

# Village of Huntley

# Annual

# Drinking Water

# Quality Report



HUNTLEY IL1110350

## Annual Water Quality Report for the period of January 1 to December 31, 2008

This report is intended to provide you with important information about your drinking water and the efforts made by the HUNTLEY water system to provide safe drinking water. The source of drinking water used by HUNTLEY is Ground Water. For more information regarding this report contact: Steve Zonta, 847-515-5281

### Source 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 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 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.

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, 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 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 you 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 [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

## SOURCE WATER ASSESSMENT SUMMARY

Based on information obtained in a Well Site Survey, published in 1989 by the Illinois EPA, twenty eight potential secondary source or possible problem sites were identified within the survey area of Huntley wells. Furthermore, information provided by the Leaking Underground Storage Tank Section of the Illinois EPA indicated several additional sites with ongoing remediation which may be of concern. The Illinois EPA has determined that the Huntley Community Water Supply's source water is not susceptible 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. Furthermore, in anticipation of the U.S. EPA's proposed Ground Water Rule, the Illinois EPA has determined that the Huntley Community Water Supply is not vulnerable to viral contamination. This determination is based upon the evaluation of the following criteria during the Vulnerability Waiver Process: the city's wells are properly constructed with sound integrity and proper site conditions; a hydrogeologic barrier exists which should prevent 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. Because the village's wells are constructed in a confined aquifer, which should prevent the movement of pathogens into the wells, well hydraulics were not considered to be a significant factor in this vulnerability determination. Hence, well hydraulics were not evaluated for this groundwater supply. The Illinois Environmental Protection Act provides minimum protection zones of 200 feet for Huntley's wells. These minimum protection zones are regulated by the Illinois EPA. In addition the community enacted a "maximum setback zone ordinance" for wells #5, #6, and #7, which is authorized by the Illinois Environmental Protection Act and allows county and municipal officials the opportunity to provide additional potential source prohibitions up to 1,000 feet from their wells. To further reduce the risk to source water, the village has implemented a wellhead 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 which allows a reduction in monitoring. The outcome of this monitoring reduction has saved the facility considerable laboratory analysis costs. To further minimize the risk to the groundwater supply, the Illinois EPA recommends that three additional activities be assessed. First, the village may wish to enact a "maximum setback zone" ordinance for wells #8, #9, and #10 to further protect their water supply. This ordinance is authorized by the Illinois Environmental Protection Act and allows county and municipal officials the opportunity to provide additional protection up to a fixed distance, normally 1,000 feet, from their wells. Second, the water supply staff may wish to revisit their contingency planning documents. Contingency planning documents are a primary means to ensure that, through emergency preparedness, a city will minimize their risk of being without safe and adequate water. Finally, the water supply staff is encouraged to review their cross connection control program to ensure that it remains current and viable. Cross connections to either the water treatment plant (for example, at bulk water loading stations) or in the distribution system may negate all source water protection initiatives provided by the village.

# 2008 Regulated Contaminants Detected

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### DEFINITIONS: Lead and Copper - Date Sampled: 9/12/2007

**Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.  
**Action Level Goal (ALG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. ALG's allow for a margin of safety

| Lead MCLG | Lead Action Level (AL) | Lead 90th Percentile | # Sites Over Lead AL | Copper MCLG | Copper Action Level (AL) | Copper 90th Percentile | # Sites Over Copper AL | Likely Source of Contamination                                       |
|-----------|------------------------|----------------------|----------------------|-------------|--------------------------|------------------------|------------------------|--|
| 0         | 15 ppb                 | 4.52 ppb             | 0                    | 1.3 ppm     | 1.3 ppm                  | 1.28 ppm               | 3                      | Corrosion of household plumbing systems; Erosion of natural deposits |

### WATER QUALITY TEST RESULTS

**Definitions:** The following tables contain scientific terms and measures, some of which may require explanation. **Maximum Contaminant Level (MCL):** The 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):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a 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. na: not applicable. **Avg:** Regulatory compliance with some MCLs are based on running annual average of monthly samples. **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.

