



CITY OF OCEAN SPRINGS

Public Works – Water Department

2011 Drinking Water Quality Report

Office Hours

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Is my water safe?

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

Do I need to take special precautions?

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/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).

Where does my water come from?

The drinking water supplied by the City of Ocean Springs is pumped from ground water aquifers using six separate wells across town. Five of the wells draw from the Graham Ferry Formation and the other from the Pascagoula Formation. The Mississippi Department of Environmental Quality has completed a ground water study and its availability to Jackson County. The Department has also completed a source water assessment for the City of Ocean Springs and its susceptibility to contamination. Copies of these reports are available for viewing at the Ocean Springs Public Library.

Source water assessment and its availability

The City of Ocean Springs is dedicated to protecting your water supply. To insure our water supply is not contaminated from commercial or residential customers, we install backflow prevention devices on all services. On rare occasions, some periodic release from faucets or the hot water tank relief valve may occur. If this problem persists, you may need to contact a plumber to install additional protection on your system.

Why are there contaminants in my drinking water?

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 stormwater 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 stormwater 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 stormwater 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.

How can I get involved?

The Ocean Springs Board of Alderman meets on the first and third Tuesday of each month at 6:00 p.m. at City Hall, 1018 Porter Avenue. Any questions or comments regarding the water system can be addressed at their meeting. We encourage your participation.

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. City of Ocean Springs PWS #0300005 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>.

Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. 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 vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

| Contaminants | MCLG Or MRDLG | MCL, TT, or MRDL | Your Water | Range Low High | Sample Date | Violation | Typical Source |
|---|---------------|------------------|------------|---------------------|-------------|---------------------------|---|
| Disinfectants & By-Products | | | | | | | |
| (There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants) | | | | | | | |
| Chlorine (as C12) (ppm) | 4 | 4 | 0.79 | 0.78 0.80 | 2011 | No | Water additive used to control microbes |
| TTHMs [Total Trihalomethanes] (ppb) | NA | 80 | 12.16 | NA | 2011 | No | By-product of drinking water disinfection |
| Inorganic Contaminants | | | | | | | |
| Chromium (ppb) | 100 | 100 | 0.99 | 0.5 3.43 | 2010 | No | Discharge from steel and pulp mills; Erosion of natural deposits |
| Fluoride (ppm) | 4 | 4 | 0.375 | 0.337 0.472 | 2010 | No | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories |
| Nitrate [measured as Nitrogen] (ppm) | 10 | 10 | 0.08 | 0.08 0.08 | 2011 | No | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| Nitrite [measured as Nitrogen] (ppm) | 1 | 1 | 0.02 | 0.02 0.02 | 2011 | No | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| Arsenic (ppb) | 0 | 10 | 0.5 | 0.5 0.5 | 2010 | No | Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes |
| Antimony (ppb) | 6 | 6 | 0.5 | 0.5 0.5 | 2010 | No | Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; test addition. |
| Barium (ppm) | 2 | 2 | 0.003 | 0.002 0.005 | 2010 | No | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits |
| Beryllium (ppb) | 4 | 4 | 0.17 | 0.1 0.5 | 2010 | No | Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries |
| Cadmium (ppb) | 5 | 5 | 0.17 | 0.1 0.5 | 2010 | No | Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; runoff from waste batteries and paints |
| Mercury [Inorganic] (ppb) | 2 | 2 | 0.25 | 0.2 0.5 | 2010 | Mercury [Inorganic] (ppb) | Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland |
| Selenium (ppb) | 50 | 50 | 1.17 | 0.5 2.5 | 2010 | No | Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines |
| Thallium (ppb) | 0.5 | 2 | 0.5 | 0.5 0.5 | 2010 | No | Discharge from electronics, glass, and Leaching from ore-processing sites; drug factories |
| Cyanide [as Free Cn] (ppb) | 200 | 200 | 15 | 15 15 | 2010 | No | Discharge from plastic and fertilizer factories; Discharge from steel/metal factories |

