City of Mascoutah
Annual Drinking Water Quality Report 2004
Introduction
Education & Informational Statement

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

If you have any questions about this report or concerning your water system, please contact Larry Rasch at (618) 566-4902 or (618) 779-2238.

This year, as in years past, your tap water met all USEPA and state drinking water health standards. This report summarizes the quality of water that we provided last year, including details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies.

All surface water we sell is treated from the Kaskaskia River and is purchased from the Summerfield, Lebanon, and Mascoutah Water Commissions. It is pumped into the ground storage tank located at Railway and Oak Street when we receive it from S.L.M. From that point it is pumped into our distribution system and the elevated tower located on 6th Street in Scheve Park.

Due to numerous farms in the area, it is more likely that certain contaminants could be detected in our supply. Herbicides such as atrazine, are classified as synthetic organic chemicals, and are used by area farmers. Another possibility of contamination comes from heavy usage of volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water run off and septic systems.

The SLM Water Commissions performs many tests every year as well as the City of Mascoutah to ensure levels of contaminants remains below recommended levels.

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 (800) 426-4791.

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 (800) 426-4791.

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. Possible contaminants consist of:

> 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 may 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 Contaminate, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban storm water runoff and septic systems; and
> Radioactive Contaminants, which may 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, 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.

The next pages are copies of the 2004 Water Quality Data given to us by our supplier, the SLM Water Commission, and City of Mascoutah Water Distribution System. If you have any questions in regards to SLM's Water Quality Report, call Randy Feldt at (618) 566-7100. **No contaminant violations were recorded for the City of Mascoutah water supply during the CCR Reporting Period.**

City of Mascoutah IL1630800

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. Primary sources of pollution in Illinois lakes can include agricultural runoff, land disposal (septic systems) and shoreline erosion. 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 non point source (NPS) pollution problems and promote public knowledge and awareness of NPS pollution. Projects in the Middle and Lower Kaskaskia Watershed have included: • Constructed Wetlands & Sustainable Agriculture - This project constructed three small wetlands within the small watershed of a tributary of Richland Creek to filter contaminants from surface water. The project was designed to determine the effects sustainable agricultural practices have on reducing nitrate and pesticide levels in surface water and also established an education and information program. • Ninemile Creek Watershed Sinkhole Stabilization Project - This project demonstrated and provided information/education to residents and landowners in the Ninemile Creek watershed as to cost-effective practices and methods to improve water quality. Ten (10) sinkholes were stabilized with appropriate land treatment practices applied to the surrounding land. • Conservation Reserve Enhancement Program - The Conservation Reserve Enhancement Program (CREP) is a cooperative effort between the USDA and the State of Illinois to protect water quality in the Illinois River and some of its tributaries. USDA and Illinois will work with other Federal, State and local authorities to reduce sedimentation and runoff, and encourage the growth of local wildlife. The Illinois program will establish CRP contracts with owners and operators of farm properties to plant specific kinds of vegetation near streams and rivers in return for rental payments and other incentives. More information on CREP may be found on Illinois DNR's website at http://dnr.state.il.us. · Pesticide Monitoring Survey - The United States Geological Survey (USGS), as part of the Toxic Substances Hydrology Program, in cooperation with the Illinois EPA installed automatic samplers for the collection of surface water samples in three watersheds in Iroquois, Piatt and St. Clair Counties. The samples were used to determine the magnitude and duration of concentrations of triazine herbicides during the first runoff event following the application of herbicides in 1990. The three sites were selected to represent different areas of the state and different size drainage basins. The predominate land use in the selected sites is agricultural with a crop rotation of corn and soybeans. In order to help farmers in adopting sound agricultural practices the Illinois Council on Best Management Practices (C-BMP) was formed. The Council is a coalition of agribusiness and agricultural producer organizations with the support of the University of Illinois Extension and serves as a clearinghouse on current research to protect water quality in Illinois. The Council also provides information and support to local watershed groups to help implement sound water quality initiatives and can offer educational assistance and help facilitate the technical and financial resources needed to carry out water quality objectives. For more information on C-BMP contact Dr. George Czapar, Springfield Extension Center, P.O. Box 8199, Springfield, IL 62791, email: g-czapar@uiuc.edu. For more information on BMPs, please refer to the web site at http://www.ctic.purdue.edu, as well as "A Guide to Illinois Lake Management" available from Illinois EPA. The Illinois Agronomy Handbook should also be used as guidance in implementing BMPs. In a national effort to ensure adequate protection against groundwater contamination from the herbicide atrazine, U.S. EPA made significant changes to the atrazine use label in 1990. It is a violation of law to apply, mix, or load atrazine within 50 feet of any well, including water wells, irrigation wells, livestock water wells, abandoned wells or sinkholes. In 1992, the atrazine label was further amended to protect surface waters by requiring a 200 foot application setback for lakes and reservoirs. In addition, there is a 66 foot setback from any point where field surface water runoff enters a stream or river. A concerted effort to incorporate best management practices for atrazine applications is on-going, an atrazine BMP document is available from Novartis Crop Protection, or by contacting the Illinois Fertilizer & Chemical Association at (800) 892-7122. In an effort to minimize the impact of livestock facilities on water resources on a statewide basis, livestock facilities are now regulated under the Livestock Management Facilities Act. This legislation is designed to keep Illinois' livestock industry productive and environmentally responsible by establishing requirements for design, construction, operation and management of livestock facilities and waste-handling structures. Detailed information on the Livestock Management Facilities Act may be found at the website http://www.agr.state.il.us. In addition, further watershed protection efforts and priorities of the Illinois EPA, Illinois Department of Agriculture, Illinois Department of Natural Resources, U. S. Department of Agriculture's Natural Resources Conservation Service, U.S. Army Corps of Engineers, and The Nature Conservancy are described and illustrated at the web site http://www.epa.state.il.us/water/unified-watershed-assessment/index.html.