#### Regulated Contaminants

| Disinfectants & Disinfection By-Products  | Collection Date | Highest Level Detected | Range of Levels Detected | MCLG    | MCL    | Units | Violation | Likely Source Of Contaminant  |
|---|-----------------|------------------------|--------------------------|---------|--------|-------|-----------|---|
| TTHMs [Total Trihalomethanes]   | 6/14/2007       | 5.60                   | 5.6 - 5.6                | N/A     | 80     | ppb   | No        | By-product of drinking water chlorination   |
| Chlorine  | 2008            | 1.7                    | 0.1-1.7                  | MRDLG=4 | MRDL=4 | ppm   | No        | Water additive used to control microbes   |
| Inorganic Contaminants  | Collection Date | Highest Level Detected | Range of Levels Detected | MCLG    | MCL    | Units | Violation | Likely Source Of Contaminant  |
| Barium  | 2008            | 0.32                   | 0.32-0.32                | 2       | 2      | ppm   | No        | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits    |
| Flouride  | 2008            | 0.4                    | 0.4-0.4                  | 4       | 4      | ppm   | No        | Erosion of natural deposits; Water additive which promotes strong teeth; Fertilizer discharge |
| Nitrate (As Nitrogen)   | 2008            | 0.311                  | 0-0.311                  | 10      | 10     | ppm   | No        | Runoff from fertilizer use; Leaching from septic tanks; sewage; Erosion of natural deposits   |
| Radioactive contaminants  | Collection Date | Highest Level Detected | Range of Levels Detected | MCLG    | MCL    | Units | Violation | Likely Source Of Contaminant  |
| Alpha Emitters  | 2008            | 3                      | 0 - 6.4                  | 0       | 15     | pCi/L | No        | Erosion of natural deposits   |
| Combined Radium   | 2008            | 7                      | 0.3 - 6.6                | 0       | 5      | pCi/L | Yes       | Erosion of natural deposits   |
| State Regulated Contaminants  | Collection Date | Highest Level Detected | Range of Levels Detected | MCLG    | MCL    | Units | Violation | Likely Source Of Contaminant  |
| <b>Iron:</b> This contaminant is not currently regulated by USEPA. However, the state has set an MCL for this contaminant for supplies serving a population of 1000 or more.  | 2008            | 0.06                   | 0.06 - 0.06              | N/A     | 1000   | ppb   | No        | Erosion from naturally occurring deposits   |
| <b>Manganese:</b> This contaminant is not currently regulated by USEPA. However, the state has set an MCL for this contaminant for supplies serving a population of 1000 or more.   | 2008            | 1.8                    | 1.8 - 1.8                | 150     | 150    | ppb   | No        | Erosion of naturally occurring deposits   |
| <b>Sodium:</b> 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. | 2008            | 100                    | 100 - 100                | N/A     | N/A    | ppm   | No        | Erosion of naturally occurring deposits; used in water softener regeneration                  |
| <b>Zinc</b>   | 2008            | 0.024                  | 0.024 - 0.024            | 5       | 5      | ppm   | No        | Naturally occurring; discharge from metal   |

Note: The state 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 year old

### 2008 VIOLATION SUMMARY TABLE:

This table is intended to assist you in the identification of year 2008 violation(s) that are required to be reported and explained in your CCR.

**HUNTLEY** has taken the following actions specific to the VIOLATION(S) listed below: As a means of resolving this violation, the Village of Huntley water operators made process control adjustments to the water treatment plant. These adjustments were successful and the plant is now within I.E.P.A limits.

| Rule or Contaminant  | Violation Type                          | Violation Duration          |
|--|---|-----------------------------|
| RADIUM, COMBINED (226, 228)<br>Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer. | MCL, AVERAGE,<br>WITHOUT No. EXCEEDANCE | 01/01/2008 to<br>03/31/2008 |

### SOURCE WATER INFORMATION:

| Source Water Name | Type of Water | Report Status | Location               |
|-------------------|---------------|---------------|------------------------|
| Well 7 (00839)    | Ground Water  | Active        | 13550 Route 47         |
| Well 8 (01139)    | Ground Water  | Active        | 9650 Bedford Drive     |
| Well 9 (01249)    | Ground Water  | Active        | 12601 West Main Street |
| Well 10 (01201)   | Ground Water  | Active        | 10770 Kreutzer Road    |
| Well 11 (01731)   | Ground Water  | Active        | 9250 South Union Road  |