

City of Calumet City

**WATER
DEPARTMENT**



**2010
Annual Drinking
Water Quality Report**

Annual Drinking Water Quality Report

Calumet City, IL0310390

Annual Water Quality Report

For the period of January 1 to December 31, 2010

This report is intended to provide you with important information about your drinking water and the efforts made by the Calumet City Water Department to provide safe drinking water.

Calumet City draws 100% of its drinking water from Lake Michigan (supplied by Chicago 20% and Hammond 80%).

Each year, on a monthly basis, our water is tested by State approved laboratories for a wide range of possible contaminants.

This year, as in the years past, our City's water has met all USEPA and state drinking water health standards. Our system vigilantly safeguards its water supply, and we are able to report that the department had no violation of a contaminant level or of any other water quality standard in the previous year.

This report summarizes the quality of water that we provided last year, including information on where your water comes from, what it contains, and how it compares to standards set by regulating agencies. We are committed to providing you with information because informed customers are our best allies.

For more information regarding this report, contact:
 Calumet City Water Department
 Nick Yovkovich - 708-891-8155
 Board Meetings 2nd & 4th Thursday Each Month

Este informe contiene informacion muy importante sobre el agua que usted bebe. Si no entiende el contenido o tiene alguna pregunta puede llamar a la oficina de la Alcalde Michelle Markiewicz Qualkinbush al (708) 891-8113.

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

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.

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 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 SEPA 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 person 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 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 or at <http://www.epa.gov/safewater/lead>.

The City of Calumet City purchases water from Hammond, Indiana. Its source water is Lake Michigan, which is surface water. There were no synthetic organic compounds, volatile organic compounds, or any unregulated contaminant's detected in the Finished Water at the entry point to the Hammond distribution system. The following table contains the results from Hammond.

| Microbial Contaminant's | MCLG | MCL | Level Found | Range of Detection | | | |
|--|------------------------|--------------------------|-------------|--------------------|-------|-----------|---|
| Turbidity (1% < 0.3 NTU) | N/A | TT | 100.00% | N/A | | | |
| Turbidity (NTU) | N/A | TT=1 | 0.10 | .10-.30 | | | |
| Soil Runoff - Highest Single Measurement | | NTU Max | | | | | |
| Disinfectants & Disinfectant By-Products | Highest Level Detected | Range of Levels Detected | MCLG | MCL | Units | Violation | Likely Source of Contamination |
| Total Haloacetic Acids | 5.0 | 3.5-5.0 | N/A | 60 | ppb | No | By-Product of Drinking Water Chlorination |
| Inorganic Contaminant's | Highest Level Detected | Range of Levels Detected | MCLG | MCL | Units | Violation | Likely Source of Contaminant |
| Fluoride | 1.5 | 0.0-1.5 | 4 | 4 | ppm | No | Erosion of Natural deposits, Water Additive which promotes Strong Teeth, Fertilizer Discharge |
| Sodium | 10.0 mg/l | N/A | N/A | N/A | ppm | No | Erosion of Naturally Occurring Deposits |

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.

2010 Water Quality Data Chicago - Hammond

DEFINITION OF TERMS

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 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.

Level Found: This column represents the highest result, unless otherwise noted, during the CCR calendar year. In some cases, it may represent a single sample if only one sample was collected.

Range of Detections: This column represents a range of individual sample results, from lowest to highest, that were collected during the CCR calendar year.

Date of Sample: 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. If no date appears in the column, monitoring for this contaminant was conducted during the Consumer Confidence Report calendar year.

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

nd: Not detectable at testing limits. **n/a:** Not applicable

2010 Non-regulated Contaminant Detections

The following table identifies contaminants detected within the past five years. State and federal regulations do not require monitoring for these contaminants and no maximum contaminant level (MCL) has been established. These detections are for informational purposes only. No mandated health effects language exists. The CCR Rule does not require that this information be reported; however, it may be useful when evaluating possible sources of contamination or characterizing overall water quality.

DEFINITION OF TERMS

Level Found: This column represents the highest result, unless otherwise noted, during the CCR calendar year. In some cases, it may represent a single sample if only one sample was collected.

Range of Detections: This column represents a range of individual sample results, from lowest to highest that were collected during the CCR calendar year.

Date of Sample: 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. If no date appears in the column, monitoring for this contaminant was conducted during the CCR calendar year.

