
## Working to bring you safe, clean water!

Employees at the East Moline Water Filtration Plant are committed to providing East Moline residents and businesses the safest and highest quality drinking water. We are proud to report that in 2014, as in previous years, our drinking water met all U.S. Environmental Protection Agency, Illinois Environmental Protection Agency, and Illinois Department of Public Health standards for drinking water!

Achieving this accomplishment year after year is no easy task, and our staff are fully dedicated to doing so. We ensure that our water quality is consistently maintained and of the highest standards by persistently monitoring the water quality during every stage of treatment.
This includes:

- Monitoring and testing for over eighty (80) contaminants that are commonly found in water annually
- Performing over 130 calibrations, checks, and lab tests daily
- Adjusting the treatment process as needed

We will continue to monitor any regulatory changes and how those changes may affect our customers throughout the coming year.

## What is a water quality report?

Both the IL and U.S. Environmental Protection Agency's (EPA) regulations require annual reporting describing the quality of your drinking water. The purpose of this report is to provide education to you (the consumer) about the source and quality of your drinking water. This report provides an overview of last year's (2014) water quality, details about where your water comes from, what it contains, and our treatment processes.

## Source Water Assessment Plan

Our Source Water Assessment Plan (SWAP) is now available at our office or on the Illinois EPA's website at http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl. The Source Water Assessment Program was implemented as a result of the 1996 amendments to the Federal Safe Drinking Water Act (SDWA) and requires all states to establish a program to assess potential sources of contamination to public water systems, and further determine their public water system's susceptibility of becoming contaminated by these identified sources. The Illinois EPA considers all surface water sources of community water supply to be susceptible to potential pollution problems, hence, the reason for mandatory treatment for all surface supplies in Illinois. Mandatory treatment includes coagulation, sedimentation, filtration, and disinfection. If you would like to review our SWAP or have any questions, please feel free to contact us at the contact information listed on the back of this report.

## Special Exemption Permit

A Special Exemption Permit allows a water treatment plant to forego meeting the specific requirements of maximum contaminant levels and/or treatment techniques in certain situations. These permits may be issued by a state or U.S. EPA. On April 16, 2013, the East Moline Water Filtration Plant was issued a special exemption permit for how we disinfect our water and inactivate microorganisms in the water. The U.S. EPA traditionally recognizes chlorination and filtration as the primary ways of achieving disinfection and inactivation. However, after extensive research and testing at our facility, we were granted a permit to receive inactivation credit for a combination of processes including chlorination, filtration, and ultraviolet light disinfection and inactivation.

**Este informe contiene información muy importante sobreel agua que usted bebe. Tradúcalo ó hable con alguienque lo entienda bien.**

## Where does drinking water come from and what is in it?

The water that is treated to make drinking water can come from a variety of sources. The City of East Moline takes water from the Mississippi River and treats up to 10 million gallons per day at our Water Filtration Plant. Other drinking water treatment facilities (both tap water and bottled water) may use rivers, lakes, streams, ponds, reservoirs, springs, and wells as their source of water. The United States' drinking water supplies are among the safest in the world, but that does not mean that they cannot be or become contaminated.[1] 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 water before treatment 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 byproducts 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.

1 http://cdc.gov/healthywater/drinking/public/water_treatment.html

## Cryptosporidium

Cryptosporidium is a microbial parasite found in surface water throughout the U.S. Although filtration removes cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. Our monitoring of source water and/or finished water indicate the presence of these organisms. Current test methods do not enable us to determine if the organisms are dead or if they are capable of causing disease. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immune-compromised people are at greater risk of developing life-threatening illness. Immuno-compromised individuals are encouraged to consult their doctors regarding appropriate precautions to avoid infection. Cryptosporidium must be ingested to cause disease and it may be spread through means other than drinking water.

We welcome any comments or questions regarding this document, our treatment process, and the quality of our water. Please feel free to contact us by telephone, email, or U.S. mail at the contact information provided below. Citizens are also welcome to attend and participate in City Council meetings, which are held the first and third Monday of each month at the East Moline City Hall building located at 915 16th Avenue East Moline, IL 61244.

City of East Moline Water Filtration Plant
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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.

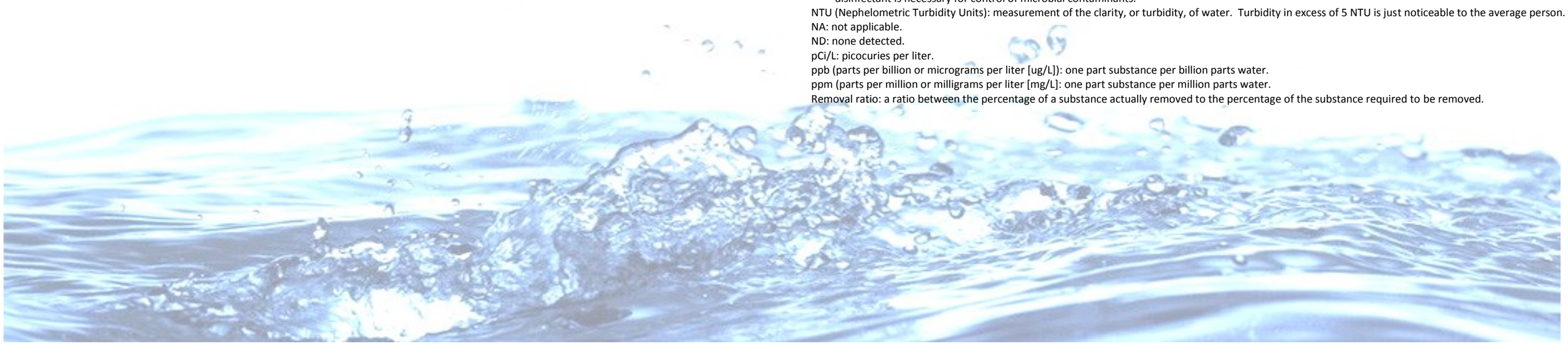
Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

