0	200	nd
Pentachlorophenol (PCP) (ppb)	0	1	nd
Aldrin (ppb)	n/a	1	nd
Polychlorinated Biphenyls (PCB) (ppb)	0	500	nd
DDT Total	n/a	n/a	nd
1,2 Dibromo-3-Chloropropane	0	0.2	nd
Ethylene Dibromide (EDB) (ppb)	0	50	nd
Chloradane	0	2	nd
Additional Phase II Unregulated Chemicals			
Butachlor	n/a	n/a	nd
Carbaryl	n/a	n/a	nd
Dicamba (ppb)	n/a	n/a	nd
3-Hydroxycarbofuran (ppb)	n/a	n/a	nd
Methomyl	n/a	n/a	nd
Metolachlor (ppb)	n/a	n/a	nd
Metribuzin (ppb)	n/a	n/a	nd
Propachlor (ppb)	n/a	n/a	nd
Volatile Organic Chemicals			
Methyl Tert-Butyl Ether (MTBE) (ppb)	n/a	n/a	nd
1,2,4-Trichlorobenzene (ppb)	70	70	nd
Cis-1,2-Dichloroethylene (ppb)	70	70	nd
Xylenes (ppm)	10	10	nd
Dichloromethane (ppb)	0	5	nd
O-Dichlorobenzene (ppb)	600	600	nd
P-Dichlorobenzene (ppb)	75	75	nd
1,1-Dichloroethylene (ppb)	7	7	nd
Tran-1,2-Dichloroethylene (ppb)	100	100	nd
1,2-Dichloroethane (ppb)	0	5	nd
1,1,1-Trichloroethane (ppb)	200	200	nd
Carbon Tetrachloride (ppb)	0	5	nd
1,2-Dichloropropane (ppb)	0	5	nd
Trichloroethlene (ppb)	0	5	nd
1,1,2-Trichloroethane (ppb)	3	5	nd
Tetrachloroethylene (ppb)	0	5	nd
Monochlorobenzene	100	100	nd
Benzene (ppb)	0	5	nd
Toluene (ppm)	1	1	nd
Ethylbenzene (ppb)	700	700	nd
Styrene (ppb)	100	100	nd
THM/HAAs			
Bromofrom (ppb)	n/a	n/a	nd
Monochloracetic Acid (ppb)	n/a	n/a	nd
Monobromoacetic Acid (ppb)	n/a	n/a	nd