# SAUK VILLAGE WATERWORKS
# WATER QUALITY REPORT FOR 2007

Village Hall - 21701 Torrence Ave.
Billing Information and All Other Offices - 708.758.3330

Sauk Villages WaterWorks vigilantly safeguards its well water supply. This brochure is a summary of the water quality provided to its customers last year. It is a record of the hard work, by our Certified Operator's and field personnel, to bring you water that is absolutely safe.

Included are details about where your water comes from, what it contains, and how it compares to the standards set by the regulatory agencies. Sauk Village WaterWorks is committed to providing you with information about your water supply, because customers who are informed are our best allies in supporting improvements necessary to maintain the highest drinking water standards.

**On tap at the Sauk Village WaterWorks**
**Distribution and Water Treatment improvements in 2007**

- We have two Class "A" and one Class "C" Certified Operators who continue their education to keep them up to date with the ever changing rules and technology in the water industry, to provide the public with safe water.
- Class "A" Certificate of Competency from the IEPA is the highest class given out by the IEPA to Public Water Supply Operators. A Class "C" is the first step towards the Class "A" certification. We thank them all on a job well done.
- Our personnel have been continuing the upgrading of our distribution system infrastructure with the replacement of fire hydrants, water main valves, and sections of water main that are deteriorating beyond repair.
- Replacement and repair of residential shut off valves continued throughout 2007.
- We are continuing to flush key locations every week, weather permitting, on the south side of town, which has proven to increase the quality of the water throughout that area.
- Our meter change-out program is nearing completion with just under 100 new meters left to install, bringing the total to over 3200. These are remote read meters, which allows us to retrieve readings without the resident needing to be home.

***Sources of Sauk Village's Drinking Water*** comes from three groundwater wells, two wells located at 2217 220th St. and one at 2050 Evergreen. They are drilled approximately 500' deep into the sandstone layer of the earth. This is water that is trapped within the sandstone and forms the water table. Groundwater is less likely to become contaminated than surface water, but is still mandated to be tested for chemical constitutes as outlined by the Illinois EPA and the USEPA.

## *2007 Water Quality Data*

The tables listed below show the contaminant, Maximum Contaminant Level (MCL), Maximum

Contaminant Level Goal (MCLG), and sources of contaminants. Some of the following abbreviations are used throughout this report and are defined as follows:

***MCLG* =** *Maximum Contaminant Level Goal, or the level of contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.*
***MCL*=** *Maximum Contaminant Level, or the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG as feasible using the best available treatment technology.*
***AL*=** *Action Level, or the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.*
**ND =** not detectable at testing limits, **NA** = not applicable, **mg/l** = milligrams per liter, or **p**arts **p**er **m**illion (or one ounce in 7,350 gallons of water), **ug/l =** micrograms per liter, or **p**arts **p**er **b**illion (or one ounce in 7,350,000 gallons of water), **pCi/l** = picocuries per liter, used to measure radioactivity
The **"Level Found"** column represents an average of sample result data collected.
The **"Range of Detections"** column represents a range of individual sample results.
The **"Date of Sample"** column. If a date appears in this column, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change.

| Contaminant | MCLG | MCL | Level Found | Range of Detection | Violations | Date of Sample | Sources of Contaminant |
|---|---|---|---|---|---|---|---|
| Inorganic | | * Action Level | | | | | |
| Barium (mg/l) | 2 | 2 | 0.0558 | 0.0519 - 0.0558 | None | 10/04/2005 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits. |
| Copper (mg/l) | 1.3 | * AL=1.3 | 0.407 | 0 exceeding AL | None | 09/08/2005 | Corrosion of household plumbing systems; erosion of natural deposits. |
| Lead (ug/l) | 0 | * AL=15 | 8.1 | 0 exceeding AL | None | 09/08/2005 | Corrosion of household plumbing systems; erosion of natural deposits. |
| Fluoride (mg/l) | 4 | 4 | 0.73 | 0.63 - 0.73 | None | 10/04/2005 | Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories. |
| Nitrate (as N) (mg/l) | 10 | 10 | ND | NA | None | 07/12/2007 | Erosion of natural deposits; run-off from fertilizer use; leaching from septic tanks, sewage. |
| Nitrite (asN) (mg/l) | 10 | 10 | ND | NA | None | 10/23/2007 | |
| Selenium (ug/l) | 50 | 50 | 1.4 | NA | None | 10/04/2005 | Discharge from petroleum and metal refineries; erosion of natural deposits. |
| Total Trihalomethanes TTHMs (ug/l) | NA | 80 | ND | NA | None | 07/13/2007 | By-product of drinking water chlorination. |
| Total Haloacetic Acids HAAS (ug/l) | NA | 60 | 1.36 | NA | None | 07/27/2007 | |
| Radioactive | | | | | | | |
| Alpha Emitters (pCi/l) | 0 | 15 | 7.2 | 0 - 7.2 | None | 08/09/2005 | Erosion of natural deposits |
| Combined Radium (pCi/l) | 0 | 5 | 4.2 | 2.45 - 4.2 | None | 08/09/2005 | Erosion of natural deposits |