| Volatile Organic Contaminants | | | | | | | | |
|--|------|-----|------------|-------------|------------------------|------------|--|---|
| Contaminants | MCLG | AL | Your Water | Sample Date | # Samples Exceeding AL | Exceeds AL | Typical Source | |
| 1,2,4-Trichlorobenzene (ppb) | 70 | 70 | 0.5 | NA | | 2010 | No | Discharge from textile finishing factories |
| cis-1,2-Dichloroethylene (ppb) | 70 | 70 | 0.5 | NA | | 2010 | No | Discharge from industrial chemical factories |
| Xylenes (ppm) | 10 | 10 | 0.0005 | NA | | 2010 | No | Discharge from petroleum factories; Discharge from chemical factories |
| Dichloromethane (ppb) | 0 | 5 | 0.5 | NA | | 2010 | No | pharmaceutical and chemical factories |
| Vinyl Chloride (ppb) | 0 | 2 | 0.5 | NA | | 2010 | No | Leaching from PVC piping; Discharge from plastics factories |
| 1,1-Dichloroethylene (ppb) | 7 | 7 | 0.5 | NA | | 2010 | No | Discharge from industrial chemical factories |
| trans-1,2-Dichloroethylene (ppb) | 100 | 100 | 0.5 | NA | | 2010 | No | Discharge from industrial z., chemical factories |
| 1,1,1-Trichloroethane (ppb) | 200 | 200 | 0.5 | NA | | 2010 | No | degreasing sites and other factories |
| Carbon Tetrachloride (ppb) | 0 | 5 | 0.5 | NA | | 2010 | No | Discharge from chemical plants and other industrial activities |
| Trichloroethylene (ppb) | 0 | 5 | 0.5 | NA | | 2010 | No | Discharge from metal degreasing sites and other factories |
| 1,2-Dichloropropane (ppb) | 0 | 5 | 0.5 | NA | | 2010 | No | Discharge from industrial chemical factories |
| 1, 1, 2-Trichloroethane (ppb) | 3 | 5 | 0.5 | NA | | 2010 | No | Discharge from industrial chemical factories |
| Tetrachloroethylene (ppb) | 0 | 5 | 0.5 | NA | | 2010 | No | Discharge from factories and dry cleaners |
| Benzene (ppb) | 0 | 5 | 0.5 | NA | | 2010 | No | Discharge from factories; Leaching from gas storage tanks and landfills |
| Toluene (ppm) | 1 | 1 | 0.0005 | NA | | 2010 | No | Discharge from petroleum factories |
| Ethylbenzene (ppb) | 700 | 700 | 0.5 | NA | | 2010 | No | Discharge from petroleum refineries |
| Styrene (ppb) | 100 | 100 | 0.5 | NA | | 2010 | No | Discharge from rubber and plastic factories; Leaching from landfills |
| o-Dichlorobenzene (ppb) | 600 | 600 | 0.5 | NA | | 2010 | No | Discharge from industrial chemical factories |
| p-Dichlorobenzene (ppb) | 75 | 75 | 0.5 | NA | | 2010 | No | Discharge from industrial chemical factories |
| Inorganic Contaminants | MCLG | AL | Your Water | Sample Date | # Samples Exceeding AL | Exceeds AL | Typical Source | |
| Lead - action level at consumer taps (ppb) | 0 | 15 | 3 | 2010 | 1 | No | Corrosion of household plumbing systems; Erosion of natural deposits | |
| Copper - action level at consumer taps (ppm) | 1.3 | 1.3 | 0.1 | 2010 | 0 | No | Corrosion of household plumbing systems; Erosion of natural deposits | |

Undetected Contaminants

The following contaminants were monitored for, but not detected, in your water.

| Contaminants | MCLG or MRDLG | MCL or MRDL | Your Water | Violation | Typical Source |
|--------------------------------|---------------|-------------|------------|-----------|---|
| Halogenated Acids (HAAS) (ppb) | NA | 60 | 11 | No | By-product of drinking water chlorination |

| Unit Descriptions | |
|-------------------|--|
| Term | Definition |
| ppm | ppm: parts per million, or milligrams per liter (mg/L) |
| ppb | ppb: parts per billion, or micrograms per liter (ug/L) |
| NA | NA: not applicable |
| ND | ND: Not detected |
| NR | NR: Monitoring not required, but recommended. |

Important Drinking Water Definitions

| Term | Definition |
|--------------------------|---|
| MCLG | MCLG: Maximum Contaminant Level Goal: 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. |
| MCL | MCL: Maximum Contaminant Level: 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. |
| TT | TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water. |
| AL | AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. |
| Variances and Exemptions | Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions. |
| MRDLG | MRDLG: Maximum residual disinfection level goal. The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants. |
| MRDL | MRDL: Maximum residual disinfectant 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. |
| MNR | MNR: Monitored Not Regulated |
| MPL | MPL: State Assigned Maximum Permissible Level |

*****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.**

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