

## 2011 Annual Drinking Water Quality Report Juvenile Justice Facility PWS # 6140630

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 water source is groundwater from wells. The water is aerated and then chlorinated for disinfection. If you have any questions about this report or concerning your water utility, please contact Mike Vuolo at 863-491-7500.

DeSoto County Utilities routinely monitors for contaminants in your drinking water according to Federal and State laws, rules, and regulations. Except where indicated otherwise, this report is based on the results of our monitoring for the period of January 1 to December 31, 2011. Data obtained before January 1, 2011, and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.

In the table below, you may find unfamiliar terms and abbreviations. To help you better understand these terms we've provided the following definitions:

**Maximum Contaminant Level or MCL:** 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 or MCLG:** 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.

**Action Level (AL):** The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

"ND" means not detected and indicates that the substance was not found by laboratory analysis.

**Parts per million (ppm) or Milligrams per liter (mg/l):** one part by weight of analyte to 1 million parts by weight of the water sample.

**Parts per billion (ppb) or Micrograms per liter (µg/l):** one part by weight of analyte to 1 billion parts by weight of the water sample.

**Picocurie per liter (pCi/L):** measure of the radioactivity in water.

**Maximum residual disinfectant level or 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.

**Maximum residual disinfectant level goal or MRDLG:** The level of a drinking water disinfectant below which there is no known or expected risk to health.

The FDEP conducted a source water assessment for this water system in 2010 and found 2 potential sources of contamination (petroleum storage tanks and waste cleanup) in the vicinity of your water supply. The susceptibility level is considered to be low to moderate. A copy of the report for this system is available at the DEP SWAPP web site: [www.dep.state.fl.us/swapp](http://www.dep.state.fl.us/swapp).

Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
<b>Radioactive Contaminants</b>							
Radium 226+228 or combined radium (pCi/L)	6/09	N	4.4	NA	0	5	Erosion of natural deposits
Alpha emitters (pCi/L)	6/09	N	11	NA	0	15	Erosion of natural deposits
Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
<b>Inorganic Contaminants</b>							
Barium (ppm)	6/09	N	0.037	NA	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	6/09	N	1.18	NA	4	4	Erosion of natural deposits; water additive which promotes strong teeth when at optimum levels between 0.7 and 1.3 ppm; discharge from fertilizer and aluminum factories
Chromium (ppb)	6/09	N	1	NA	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Nickel (ppb)	6/09	N	3	NA	5	100	Pollution from mining and refining operations. Natural occurrence in soil.
Sodium (ppm)	6/09	N	62.7	NA	N/A	160	Salt water intrusion, leaching from soil
Nitrate (as Nitrogen) (ppm)	2/11	N	.02	NA	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

For chlorine, the level detected is the highest running annual average (RAA), computed quarterly, of monthly averages of all samples collected. For haloacetic acids or TTHM, the level detected is the average of all samples taken during the year if the system monitors less frequently than quarterly. Range of Results is the range of individual sample results (lowest to highest) for all monitoring locations.

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
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## Stage 1 Disinfectant/Disinfection By-Product (D/DBP) Contaminants

Chlorine (ppm)	Monthly 2011	N	2.1	0.4-4.0	RDLG = 4	MRDL = 4	Water additive used to control microbes
TTHM [Total trihalomethanes] (ppb)	Quarterly 2011	Y	106.75	94-116	NA	MCL = 80	By-product of drinking water disinfection
Haloacetic Acids (five) (HAA5) (ppb)	Quarterly 2011	N	20.78	14.3-27.9	NA	MCL = 60	By-product of drinking water disinfection

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	AL Violation Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
<b>Lead and Copper (Tap Water)</b>							
Copper (tap water) (ppm)	10/09	N	0.02	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

## SECONDARY CONTAMINANTS TABLE

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Highest Result	MCLG	MCL	Likely Source of Contamination
Total Dissolved Solids (ppm)	6/09	Y	731		500	Natural occurrence from soil leaching

\*We constantly monitor for various contaminants in the water supply to meet all regulatory requirements. Our water system was in violation of federal and state water quality standards for Total Trihalomethanes (TTHM's) from 4/1/11 through 12/31/11. The levels of TTHM's are shown in the Test Results Table. Health effects: Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer. Our System is working to correct the violation by connecting the County Water System to the DeSoto Juvenile Justice Distribution system. This will ensure better quality water.

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. DeSoto Juvenile Justice Facility 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 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. Contaminants that may be present in source water include:

- (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (B) 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.
- (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- (D) 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.
- (E) 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, the EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

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).