

APPROVED

BUREAU OF PUBLIC WATER SUPPLY  
CALENDAR YEAR 2008 CONSUMER CONFIDENCE REPORT  
CERTIFICATION FORM

CITY OF MOORHEAD  
Public Water Supply Name

670008  
List PWS ID #s for all Water Systems Covered by this CCR

The Federal Safe Drinking Water Act requires each *community* public water system to develop and distribute a consumer confidence report (CCR) to its customers each year. Depending on the population served by the public water system, this CCR must be mailed to the customers, published in a newspaper of local circulation, or provided to the customers upon request.

*Please Answer the Following Questions Regarding the Consumer Confidence Report*

- Customers were informed of availability of CCR by: (*Attach copy of publication, water bill or other*)
  - Advertisement in local paper
  - On water bills
  - Other \_\_\_\_\_

Date customers were informed: \_\_\_ / \_\_\_ / \_\_\_

- CCR was distributed by mail or other direct delivery. Specify other direct delivery methods:

Date Mailed/Distributed: \_\_\_ / \_\_\_ / \_\_\_

- CCR was published in local newspaper. (*Attach copy of published CCR or proof of publication*)

Name of Newspaper: ENTERPRISE-TOCSIN

Date Published: 6 / 18 / 09

- CCR was posted in public places. (*Attach list of locations*)

Date Posted: 6 05 / 09 MOORHEAD CITY HALL U.S. POST OFFICE, MOORHEAD

- CCR was posted on a publicly accessible internet site at the address: www. \_\_\_\_\_

**CERTIFICATION**

I hereby certify that a consumer confidence report (CCR) has been distributed to the customers of this public water system in the form and manner identified above. I further certify that the information included in this CCR is true and correct and is consistent with the water quality monitoring data provided to the public water system officials by the Mississippi State Department of Health, Bureau of Public Water Supply.

John J. Carpenter, Mayor  
Name/Title (President, Mayor, Owner, etc.)

6-22-2009  
Date

Mail Completed Form to: Bureau of Public Water Supply/P.O. Box 1700/Jackson, MS 39215  
Phone: 601-576-7518

2008 Annual Drinking Water Quality Report  
 City of Moorhead  
 PWS ID#: 0670008  
 June 2009

We're pleased to present to you this year's Annual Quality Water 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 source is from three wells drawing from the Meridian Upper Wilcox and Upper Wilcox Aquifers.

The source water assessment has been completed for our public water system to determine the overall susceptibility of its drinking water supply to identify potential sources of contamination. The general susceptibility rankings assigned to each well of this system are provided immediately below. A report containing detailed information on how the susceptibility determinations were made has been furnished to our public water system and is available for viewing upon request. The wells in the City of Moorhead have received lower to moderate susceptibility rankings to contamination.

If you have any questions about this report or concerning your water utility, please contact Michael Branch at 662-246-5461. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the second Wednesday of each month at 5:30 PM at the Moorhead City Hall.

We routinely monitor for constituents in your drinking water according to Federal and State laws. This table below lists all of the drinking water contaminants that were detected during the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2008. In cases where monitoring wasn't required in 2008, the table reflects the most recent results. As water travels over the surface of land or underground, it dissolves naturally occurring minerals and, in some cases, radioactive materials and can pick up substances or contaminants from the presence of animals or from human activity; microbial contaminants, such as viruses and bacteria, that 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 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, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. 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 indicate that the water poses 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:

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

**Maximum Contaminant Level (MCL)** - 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 (MCLG)** - 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.

**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.

<b>TEST RESULTS</b>								
Contaminant	Violation Y/N	Date Collected	Level Detected	Range of Detects or # of Samples Exceeding MCL/ACL	Unit Measure -ment	MCLG	MCL	Likely Source of Contamination
<b>Inorganic Contaminants</b>								
10. Barium	N	2006*	.005	No Range	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
13. Chromium	N	2006*	.9	.7 - .9	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
14. Copper	N	2008	.3	0	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives



16. Fluoride	N	2006*	.291	.247 - .291	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
17. Lead	N	2008	1	0	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
21. Selenium	N	2006*	.6	No Range	ppb	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
<b>Disinfection By-Products</b>								
81. HAA5	N	2005*	13	No Range	ppb	0	60	By-Product of drinking water disinfection.
82. TTHM [Total trihalomethanes]	N	2005*	19	No Range	ppb	0	80	By-product of drinking water chlorination.
Chlorine	N	2008	.57	.23 - .57	ppm	0	MDRL = 4	Water additive used to control microbes

\* Most recent sample. No sample required for 2008.

As you can see by the table, our system had no contaminant violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected, however, the EPA has determined that your water IS SAFE at these levels.

We are required to monitor your drinking water for specific constituents on a monthly basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. Beginning January 1, 2004, the Mississippi State Department of Health (MSDH) required public water systems that use chlorine as a primary disinfectant to monitor/test for chlorine residuals as required by the Stage 1 Disinfection By-Products Rule. Our water system failed to complete these monitoring requirements in February of 2008. We did complete the monitoring requirements for bacteriological sampling that showed no coliform present. In an effort to ensure systems complete all monitoring requirements, MSDH now notifies systems of any missing samples prior to the end of the compliance period.

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. Our Water Association 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 wish to have your water tested.

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.

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 1-800-426-4791.

