

City of Pascagoula  
Water Division  
P.O. Drawer 908  
Pascagoula, MS 39568-0908

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***Water Quality Report***  
For  
***The City of Pascagoula***  
ID # 300006

We are pleased to present to you our Annual Water Quality Report for the year 2008. This report is designed to inform you about the quality of 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. In view of this goal, we are pleased to report that our drinking water meets all federal and state requirements.

Our water comes from wells drilled deep into aquifers 300 to 800 feet below the surface. These aquifers are the Pascagoula and the Graham's Ferry formations. Each well is evaluated on an annual basis for purity and content. If you want to learn more about your water and how the City of Pascagoula works to keep your water safe, contact Jeff Hutchison, Water Superintendent, at our 14<sup>th</sup> St. offices between 7:00 a.m. and 3:30 p.m. Or you may meet with us at our Criswell Water Treatment Plant on Thursday, July 9, 2008, at 1:30 p.m. at our annual open house to discuss any water issues. You may call us at (228) 938-6623 or write to us at P.O. Drawer 908, Pascagoula, MS 39568-0908. Our City Council meets on the first and third Tuesday of each month at 6:00 p.m. at City Hall. Information is also available on our website [www.cityofpascagoula.com](http://www.cityofpascagoula.com)

The source water assessment has also been completed for our public water system to determine the overall susceptibility of its drinking water to identify potential sources of contamination. A report containing detailed information on how the susceptibility determinations were made has been furnished to our Public Works Department and is available for viewing at our office upon request.

The City of Pascagoula routinely monitors for substances and contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2008. As water travels over the land or underground, it may pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, is suspected to contain small amounts of some substances or contaminants. It is important to remember that the presence of these substances or contaminants does not necessarily pose a health risk.

**\*\*\*\*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 City of Pascagoula, 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.

In this table you will find many terms and abbreviations you might not be familiar with. To help you understand these terms; we have provided the following definitions:

Running Annual Average (RAA)

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

*Non-Detects (ND)* - laboratory analysis indicates that substances or contaminants are not present.

*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.

*Parts per trillion (ppt) or Nanograms per liter (nanograms/l)* - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

*Parts per quadrillion (ppq) or Picograms per liter (picograms/l)* - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

*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.

*Million Fibers per Liter (MFL)* - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

*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
<b>Radionuclide Contaminants</b>								
Uranium	N	12/19/08	0.044		Ug/l	0	30	Erosion of natural deposits
Alpha Emitters	N	12/19/08	1.772		PCi/l	0	15	Erosion of natural deposits
Combined Radium 226-228	N	12/19/08	2.0488		PCi/l	0	5	Erosion of natural deposits
<b>Inorganic Contaminants</b>								
Arsenic	N	02/06/06	<0.0005		Mg/l	n/a	0.05	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Cadmium	N	02/06/06	<0.0001	0.1-0.8	Mg/l	5	0.005	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints

Chromium	N	02/06/06	0.0009		Mg/l	100	0.1	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride	N	02/06/06	0.1	0.6-1.1	Mg/l	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen)	N	06/09/08 06/09/08 06/09/08	0.22 < 0.08 < 0.08		Mg/l	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen)	N	06/09/08	<0.02 <0.02 <0.02		Mg/l	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nickel	N	02/10/04	ND		Mg/l			
Sulfate	N	02/10/04	ND	7.4-10.11	Mg/l		250	
Mercury	N	02/06/06	<0.0002		Mg/l		0.002	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and croplands
Cyanide	N	02/06/06	<0.005		Mg/l		0.2	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Antimony	N	02/06/06	<0.0005		Mg/l		0.0006	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Barium	N	02/06/06	0.000911		Mg/l		2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beryllium	N	02/06/06	<0.0001		Mg/l		0.004	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
Selenium	N	02/06/06	0.001297		Mg/l		0.05	Discharge from petroleum refineries; erosion of natural deposits; discharge from mines
Thallium	N	02/06/06	<0.0005		Mg/l		0.002	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories

**Volatile Organic Contaminants**

Bromochloro-methane	N	10/06/03	1.8		Ppb		Monitor only	
Chloroform	N	10/06/03	8.1		Ppb		Monitor only	
Bromoform	N	10/06/03	<1.0		Ppb		Monitor only	
Bromodichloro-methane	N	09/25/01	0.001		Ppb		Monitor only	
Chlorodibromo-methane	N	12/21/00	0.003		Ppb		Monitor only	

Dibromomethane	N	10/29/04	<0.5		Ppb		Monitor only	
Dichloromethane	N	10/29/04	<0.5		Ppb		10	Discharge from chemical and pharmaceutical factories
<b>Disinfection By-Products</b>								
Chlorine	N	01/08 12/08	0.35 (RAA)		Mg/l		4	Water Additive used to control microbes.
THM	N	06/24/08	8.27		Ppb	0	80	By-product of drinking water chlorination
HAA5	N	06/24/08	<6.0		Ppb		60	Byproduct of drinking water disinfection
Bromate	N	09/13/04	<0.005		Ppb		10	Byproduct of drinking water disinfection
<b>Lead &amp; Copper</b>								
Lead	N	06/02/07	0.044 (RAA)	2	Mg/l	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Copper	N	06/02/07	.749 (RAA)		Mg/l	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

EPA is reviewing the drinking water standard for arsenic because of special concerns that it may not be stringent enough. Arsenic is a naturally occurring mineral known to cause cancer in humans at high concentrations.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested by a private laboratory. Letting the water run for 30 seconds to 2 minutes before using tap water may reduce your exposure to lead. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).

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

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. People whose immune system is compromised 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 diseases. 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 (a bacteria more commonly found in surface water) and other microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

If you want additional information about your drinking water, you may contact our certified waterworks operator or you may prefer to log on to the Mississippi Department of Health website and obtain specific information about your system and its compliance history at the following address: <http://www.msdh.state.ms.us/msdhsite/index.cfm/11.0.76.html>. From there just follow the "Water Supply" link on the left. Information including current and past boil water notices, compliance and reporting violations, and other information pertaining to your water supply including "Why, When, and How to Boil Your Drinking Water" and "Flooding and Safe Drinking Water" may be obtained.

Our water resources are the heart of our community, our way of life and our children's future. You can help us in our efforts to provide you with quality water and services by keeping alleys clear of debris, fences, and other obstructions, by protecting your water meter so that it may be read accurately, by preventing backflows and back siphons, by using pesticides wisely, and by not wasting this precious natural resource.