

MISSISSIPPI WATER SUPPLY  
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## BUREAU OF PUBLIC WATER SUPPLY

### CALENDAR YEAR 2011 CONSUMER CONFIDENCE REPORT CERTIFICATION FORM

City of Leland  
Public Water Supply Name

760006  
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: 7/27/2012

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

Date Mailed/Distributed: 7/27/2012

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

Name of Newspaper: Leland Progress

Date Published: 7/30/2012

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

Date Posted \_\_\_\_\_

- 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.

James M. Lewis Mayor  
Name/Title (President, Mayor, Owner, etc.)

07-19-12  
Date

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

**Public Drinking Water Quality Report**  
**2011 WATER QUALITY REPORT**

You are invited to participate in the public water system to determine the overall acceptability of its drinking water supply to report existing and potential information on how the water quality is being managed by each user of the system. We encourage you to contact us if you have any questions about this report or concerning your water utility, please contact Boby Babin at 602.246.4156. We want your valued feedback to be helpful about the water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the first Tuesday of each month at 6:00 PM at the City Hall.

The water utility has been committed to the public water system to determine the overall acceptability of its drinking water supply to report existing and potential information on how the water quality is being managed by each user of the system. We encourage you to contact us if you have any questions about this report or concerning your water utility, please contact Boby Babin at 602.246.4156. We want your valued feedback to be helpful about the water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the first Tuesday of each month at 6:00 PM at the City Hall.

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:

**Minimum Contaminant Level (MCL):** The "Maximum Allowable" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set in order to be MCLG 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 that poses no known or expected risk to health. MCLG is set as low as feasible.

**Maximum Allowable Disinfectant Level (MADL):** The highest level of a disinfectant allowed in drinking water. This is a contaminant because at this level of a disinfectant is necessary to control microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a disinfectant that is allowed in drinking water when there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Parts per million (ppm) or Milligrams per liter (mg/L):** One part per million (ppm) is one ounce in 160,000 gallons, or a single penny in \$10,000.

**TEST RESULTS**

Contaminant	Violation	Date Collected	Level Detected	Range of Levels or of All Samples Collected	Unit Measurement	MCLG	MCL	Health Effects of Contamination
<b>Inorganic Contaminants</b>								
8. Ammonia	N	2010	8	3 - 8	ppm	10	10	Excess of ammonia in drinking water can cause irritation to the eyes, nose, throat and respiratory system. High concentrations can cause damage to the liver and kidneys.
10. Barium	N	2010	134	.067 - 134	ppm	2	2	Excess of barium in drinking water can cause constipation, muscle weakness, and difficulty breathing. High concentrations can cause damage to the heart and kidneys.
13. Cadmium	N	2010	11	4 - 11	ppm	100	100	Excess of cadmium in drinking water can cause damage to the kidneys, liver, and lungs. High concentrations can cause cancer.
14. Copper	N	2010	7	0	ppm	1.3	1.3	Excess of copper in drinking water can cause stomach pain, nausea, and diarrhea. High concentrations can cause damage to the liver and kidneys.
16. Fluoride	N	2011	28	23 - 28	ppm	4	4	Excess of fluoride in drinking water can cause tooth decay and skeletal fluorosis. High concentrations can cause damage to the thyroid gland.

Lead	Violation	Date Collected	Level Detected	Range of Levels or of All Samples Collected	Unit Measurement	MCLG	MCL	Health Effects of Contamination
17. Lead	N	2010	3		ppb	0	0	Excess of lead in drinking water can cause damage to the brain, kidneys, and reproductive system. High concentrations can cause anemia and high blood pressure.
21. Selenium	N	2010	24	No Range	ppb	50	50	Excess of selenium in drinking water can cause damage to the liver and kidneys. High concentrations can cause cancer.

Disinfection By-Products	Violation	Date Collected	Level Detected	Range of Levels or of All Samples Collected	Unit Measurement	MCLG	MCL	Health Effects of Contamination
81. THMs	N	2010	50	No Range	ppb	0	0	Excess of THMs in drinking water can cause damage to the liver and kidneys. High concentrations can cause cancer.
87. Haloacetic Acids (HAA5)	N	2010	57.33	13.27 - 57.33	ppb	0	0	Excess of HAA5 in drinking water can cause damage to the liver and kidneys. High concentrations can cause cancer.
Chloroform	N	2011	50	50 - 72	ppm	0	0	Excess of chloroform in drinking water can cause damage to the liver and kidneys. High concentrations can cause cancer.

Treatment Technique	Explanation	Duration of Violation	Corrective Action	Health Effects Language
Ground Water Rm	Fluoride in Tap Water Exceeds Action Level Required	10/1/2011	The system has entered into a corrective action plan to reduce the level of fluoride in the water.	Excess of fluoride in drinking water can cause tooth decay and skeletal fluorosis. High concentrations can cause damage to the thyroid gland.