## Substances Regulated by the IEPA

| Substance we tested for… | Unit the substance is measured in… | Year we sampled… | MCL or MRDL | MCLG or MRDLG | Amount we detected… | Range Detected | Violation | Likely Source of Contamination |
|---|---|---|---|---|---|---|---|---|
| Combined Radium 226/228 | pCi/L | 2009 | 5 | 0 | 0.588 | 0.588-0.588 | No | Erosion of natural deposits |
| Gross Alpha excluding Radon & Uranium | pCi/L | 2009 | 15 | 0 | 1.49 | 1.49-1.49 | No | Erosion of natural deposits |
| Barium | ppm | 2014 | 2 | 2 | 0.042 | 0.042-0.042 | No | Discharge of drilling wastes<br>Discharge from metal refineries<br>Erosion of natural deposits |
| Chloramine | ppm | 2014 | 4 | 4 | 3.1 | 2.6-3.1 | No | Water additive used to control microbes |
| Fluoride | ppm | 2014 | 4 | 4 | 1.01 | 1.01-1.01 | No | Discharge from fertilizer and aluminum factories<br>Erosion of natural deposits<br>Water additive that enhances dental health |
| Haloacetic Acid (HAA) | ppb | 2014 | 60 | NA | 42.9 | 26.7-56.8 | No | By-product produced from drinking water disinfection processes |
| Nitrate | ppm | 2014 | 10 | 10 | 2.0 | 2.0-2.0 | No | Erosion of natural deposits<br>Leaching from septic tanks and sewage<br>Runoff produced from agriculture processes |
| Total Trihalomethane (TTHM) | ppb | 2014 | 80 | NA | 49.1 | 28.2-84.1 | No | By-product produced from drinking water chlorination processes |
| Total Coliform Bacteria | % positive samples | 2014 | 5% positive samples/ month | 0 | 5% | NA | No | Naturally present in the environment |
| Turbidity[1] | NTU | 2014 | 1 | NA | 0.44 | 0.05-0.44 | No | Soil runoff |
| Turbidity | Lowest monthly percentage of samples meeting limit | 2014 | 0.3 | NA | 99.45% | 99.45%-100% | No | Soil runoff |

[1] *Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.*

| | | | |
|---|---|---|---|
| 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, unless a TOC violation is noted in the violation section. | No | Naturally present in the environment |



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).

## Substances Regulated by the State of IL[2]

| Substance we tested for… | Unit the substance is measured in… | Year we sampled… | MCL or MRDL | MCLG or MRDLG | Amount we detected… | Range Detected Low-High | Violation | Likely Source of Contamination |
|---|---|---|---|---|---|---|---|---|
| Manganese | ppb | 2014 | 150 | 150 | 2.2 | 2.2-2.2 | No | Erosion of naturally occurring deposits |
| Sodium | ppm | 2014 | NA | NA | 40 | 40-40 | No | Erosion of naturally occurring deposits<br>Used in water softener regeneration |

[2] *Manganese and Sodium are not currently regulated by the U.S. EPA. However, the state has set MCL's for supplies serving a population of 1000 or more.*

## Lead and Copper Testing

| Substance we tested for… | Unit the substance is measured in… | Year we sampled… | Action Level (AL) | MCLG or MRDLG | Amount we detected (90th percentile)… | Sites above AL/Total Sites | Violation | Likely Source of Contamination |
|---|---|---|---|---|---|---|---|---|
| Lead | ppb | 2014 | 15 | 0 | 8 | 2 / 30 | No | Corrosion of household plumbing systems<br>Erosion of natural deposits |
| Copper | ppm | 2014 | 1.3 | 1.3 | 0.19 | 1 / 30 | No | Corrosion of household plumbing systems<br>Erosion of natural deposits<br>Leaching from wood preservatives |

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. The East Moline Water Filtration Plant is responsible for providing high quality drinking water, but 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 (1-800-426-4791), or at http://www.epa.gov/safewater/lead.

## Table Definitions

AL (Action Level): The concentration of a contaminant that triggers treatment or other required actions by the water supply.
MCL (Maximum Contaminant Level): 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.
MCLG (Maximum Contaminant Level Goal): 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.
MRDL (Maximum Residual Disinfectant Level): the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
NTU (Nephelometric Turbidity Units): measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
NA: not applicable.
ND: none detected.
pCi/L: picocuries per liter.
ppb (parts per billion or micrograms per liter [ug/L]): one part substance per billion parts water.
ppm (parts per million or milligrams per liter [mg/L]: one part substance per million parts water.
Removal ratio: a ratio between the percentage of a substance actually removed to the percentage of the substance required to be removed.