| Additional Contaminants | MCLG | MCL | Level Found | Range of Detections | Violation | Date of Sample |
|--|------|-----|-------------|---------------------|-----------|----------------|
| BORON (ppb) Erosion of naturally occurring deposits; Used in detergents and as a water softener; Used in production of glass, cosmetics, pesticides, fire retardants, and for leather tanning | | | 28.0 | 28.0-28.0 | | 1/29/2007 |
| MOLYBDENUM (ppb) Erosion of naturally occurring deposits; Used in manufacture of special steels | | | 31.0 | 0-31.0 | | 1/29/2007 |
| Unregulated Contaminants | MCLG | MCL | Level Found | Range of Detections | Violation | Date of Sample |
| SULFATE (ppm) Erosion of naturally occurring deposits. | n/a | n/a | 33.600 | 30.4-33.6 | | |
| State Regulated Contaminants | MCLG | MCL | Level Found | Range of Detections | Violation | Date of Sample |
| FLUORIDE (ppm) Water additive which promotes strong teeth | 4 | 4 | .817 | .631-.817 | | |
| SODIUM (ppm) Erosion of naturally occurring deposits; Used as water softener. | n/a | n/a | 8.98 | 8.26-8.98 | | |
| Radioactive Contaminants | MCLG | MCL | Level Found | Range of Detections | Violation | Date of Sample |
| COMBINED RADIUM (226/228) (pCi/L) Decay of natural and man-made deposits. | 0 | 5 | 1.38 | 1.300-1.380 | | 3/17/2008 |
| GROSS ALPHA excluding radon and uranium. Decay of natural & man-made deposits. | 0 | 15 | 0.88 | 0.090-0.880 | | 3/17/2008 |

TURBIDITY

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

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.

FLUORIDE

Fluoride is added to the water supply to help promote strong teeth. The Illinois Department of Public Health recommends an optimal fluoride 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 this level of sodium in the water.

* Highest Running Annual Average computed

Hammond Table Detected Contaminants

| Microbial Contaminants | MCLG | MCL | Level Found | Range of Detections | Violation | Date of Sample |
|--|------|----------|-------------|---------------------|-----------|----------------|
| TOTAL COLIFORM Bacteria (% pos/mo) Human and animal fecal waste | 0 | 5% | 0.2 | n/a | | |
| FECAL COLIFORM AND E.COLI (# pos/mo) Human and animal fecal waste. | 0 | 0 | 1 | n/a | | |
| TURBIDITY (% <0.3 NTU) Soil runoff. Lowest monthly percent meeting limit. | n/a | TT | 99.740% | 99.740-100 | | |
| TURBIDITY (NTU) Soil runoff. Highest Single measurement. | n/a | TT=100%* | 0.38 | n/a | | |
| Inorganic Contaminants | MCLG | MCL | Level Found | Range of Detections | Violation | Date of Sample |
| BARIUM (ppm) Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits. | 2 | 2 | 0.0182 | 0.0175-0.0182 | | |
| NITRATE (as Nitrogen) (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits. | 10 | 10 | 0.311 | 0.288-0.311 | | |
| TOTAL NITRATE & NITRITE (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits. | 10 | 10 | 0.311 | 0.288-0.311 | | |
| Disinfectants/Disinfection By-Products | MCLG | MCL | Level Found | Range of Detections | Violation | Date of Sample |
| TTHMs (TOTAL TRIHALOMETHANES) (ppb) By-product of drinking water disinfection. | n/a | 80 | 20.0* | 11.07-28.6 | | |
| HAA5 (HALOACETIC ACIDS) (ppb) By-product of drinking water disinfection. | n/a | 60 | 10.00* | 6.00-14.20 | | |
| *TTHMs and HAA5s are for the Chicago distribution system. Not all sample results were used for calculating the Highest Level Detected because some results include the IDSE study for future compliance that is included in the range of results. Initial distribution System Evaluation Standard Monitoring Plan. Stage 2 DBPR promulgated on January 2006. | | | | | | |
| CHLORINE (as Cl2) (ppm) Drinking water disinfectant | 4.0 | 4.0 | 0.80 | 0.7063-8.189 | | |
| TOC (TOTAL ORGANIC CARBON) The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set by IEPA | | | | | | |

2010 Regulated Contaminants Detected - Calumet City 2010

Lead and Copper

Definitions:

Action Level The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

---- 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 or at <http://www.epa.gov/safewater/lead>. ----

Action level Goal (ALG): The level of a contaminant in drinking water below which there is not known or expected risk to health. ALGs allow for a margin of safety.

| Lead and Copper | Date Sampled | MCLG | Action Level (AL) | 90th Percentile | # Site Over AL | Units | Violation | Likely Source of Contamination |
|-----------------|--------------|------|-------------------|-----------------|----------------|-------|-----------|---|
| Copper | 6/20/08 | 1.3 | 1.3 | 0 | 0 | ppm | N | Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems. |
| Lead | 4/20/08 | 0 | 15 | 0 | 0 | ppb | N | 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. MCLs 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.

ppm: milligrams per liter or parts per million - or one ounce in 7,350 gallons of water

ppb: micrograms per liter 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. 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 disinfectant in drinking water 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..

Regulated Contaminants

| Disinfectants & Disinfection By-Products | Collection Date | Highest Level Detected | Range of Levels Detected | MCLG | MCL | Units | Violation | Likely Source of Contamination |
|--|-----------------|------------------------|--------------------------|-----------------------|--------|-------|-----------|---|
| Chlorine | 2009 | .01 | .0458 - .0573 | MRDLG=4 | MRDL=4 | ppm | N | Water additive used to control Microbes |
| Haloacetic Acids (HAA5*) | 2009 | 5 | 4.11 - 6 | No goal for the total | 60 | ppb | N | By-product of drinking water chlorination |
| Total Trihalomethanes (TTHm)* | 2009 | 20 | 14.62 - 20.39 | No goal for the total | 80 | ppb | N | 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