Village of Wauconda 2013 Consumer Confidence Report

The Village of Wauconda is committed to providing residents and businesses throughout the Village with top quality water service. The Water Quality Report is distributed annually to inform our customers that we are meeting all water quality guidelines set forth by the United States Environmental Protection Agency.

We want you, our valued customers, to be informed about the water quality. Should you have any questions about this report, your water system, or if you would like additional information, please contact Mr. Alex Pryde, Superintendent of Public Works at (847) 526-9610.

If you would like to learn more, please feel free to attend a regularly scheduled Village Board Meeting. Village Board Meetings are held at 7:00 p.m. on the 1st and 3rd Tuesday of each month at the Village Hall, 101 North Main Street (847) 526-9600.

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

Water Sources and Treatment

The source(s) of the water that you are receiving depends upon which wells are currently utilized, system demands, and your location. The eight wells supplying Village residents are supplied by four groundwater aquifers. The aquifers used by the Village are the Sand and Gravel, Silurian Dolomite, Ironton-Galesville, and St Peter. These wells pump water from their aquifers to a water treatment plant designed to treat the type of water being received.

Water from four of our deep wells is treated with ion-exchange softening in order to reduce to IEPA drinking water standards the levels of barium and/or gross-alpha emitters and radium. Higher levels of these parameters are often found in deep sandstone formations such as those in northern Illinois. In order to remove excess iron, water at the four shallow wells is treated with iron-removal filtration. Our water is also treated with chlorine for disinfection purposes; polyphosphate for the purpose of lead and copper corrosion control; and where necessary, fluoride, which is added to comply with state regulations for optimal dental health. Some wells already have an optimal fluoride level. After water treatment, the water is pumped through our piping system to storage tanks, hydrants, and to your home or place of business

A source water assessment for our supply was completed by the Illinois EPA. The Agency determined that the Wauconda Community Water Supply's source water was not susceptible to contamination. This determination was based upon a number of criteria including a 1993 well site survey, reviews of water sample analyses and available hydrogeologic data on the wells. A copy of this source water assessment is available at the Public Works facility at 302 Slocum Lake Road. This assessment is also available in summary form on the Internet at http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl.

Drinking Water and Health Concerns

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 USEPA'S Safe Drinking Water Hotline **(1-800-426-4791)**.

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. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the USEPA'S Safe Drinking Water Hotline **(1-800-426-4791)**.

Typical Sources of Possible Contaminants

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 can dissolve naturally occurring minerals and radioactive materials and pick up substances resulting from the presence of animals or human activity.

Possible contaminants consist of:

- **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 may 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, urban storm water runoff and residential uses;
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban storm water runoff, and septic systems.
- **Radioactive contaminants**, which may be naturally occurring or be the result of oil and gas production and mining activities.

Water Quality Monitoring Requirements

The type and frequency of monitoring required is determined by the type of source water, size of the system, potential for contamination, and historical results of water analysis. If a compound is not likely to be detected or historically has never been detected, the Illinois EPA may issue a monitoring exception for that compound. Also, some monitoring requirements are specifically applicable to ground water, whereas others apply exclusively to surface water.

Table of 2013 Monitoring Results

In order to ensure that tap water is safe to drink, USEPA prescribes regulations that 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.

TABLE OF COMPLIANCE MONITORING DETECTIONS

The following table summarizes the results of our water quality analysis for IEPA compliance purposes. Only those contaminants that are subject to monitoring and were detected in compliance monitoring are listed. A listing of non-detected contaminants is available, upon request, at the Public Works facility. Please see the following page for a list of Table Abbreviations & Definitions.

Contaminant (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Date	Typical Sources of Contamination
Disinfectants & Disinfection By-Products							
Chlorine (ppm free available chlorine)	MRDLG = 4	MRDL = 4	.3	0.02 – 1.1	**None**	2013	Water additive used to control microbes.
Haloacetic Acids (HAA5) (ppb)	n/a	60	1.7	0-1.7	**None**	2013	By product of drinking water chlorination
Total trihalomethanes (ppb)	n/a	80	9.75	2.353-9.75	**None**	2013	By-product of drinking water chlorination.
Inorganic Contaminants							
Barium (ppm)	2	2	0.92	0.075- 0.920	**None**	2012	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride (ppm)	4	4	1.1	0.719- 1.1	**None**	2012	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer & aluminum factories.
Lead and Copper							
Lead (ppb)	ALG = 0	AL=15	8.78	3 exceeding AL	**None**	2012	Corrosion of household plumbing systems. Erosion of natural deposits.
Copper (ppm)	ALG =1.3	AL=1.3	1.13	0 exceeding AL	**None**	2012	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
Radioactive Contaminants							
Beta/Photon Emitters (PCi/L)	0	50 (Footnote)	10.6	10.6 – 10.6	**None**	2006	Decay of natural and man-made deposits
Combined Radium (pCi/L)	0	5	1.0	0.43- 3.1	**None**	2013	Erosion of natural deposits
Gross Alpha (pCi/L)	0	15	4.0	3.23-4.8	**None**	2011	Erosion of natural deposits
Uranium (ppb)	0	30	1.192	1.192 –1.192	**None**	2006	Erosion of natural deposits
State Regulated Contaminants							
Iron (ppb)	n/a	1000	89	39-260	**None**	2012	Erosion from naturally occurring deposits.
Manganese (ppb)	n/a	150	10	1.9 - 24	**None**	2012	Erosion from naturally occurring deposits.
Sodium (ppm)	n/a	n/a	110	10-110	**None**	2012	Erosion of naturally occurring deposits; Used as water softener.
Unregulated Contaminants							
Sulfate (ppm)	n/a	n/a	100	5.3-100	**None**	2012	Erosion from naturally occurring deposits.

