2008 Annual Drinking Water Quality Report
City of Jackson Surface Water System
Public Water Supply Identification Number MS0250008
June 3, 2009

We're pleased to present to you the 2008 Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water sources are the Ross Barnett Reservoir and the Pearl River (surface water).

The Mississippi Department of Environmental Quality has completed their source water assessment report which is available for review by appointment at the Water / Sewer Utilities Division Office, 200 S. President Street, Room 405, between the hours of 8:00 AM and 5:00 PM Monday through Friday. Call 601-960-2090 for appointment.

This report shows our water quality and what it means.

If you have any questions about this report or concerning your water utility, please contact Don Bach, P.E. at 601-960-2090. We want our valued customers to be informed about their water utility. To participate in decisions that may affect the quality of the water, please attend any of our regularly scheduled City Council meetings. They are held every other Tuesday at either 6:00 PM or 10:00 AM within City Hall.

The City of Jackson Surface Water System routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period beginning January 1, 2008 and ending December 31, 2008. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk. In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present. The test result table does not list non-detected contaminants.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in $10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Millirems per year (mrem/yr) - measure of radiation absorbed by the body.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

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

Maximum Contaminant Level - The "Maximum Allowed" (MCL) is 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.

Maximum Contaminant Level Goal - The "Goal"(MCLG) is 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.

TEST RESULTS

Contaminant	Violation Y/N	Date Collected	Level Detected	Range of Detects or # of Samples Exceeding MCL/ACL	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants								
Total Coliform Bacteria	N			0.0%		0	Presence of coliform bacteria in 5% of monthly samples	Naturally present in the environment
Fecal coliform and E. coli.	N			0		0	0	Human and animal fecal waste
Total Organic Carbon (TOC)	N		1.14	Removal percentage within limits	ppm	n/a	TT - 35% to 50% removal based upon untreated water TOC concentration	Naturally present in the environment
Turbidity	N		0.9 maximum	Lowest monthly percentage below 0.3 = 95.0	NTU	n/a	TT - for conventional filtration, 0.3 NTU in 95% of samples collected, 1 NTU maximum	Soil runoff
Inorganic Contaminants								
Arsenic	N		0.472	ND-0.944	ppb	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium	N		0.017	0.015-0.018	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chlorite	N		0.043	ND-0.864	ppm	0.8	1.0	By-product of drinking water disinfection
Chromium	N		0	ND	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Copper	N		0 (90^{th} percentile)	0	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead	N		5 (90^{th} percentile)	0	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as Nitrogen)	N		0.23	0.20-0.25	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	N		1.87	1.46-2.27	ppb	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Synthetic Organic Contaminants including Pesticides and Herbicides								
Athrazine	N	2007	0.0675	0.06-0.08	ppb	3	3	Runoff from herbicide used on row crops
Volatile Organic Contaminants								
HAA5 (sum of 5 Haloacetic Acids)	N		36.0	11.0-68.0	ppb	N/A	60	By-product of drinking water chlorination
TTHM (Total trihalomethanes)	N		37.0	10.8-53.5	ppb	N/A	80	By-product of drinking water chlorination

We constantly monitor the water supply for various constituents. We have detected cryptosporidium in the source water. We detected this constituent in 1 out of 24 samples tested during 1998. We believe that our disinfection and filtration treatment techniques reduce the chance that this constituent is present within the finished water. We believe it is important for you to know that cryptosporidium may cause serious illness in 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. These people should seek advice from their health care providers.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Additional Information for Lead:

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 City of Jackson 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 or at http://www.epa.gov/safewater/lead. The Mississippi State Department of Health Public Health Laboratory offers lead testing for $10 per sample. Please contact 601-576-7582 if you want to have your water tested.

*****A Message from MSDH Concerning Radiological Sampling*****

In accordance with the Radionuclides Rule, all community public water supplies were required to sample quarterly for beginning January 2007 - December 2007. Your public water supply completed sampling by the scheduled deadline; however, during an audit of the Mississippi State Department of Health Radiological Health Laboratory, the Environmental Protection Agency (EPA) suspended analyses and reporting of radiological compliance samples and results until further notice.

Although this was not the result of inaction by the public water supply, MSDH was required to issue a violation. The Bureau of Public Water Supply is taking action to resolve this issue as quickly as possible. If you have any questions, please contact Melissa Parker, Deputy Director, Bureau of Public Water Supply, at 601-576-7518.

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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Please call our office if you have questions.

We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

Water System User Charge Notification

Your water use charge is $2.20/100 cubic feet if you are within the City Limits, $4.40/100 cubic feet if you are outside the City Limits but within 1 mile of the City Limits and $1.48/100 cubic feet if you are more than 1 mile outside of the City Limits. 57% of this charge is used for operations and maintenance of the water system. 43% of this charge is used for debt retirement.

Water Conservation Tips

Water conservation measures are an important first step in protecting our water supply. Such measures not only save the supply of our source water, but can also save you money by reducing your water bill. There are a few suggestions:

Conservation measures you can use inside your home include:

- $ Fix leaking faucets, pipes, toilets, etc.
- $ Replace old fixtures and install water-saving devices in faucets, toilets and appliances.
- $ Wash only full loads of laundry.
- $ Do not use the toilet for trash disposal.
- $ Take shorter showers.
- $ Do not let the water run while shaving or brushing teeth.
- $ Soak dishes before washing.
- $ Run the dishwasher only when full.

You can conserve outdoors as well:

- $ Water the lawn and garden in the early morning or evening.
- $ Use mulch around plants and shrubs.
- $ Repair leaks in faucets and hoses.
- $ Use water from a bucket to wash your car and save the hose for rinsing.

Information on other ways you can help conserve water can be found at www.epa.gov/safewater/publicoutreach.

2008 Annual Drinking Water Quality Report
City of Jackson Maddox Road Well System
Public Water Supply Identification Number MS0250012
June 3, 2009

We're pleased to present to you the 2008 Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our six wells draw from the Sparta Aquifer.

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The City of Jackson Maddox Road Well System routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period beginning January 1, 2008 and ending December 31, 2008. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

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TEST RESULTS

Contaminant	Violation Y/N	Date Collected	Level Detected	Range of Detects or # of Samples Exceeding MCL/ACL	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants								
Total Coliform Bacteria	Y			100%		0	1	Naturally present in the environment
Fecal coliform and E. coli	Y			15		0	0	Human and animal fecal waste
Radioactive Contaminants								
Alpha emitters	N		0.329	ND-3.29	PCi/L	0	15	Erosion of natural deposits
Combined Radium	N		0.191	ND-2.11	PCi/L	0	5	Erosion of natural deposits
Inorganic Contaminants								
Barium	N		0.002	0.002-0.003	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper	N	2007	0.001 (90^{th} percentile)	0	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Chromium	N		0.705	0.618-0.814	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Lead	N	2007	2.0 (90^{th} percentile)	0	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Volatile Organic Contaminants								
HAA5 (sum of 5 Haloacetic Acids)	N		31.0	ND-70	ppb	N/A	60	By-product of drinking water chlorination
TTHM (Total trihalomethanes)	N		65.0	19.0-107	ppb	0	80	By-product of drinking water chlorination

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The table shows that our system uncovered some problems this year:

The Total Coliform, Fecal Coliform and E. Coli violations occurred during July. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems. Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely-compromised immune systems. We believe that these violations were due to problems with analyses at the MSDH laboratory. We believe these problems have since been corrected as all subsequent samples collected haveanalyzed as negative for any coliform bacteria.

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