**\*\*\*\*\*A MESSAGE FROM MSDH CONCERNING RADIOLOGICAL SAMPLING\*\*\*\*\***

In accordance with the Radionuclides Rule, all community public water supplies were required to sample quarterly for radionuclides 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.

The City of Moorhead is proud to offer a great product to each customer. Our water is health dept. tested each month. We work around the clock to provide top quality water to every tap. 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.

# **AFFIDAVIT OF PUBLICATION**

STATE OF MISSISSIPPI  
COUNTY OF SUNFLOWER  
CITY OF INDIANOLA:

*The Enterprise-Tocsin*

Personally appeared before me, a Notary Public, in and for said County and State,

Qualdine McDonald, of The Enterprise-Tocsin, a newspaper published in said City, County and State, who upon being duly sworn, deposes and says: The notice, of which a copy is hereunto annexed,

was published in said newspaper 1 weeks, as follows:

18 Day of June, 20 09 Vol. CXXIII, No. 25  
\_\_\_\_ Day of \_\_\_\_\_, 20 \_\_\_\_ Vol. \_\_\_\_\_, No. \_\_\_\_\_  
\_\_\_\_ Day of \_\_\_\_\_, 20 \_\_\_\_ Vol. \_\_\_\_\_, No. \_\_\_\_\_  
\_\_\_\_ Day of \_\_\_\_\_, 20 \_\_\_\_ Vol. \_\_\_\_\_, No. \_\_\_\_\_  
\_\_\_\_ Day of \_\_\_\_\_, 20 \_\_\_\_ Vol. \_\_\_\_\_, No. \_\_\_\_\_

Signed: Qualdine McDonald

And I further certify that I have examined the several copies of The Enterprise-Tocsin, above referred to, and find that the said notice has been published as stated.

Subscribed and sworn to, before me this 18 day of June, 20 09

Cost: \$ 315.31

Cornish R. Rayton

My Commission  
Expires on:  
December 7, 2010



# 2008 ANNUAL DRINKING WATER QUALITY REPORT

## CITY OF MOORHEAD,

### PWS# 0670008 JUNE 2009

We're pleased to present to you this year's 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 source is from three wells drawing from the Meridian Upper Wilcox and Upper Wilcox Aquifers.

The source water assessment has been completed for our public water system to determine the overall susceptibility of its drinking water supply to identify potential sources of contamination. The general susceptibility rankings assigned to each well of this system are provided immediately below. A report containing detailed information on how the susceptibility determinations were made has been furnished to our public water system and is available for viewing upon request. The wells for the City of Moorhead have received a lower to moderate susceptibility ranking to contamination.

If you have any questions about this report or concerning your water utility, please contact **Michael Branch at 662-246-5461**. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly meetings. They are held on the second Wednesday of each month at 5:30 PM at the Moorhead City Hall.

We routinely monitor for constituents in your drinking water according to Federal and State laws. This table below lists all of the drinking water contaminants that were detected for the period of January 1 to December 31, 2008. In cases where monitoring wasn't required in 2008, the table reflects the most recent results. As water travels over the surface of land or underground, it dissolves naturally occurring minerals and, in some cases, radioactive materials and can pick up substances or contaminants from the presence of animals or from human activity; microbial contaminants, such as viruses and bacteria, that 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 waste water 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 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, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. 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 indicate that the water poses a health risk.

In this table you may find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

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

**Maximum Contaminant Level (MCL)** - 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 (MCLG)** - 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.

**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.

#### 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
<b>Inorganic Contaminants</b>								
10. Barium	N	2006*	.005	No Range	ppm	2	2	Discharge of drilling wastes; discharges from metal refineries; erosion of natural deposits
13. Chromium	N	2006*	.9	.7 - .9	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
14. Copper	N	2008	.3	0	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
16. Fluoride	N	2006*	.291	.247 - .291	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
17. Lead	N	2008	1	0	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
21. Selenium	N	2006*	.6	No Range	ppb	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines



## Disinfection By-Products

81. HAA5	N	2005*	13	No Range	ppb	0	60	By-Product of drinking water disinfection.
82. TTHM [Total trihalomethanes]	N	2005*	19	No Range	ppb	0	80	By-product of drinking water chlorination.
Chlorine	N	2008	.57	.23 - .57	ppm	0	MDRL = 4	Water additive used to control microbes

\*Most recent sample. No sample required for 2008

\*\* Fluoride level is routinely adjusted to the MS State Dept of Health's recommended level of 0.7-1.3mg/l.

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected, however, the EPA has determined that your water IS SAFE at these levels.

We are required to monitor your drinking water for specific constituents on a monthly basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. Beginning January 1, 2004, the Mississippi State Department of Health (MSDH) required public water systems that use chlorine as a primary disinfectant to monitor/test for chlorine residuals as required by Stage 1 Disinfection By-Products Rule. We did complete the monitoring requirements, MSDH now notifies systems of any missing samples prior to the end of the compliance period.

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. Our Water Association 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 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 wish to have your water tested.

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.

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).

### \*\*\*A MESSAGE FROM MSDH CONCERNING RADIOLOGICAL SAMPLING\*\*\*

In accordance with the Radionuclides Rule, all community public water supplies were required to sample quarterly for radionuclides 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

The City of Moorhead works around the clock to provide top quality water to every tap. 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.