Table Abbreviations & Definitions

The table contains scientific terms and measures, some of which may require explanation.

- **Action Level (AL)**: The concentration of a contaminant that triggers treatment or other required actions by the water supply.
- **Action Level Goal (ALG)**: The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.
- **Level Found**: In most cases, this is the highest level of a contaminant found at the entry point (water treatment plant). In some cases it represents an average of results from that entry point. For lead and copper, this level is the 90th percentile value from our most recent first-draw sample monitoring in a select group of 60 homes. For chlorine, it is the highest running yearly average of monthly averages for residuals measured during the collection of routine microbiological distribution system samples.
- **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 highest level of disinfectant allowed in drinking water.
- **Maximum Residual Disinfectant Level Goal (MRDLG)**: The level of disinfectant in drinking water below which there is no known or expected risk to health. MRDLG's allow for a margin of safety.
- **mrem/year**: millirems per year (a measure of radiation absorbed by the body)
- **n/a:** Not applicable
- **Not Detectable (ND)**: Not detectable at testing limits.
- **pCi/L**: picocuries per liter (a measure of radioactivity)
- **ppb**: parts per billion or micrograms per liter - or one ounce in 7,350,000 gallons of water.
- **ppm**: parts per million or milligrams per liter - or one ounce in 7,350 gallons of water.
- **Range of Detections**: Except for lead and copper or chlorine, this is the range from lowest to highest of all individual samples collected during 2011 or during the most recent compliance monitoring prior to 2012. For chlorine, it is the range of monthly averages for residuals measured during the collection of routine microbiological distribution system samples.

Table Footnotes

Beta/Photon Emitters: The MCL for beta particles is 4 mrem/year. EPA considers 50 pCi/l to be a level of concern for beta particles.

Chlorine: For table purposes, the "Levels Found" is for free chlorine residuals. Total chlorine residuals are higher.

Date of Samples Footnotes: For many contaminants, the IEPA requires monitoring less than yearly because their concentrations do not change frequently. The data presented for any given contaminant, if not from 2013, is from the most recent monitoring period prior to 2013. If two or more years are shown, it is because the results combine the most recent compliance results from multiple entry points collected in multiple years.

Fluoride: The water supply is required to add fluoride to promote strong teeth. The Illinois Department of Public Health recommends an optimal fluoride range of .9 PPM to 1.2 PPM. The Wauconda Water Division recently received a commendation from the Illinois Department of Public Health for excellence in maintaining optimal fluoride levels for 2003 through 2013. Table results are from IOC compliance samples.

Iron and Manganese: These contaminants are not currently regulated by USEPA. However, the state has set MCLs for iron and manganese for supplies serving a population of 1,000 or more.

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. We are responsible for providing high quality drinking water, but we 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 at http://www.epa.gov/safewater/lead/.

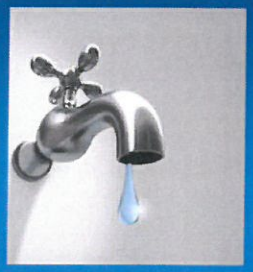
Sodium: There is not a state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult a physician about this level of sodium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

Unregulated Contaminants: A maximum contaminant level (MCL) for this contaminant has not been established by either state or federal regulations, nor has mandatory health effects language. The purpose for monitoring this contaminant is to assist USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.

2013 JULIE LOCATES
&
UTILITY DAMAGE PREVENTION

As the owner of underground infrastructure, the Village of Wauconda is a member of the JULIE state-wide one-call notification system. Anyone planning to dig is required by Illinois law to call JULIE who forwards the location requests for our area to us via e-mail. Utilities have 48 hours (excluding weekends and holidays) to mark their facilities for routine excavations and 2 hours for emergency excavations. We respond by marking Village-owned underground water, sanitary and storm sewer lines, street light cables, as well as underground electric and control wiring at our lift stations, water treatment plants, and water reclamation plant. In 2013, the Village received 1,878 JULIE locate requests. Our prompt and accurate response is important for the prevention of costly utility damage and interruptions in service. For additional information on JULIE, visit www.illinois1call.com/. Before you dig, please call JULIE at 800-892-0123.

VILLAGE OF WAUCONDA
WATER FACTS



- Groundwater is supplied from four aquifers
- Four iron removal plants
- Two water softening plants
- Four elevated storage tanks
- 69.4 miles of water main
- 952 fire hydrants
- 5,765 water services
- 391,935,965 gallons of water supplied in 2013
- 1,073,863 average gallons of water supplied per day in 2013
- 1,735,158 highest gallons of water supplied in a single day in 2013