2004 Regulated Contaminants Detected

Lead and Copper

Date Sampled: 12/31/2004

Definitions:

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	6 ppb	0	1.3 ppm	1.3 ppm	0.22 ppm	0	Corrosion of household plumbing systems; Erosion of natural deposits	Edit

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 Maxium 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.

City of Mascoutah IL1630800

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]	3/9/2004	52.4	33.8 - 52.4	N/A	80	ppb	No	By-product of drinking water chlorination	Edit
Total Haloacetic Acids (HAA5)	12/8/2004	45	30.3 - 45	N/A	60	ppb	No	By-product of drinking water chlorination	Edit
Unregulated Contaminants	**Collection Date**	**Highest Level Detected**	**Range of Levels Detected**	**MCLG**	**MCL**	**Units**	**Violation**	**Likely Source Of Contaminant**	
Dibromochloromethane	3/9/2004	2.4	0.62 - 2.4	N/A	N/A	ppb	No		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.

SLM Water Commission IL1635090

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SLM Water Commission IL1635090

2004 Regulated Contaminants Detected

Lead and Copper

Date Sampled: 12/31/2004

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0	15 ppb	<5 ppb	0	1.3 ppm	1.3 ppm	<0.100 ppm	0	Corrosion of household plumbing systems; Erosion of natural deposits	Edit

Water Quality Test Results

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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]	7/7/2004	57.4	Not Applicable	N/A	80	ppb	No	By-product of drinking water chlorination	Edit
Total Haloacetic Acids (HAA5)	7/7/2004	38.3	Not Applicable	N/A	60	ppb	No	By-product of drinking water chlorination	Edit
Chloramines	12/31/2004	2.821	2.3032 - 2.821	MRDLG=4	MRDL=4	ppm		Water additive used to control microbes	Edit

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant	
Arsenic	12/6/2004	0.57	0.54 - 0.57	0	50	ppb	No	Erosion of natural deposits; Runoff from orchards; Runoff from electronics production wastes	Edit
Barium	12/6/2004	0.04	Not Applicable	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	Edit
Fluoride	12/6/2004	0.95	0.94 - 0.95	4	4	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Fertilizer discharge	Edit
Nitrate-Nitrite	5/25/2004	1.84	Not Applicable	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	Edit

SLM Water Commission IL1635090

Nitrate (As N)	5/25/2004	1.82	Not Applicable	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; 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	
Simazine	2/16/2004	1	0 - 1	4	4	ppb	No	Herbicide runoff	Edit
Atrazine	5/19/2004	2.3	0 - 2.3	3	3	ppb	No	Runoff from herbicide used on row crops	Edit

Unregulated Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant	
Dibromochloromethane	7/7/2004	2	Not Applicable	N/A	N/A	ppb	No		Edit

State Regulated Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant	
Sodium There is not a state of 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.	12/6/2004	17	Not Applicable	N/A	N/A	ppm	No	Erosion of naturally occuring deposits; used in water softener regeneration	Edit
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.	12/6/2004	31	30 - 31	N/A	150	ppb	No	Erosion of naturally occurring deposits	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.

Turbidity

Limit (Treatment Technique)	Lowest Monthly % meeting limit	Violation	Source	
0.5 NTU (POP served < 10,000) 0.3 NTU (POP served > 9,999)	100	No	Soil Runoff	Edit

Limit (Treatment Technique)	Highest Single Measurement	Violation	Source	
5 NTU (POP served < 10,000) 1 NTU (POP served > 9,999)	0.2	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.