

**THE WATER WE DRINK
CITY OF HERNANDO
PWS ID# 170009
JUNE 5, 2009**

We are pleased to provide you with this year's annual water quality report. Our goal is and has always been to provide to you a safe, adequate, and dependable supply of drinking water. Our water source consists of four wells pumping from the Sparta aquifer. Last year we conducted tests for over 80 contaminants, detecting 11, with only one at a level higher than EPA allows. As we told you at the time, our water temporarily exceeded drinking water standards. We are committed to providing you with information because informed customers are our best allies. (For more information see the section labeled Violations and Exceedances at the end of the report).

Our source water assessment has been completed and copies are available upon request at Hernando City Hall.

As required by the Safe Drinking Water Act copies of this report are available to any of our customers upon request at Hernando City Hall, located at 475 West Commerce Street. If you have any questions about this report or concerning your water utility, please contact Van Gates at 662-429-9092. If you want to learn more, please attend any of the City of Hernando's regularly scheduled board meetings. They are held on the first and third Tuesdays of each month, starting at 6:00 pm.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as people 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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking 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 Environmental Protection Agency's (EPA) 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 dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting 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, urban storm-water runoff, and septic systems; and 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. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The table below lists all of the drinking water contaminants that we detected for the period of January 1st to December 31st, 2008. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, may be more than one year old. In this table you will find terms and abbreviations you might not be familiar with. To better understand these we've provided the following definitions:

MCLG-Maximum Contaminant Level Goal- 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.

MCL-Maximum Contaminant Level- The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

MRDLG-Maximum Residual Disinfection Level Goal- The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

MRDL-Maximum Residual Disinfection Level- 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.

Ppm- Parts per million or milligrams per liter (mg/L)

Ppb- Parts per billion or micrograms per liter (ug/L)

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

pCi/L- Picocuries per liter (a measure of radioactivity)

Positive Samples/month- Number of samples taken monthly that were found to be positive

**THE WATER WE DRINK
CITY OF HERNANDO
PWS ID# 170009
JUNE 5, 2009**

| Contaminants | Units | MCLGor MRDLG | MCL,AL orMRDL | Your Water | Sample Date | Violation YES/NO | Typical Source |
|---|-------|-----------------|------------------|---------------|----------------|---------------------|--|
| Disinfectants & Disinfection By-Products (There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants) | | | | | | | |
| Chlorine(CL2) | Ppm | 4 | 4 | 1.04 | 2008 | NO | Water additive used to control microbes |
| Radioactive Contaminants | | | | | | | |
| Alpha Emitters | pCi/L | 0 | 15 | 0.369 | 2008 | NO | Erosion of natural deposits |
| Radium(226/ 228combined) | pCi/L | 0 | 5 | 1.224 | 2008 | NO | Erosion of natural deposits |
| Uranium | ug/L | 0 | 30 | 0.04 | 2008 | NO | Erosion of natural deposits |
| Inorganic Contaminants | | | | | | | |
| Arsenic | Ppb | 0 | 10 | 0.253 | 2008 | NO | Erosion of natural deposits; runoff from Orchards; runoff from glass and Electronics production wastes |
| Barium | Ppm | 2 | 2 | 0.029 | 2008 | NO | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Copper | Ppm | 1.3 | 1.3 | 0.1 | 2007 | NO | Corrosion of household plumbing systems; Erosion of natural deposits |
| Fluoride | Ppm | 4 | 4 | 0.12 | 2008 | NO | Water additive that promotes strong teeth; Erosion of natural deposits; discharge from Fertilizer and aluminum factories |
| Lead | Ppb | 0 | 1.5 | 1.0 | 2007 | NO | Corrosion of household plumbing systems; Erosion of natural deposits |
| Nitrate | Ppm | 10 | 10 | 0.43 | 2005 | NO | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Microbiological Contaminants | | | | | | | |
| Total Coliform Positive samples/ Month | | 0 | 1 | 2 | 2008 | YES | Naturally present in the environment |

***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. SouthWest Water Company 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 \$10.00 per sample. Please contact 601-576-7582 if you wish to have your water tested.

Violations and Exceedances

Total Coliform – 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. The violation occurred in October 2008. It was resolved within two weeks. For each detect of total coliform, additional samples were collected at the sites where total coliform was detected as well as upstream and downstream of each site. Final results showed all samples free of total coliform. Extensive flushing of the water mains in the area took place during this sampling period.

*******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.