We are required to monitor your drinking water for specific contaminants on a monthly basis. Results of sample monitoring are an indicator of whether or not drinking water meets health standards. In an effort to ensure systems comply all monitoring requirements, MCLG for public systems is any 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 quality of materials used in plumbing components. When your water has been sitting for several hours, you can get the most lead in your water, you may wish to flush your water. Information on lead in drinking water, testing methods, and when you can use bottled water is available from the Safe Drinking Water Hotline at <http://www.epa.gov/lead>. The Missouri State Department of Health Public Health Laboratory offers lead testing. Please contact 651-575-7362 if you wish to have your water tested.

To comply with the "Regulation Governing Fluoridation of Community Water Supplies," the CITY OF LEANED is required to report certain results pertaining to fluoridation of our water system. The number of months in the previous calendar year that exceed the maximum fluoride sample results were within the optimal range of 0.7-1.3 ppm was 0%. The percentage of fluoride samples collected in the previous calendar year that was within the optimal range of 0.7-1.3 ppm was 0%.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man-made. These substances can be inorganic, organic or synthetic 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 1-800-486-6789.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, pregnant women and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/MSD provides an appropriate means to assess the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline 1-800-486-6789.

**A MESSAGE FROM MSD CONCERNING RADIOLOGICAL SAMPLING**

In accordance with the Radioactive Dose Rule, all community public water supplies were required to sample quarterly for radionuclides beginning January 2002 - December 2007. Your public water supply complied completely by the scheduled schedule. However, during at least one of the Missouri State Department of Health radiological monitoring, the Environmental Protection Agency (EPA) suspended analysis and reporting of radiological samples and results until further notice. Although there are no health risks from the public water system, EPA has required to have a violation. This is in order to ensure that your water system has not exceeded the monitoring requirements. The Bureau of Public Water Supply has taken action to ensure that your water system has not exceeded the monitoring requirements. The Bureau of Public Water Supply has taken action to ensure that your water system has not exceeded the monitoring requirements. The Bureau of Public Water Supply has taken action to ensure that your water system has not exceeded the monitoring requirements.

The City of Leaned 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. Note: This (Contaminant) report will not be mailed to each customer.

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2011 Annual Drinking Water Quality Report  
 City of Leland  
 PWS#: 0760006  
 June 2012

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 wells drawing from the Cockfield Formation Aquifer.

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 Leland have received lower to moderate susceptibility rankings to contamination.

If you have any questions about this report or concerning your water utility, please contact Ricky Belgon at 662-686-4136. 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 first Tuesday of each month at 5:00 PM at the 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>, 2011. In cases where monitoring wasn't required in 2011, 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.

**Maximum Residual Disinfectant Level (MRDL)** - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG)** - The level of a drinking water disinfectant below which there is no known or expected risk of health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial 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.

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>								
8. Arsenic	N	2010*	.6	.5 - .6	ppb	n/a	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
10. Barium	N	2010*	.136	.007 - .136	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
13. Chromium	N	2010*	11	4 - 11	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
14. Copper	N	2010*	.7	0	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
16. Fluoride**	N	2011	.28	.25 - .28	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

17. Lead	N	2010*	3	0	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
21. Selenium	N	2010*	2.4	No Range	ppb	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines

### Disinfection By-Products

81. HAA5	N	2010*	20	No Range	ppb	0	60	By-Product of drinking water disinfection.
82. TTHM [Total trihalomethanes]	N	2010*	57.73	13.27 – 57.73	ppb	0	80	By-product of drinking water chlorination.
Chlorine	N	2011	.60	.50 – .72	ppm	0	MDRL = 4	Water additive used to control microbes

### Treatment Technique

TT Violation	Explanation	Duration of Violation	Corrective Actions	Health Effects Language
Ground Water Rule	Failure to Take Corrective Action Within Required Timeframe	1/01/2011	The system has entered into a bilateral compliance agreement and/or corrected the deficiency.	Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

\* Most recent sample. No sample required for 2011. \*\* Fluoride level is routinely adjusted to the MS State Dept of Health's recommended level of 0.7 - 1.3 mg/l.

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. 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. Please contact 601.576.7582 if you wish to have your water tested.

To comply with the "Regulation Governing Fluoridation of Community Water Supplies", the CITY OF LELAND is required to report certain results pertaining to fluoridation of our water system. The number of months in the previous calendar year that average fluoride sample results were within the optimal range of 0.7-1.3 ppm was 0. The percentage of fluoride samples collected in the previous calendar year that was within the optimal range of 0.7-1.3 ppm was 0%.

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. This is to notify you that as of this date, your water system has not completed the monitoring requirements. The Bureau of Public Water Supply has taken action to ensure that your water system be returned to compliance by March 31, 2013. If you have any questions, please contact Melissa Parker, Deputy Director, Bureau of Public Water Supply, at 601.576.7518.

The City of Leland 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. Notice: This (Consumer Confidence) report will not be mailed to each customer.