| State Regulated Contaminants | MCLG | MCL | Level Found | Range of Detections | Violations | Date of Sample | Sources of Contaminants |
|---|---|---|---|---|---|---|---|
| Iron (ug/l) | NA | 1000 | 152 | 91.6 - 152 | None | 10/04/2005 | Erosion from naturally occurring deposits. |
| Manganese (ug/l) | NA | 150 | 34.2 | NA | None | 10/04/2005 | Erosion of naturally occurring deposits. |
| Sodium (mg/l) | NA | NA | 106 | 81 - 106 | None | 10/04/2005 | Erosion of naturally occurring deposits; used as water softener. |

| Microbial Contaminants | MCLG | MCL | Highest No. of Positive | Violation | Source of Contamination |
|---|---|---|---|---|---|
| Total Coliform | 0 | 0 | 0 | No | Naturally present in the environment |
| Fecal Coliform and E-Coli | 0 | 0 | 0 | No | |

## Violation Summary Table

### Violation Types

**MNR** Monitoring Violation (failure to Monitor)
**MCL** Maximum Contaminant Level (level found exceeded regulated standard)
**TTV** Treatment Technique Violation (failure to meet treatment process)
**RPV** Reporting Violation (failure to submit results/required report by dead line)

### Violations for Sauk Village Public Water Supply

**No drinking water quality violations were recorded for our facility during the year 2007.**

## *Water Quality Data Table Footnotes*

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 the USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.

Iron: This contaminant is not currently regulated by the USEPA. However, the state has set a MCL for this contaminant for supplies serving a population of 1000 or more.

Manganese: This contaminant is not currently regulated by the USEPA. However, the state has set a MCL for this contaminant for supplies serving a population of 1000 or more.

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 your physician about this level of sodium in the 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hot Line (1-800-426-4791).*

*The sources of drinking water (both tap 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 pick up substances resulting from the presence of animals or human activity.*

***Contaminants that may be present in source water include:***

- ***Microbial contaminants,*** *such as viruses and bacteria, which may come from sewerage treatment plants, septic systems, agricultural livestock operations and wildlife;*
- ***Inorganic contaminant,*** *such as salts and metals, which can be naturally occurring or the 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 can also come from gas stations, urban storm-water runoff and septic systems;*
- ***Radioactive contaminants,*** *which can be naturally occurring or be the result of oil and gas production and mining activities.*

*In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by the 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 Hot Line (1-800-426-4791).*

***The Source Water Assessment for Sauk Village (facility # 0312790)***

***Susceptibility to Contamination:***

*The Illinois EPA has determined that the Sauk community Water Supply's source water has a low susceptibility to contamination. This determination is based on a number of criteria including: monitoring conducted at the wells; monitoring conducted at the entry point to the distribution system; and the available hydrogeologic data on the wells.*

*Sauk Villages wells are properly constructed with sound integrity and proper site conditions; a hydro-geologic barrier exists which prevents pathogen movement; all potential routes and sanitary defects have been mitigated such that the source water is adequately protected; monitoring data did not indicate a history of disease outbreak; and the sanitary survey of the water supply did not indicate a viral contamination threat. The Illinois Environmental Protection Act provides minimum protection zones of 200 feet for Sauk's wells. The Illinois EPA regulates these minimum protection zones. To further reduce the risk to source water, the village has implemented a source water protection program, which includes the proper abandonment of potential routes of groundwater contamination and correction of sanitary defects at the water treatment facility. This effort resulted in the community water supply receiving a special exception permit from the Illinois EPA that allows a reduction in monitoring. The outcome of this monitoring has saved the community considerable laboratory analysis costs.*

## *Customer Views Welcome*

*If you are interested in learning more about the Treatment and Distribution of the water system, or have any questions or concerns about this report, contact; David Overocker, Field Supervisor of the Water Works, through the Village Hall at 708.758.3330. Individual or group tours are also available between the hours of 9:00 am and 2:00 PM Monday through Friday.* ****

**(** ** **proper identification is required, certain restrictions apply)**