



Annual Drinking Water Quality Report

NAUVOO

IL0670500

Annual Water Quality Report for the period of January 1 to December 31, 2007

This report is intended to provide you with important information about your drinking water and the efforts made by the NAUVOO water system to provide safe drinking water. The source of drinking water used by NAUVOO is Surface Water.

For more information regarding this report contact:

Name Barry Cuthbert

Phone 217-453-2411

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

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).

Source Water Assessment

A Source Water Assessment summary is included below for your convenience.

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 water supplies in Illinois. Mandatory treatment includes coagulation, sedimentation, filtration, and disinfection. Within the Illinois portion of the Mississippi River Watershed, which is illustrated in Figure 3, many commodities, including manufactured goods, petrochemicals, and pesticides are transported along the river system. The production, storage, and transportation of these commodities are a major concern, especially when occurring near surface water intakes. In addition, agricultural runoff within the Illinois portion of the Mississippi River Basin contributes to the susceptibility of the Nauvoo intakes. With high flow rates and long distances of travel on the Mississippi River, critical areas can be extensive. The critical area for the Nauvoo intake was determined using data from a joint U. S. Environmental Protection Agency/U. S. Geological Survey project. This project used a computer modeling program (SPARROW) to determine travel times on major rivers in the United States. Accidental spills of hazardous materials into navigable waterways are a major concern because of their frequency in the United States in recent years. Illinois has access to 1,116 miles of inland waterway that can handle commercial barge traffic. These include the Upper Mississippi River, Illinois River Waterway, and the Ohio River. Along these waterways are numerous facilities that load and unload hazardous materials. Analysis of reported spills indicate that between 1974 and 1989, 794 accidental spills of hazardous materials occurred along Illinois waterways. Approximately 92% of these spills occurred along the Mississippi and/or the Illinois River. Figure 2 shows the critical area of concern (Zone 1) for the Nauvoo surface water intake. Spills occurring in this critical area will travel to the intake in five hours or less, making contingency planning and spill reporting a major concern in this watershed. Additional information concerning spill response planning on the Mississippi River may be found at the U. S. EPA's website www.epa.gov/region5/oil, and data can also be downloaded at the U. S. Geological Survey's FTP site ftp://ftp.umesc.er.usgs.gov/pub/gls_data/oil_spill. Under Section 319 of the Federal Clean Water Act, U.S. EPA provides grants for the Illinois EPA to finance projects that demonstrate cost-effective solutions to NPS pollution problems and promote public knowledge and awareness of NPS pollution. Projects in the Illinois portion of the Mississippi Watershed have included: • On going programs in the North Mississippi, Des Plaines, Illinois, Sangamon, and Fox River Watersheds to reduce siltation and improve water quality. Within the Illinois portion of the Mississippi River Watershed, the Illinois River Watershed has been identified as one of the most significant natural resources in the state. Protection and enhancement of this natural resource is a priority concern of the State of Illinois. In order to focus public attention and identify resource needs, several initiatives are underway including: • Integrated Management Plan for the Illinois River Watershed - Under the Chairmanship of Lieutenant Governor Corrine

	6/21/2006	2.1	Not Applicable	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	Edit
Nitrate (As N)	6/26/2007	3	Not Applicable	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	Edit
Selenium	2/27/2007	1.8	Not Applicable	50	50	ppb	No	Discharge from petroleum and metal refineries; Erosion of natural deposits	Edit
Synthetic Organic Contaminants (including pesticides and herbicides)	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant	
Atrazine	6/26/2007	1.4	0 - 1.4	3	3	ppb	No	Runoff from herbicide used on row crops	Edit
State Regulated Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant	
Manganese 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.	2/27/2007	4.9	Not Applicable	N/A	150	ppb	No	Erosion of naturally occurring deposits	Edit
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.	2/27/2007	18	Not Applicable	N/A	N/A	ppm	No	Erosion of naturally occurring deposits; used in water softener regeneration	Edit

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.

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Turbidity

Limit (Treatment Technique)	Lowest Monthly % meeting limit	Violation	Source	
0.3 NTU	100	No	Soil Runoff	Edit
Limit (Treatment Technique)	Highest Single Measurement	Violation	Source	
1 NTU	0.29	No	Soil Runoff	Edit

Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

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 violations section.

2007 Violation Summary Table:

This table is intended to assist you in the identification of year 2007 violation(s) that are required to be reported and explained in your CCR. The table does NOT include the required explanation of the noted violation(s) and you will need to provide this information as explained in the CCR Guidance Manual.

Rule or Contaminant	Violation Type	Violation Duration
CHLORAMINE	MONITORING, ROUTINE (DBP), MAJOR	4/1/2007 To 6/30/2007
CHLORAMINE	MONITORING, ROUTINE (DBP), MAJOR	7/1/2007 To 9/30/2007

NAUVOO has taken the following actions specific to the VIOLATION(S) listed above:

Due to an oversight the Nauvoo Water Department failed to monitor for routine Chloramine (Chlorine residual) during the 4/01/07 to 6/30/07 and 7/1/07 to 9/3/07 monitoring periods. In the future the Nauvoo Water Department will collect the required number of Chloramine samples.