

2007 Annual Drinking Water Quality Report Juvenile Justice Facility

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 the Floridan Aquifer. If you have any questions about this report or concerning your water utility, please contact Victor Dotson 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, 2007.

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 2004 and found potential sources of contamination (petroleum storage tanks) in the vicinity of your water supply. The susceptibility level is considered to be high. A copy of the report for this system is available at the DEP SWAPP web site: 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
Radiological Contaminants							
6. Radium 226+228 or combined radium (pCi/l)	Quarterly	Y	6.0	ND-6.0	0	5	Erosion of natural deposits
5. Alpha emitters (pCi/l)	Quarterly	N	4.8	ND-8.3	0	15	Erosion of natural deposits
7. Uranium (ug/L)	Quarterly	N	1.5	ND-0.6	0	30	Erosion of natural deposits

Inorganic Contaminants

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Level Detected	MCLG	MCL	Likely Source of Contamination
11. Barium (ppm)	2/06	N	0.031	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
16. Fluoride (ppm)	2/06	N	1.34	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
20. Nitrate (as Nitrogen) (ppm)	11/07	N	0.04	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
17. Lead (point of entry) (ppb)	2/06	N	1		n/a	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder
13. Cadmium (ppb)	2/06	N	1	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
23. Sodium (ppm)	2/06	N	40.2	N/A	160	Salt water intrusion, leaching from soil

- 6) Combined Radium. Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

For bromate, chloramines, or chlorine, the level detected is the 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 highest RAA, computed quarterly, of quarterly averages of all samples collected if the system is monitoring quarterly or 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.

Stage 1 Disinfectant/Disinfection By-Product (D/DBP) Contaminants

Chlorine (ppm)	Monthly	N	0.9	0.2=1.9	RDLG = 4	MRDL = 4	Water additive used to control microbes
Haloacetic Acids (five) (HAA5) (ppb)	Quarterly	N	11.1	7.5-10.8	NA	MCL = 60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	Quarterly	N	87.1	31.4-76	NA	MCL = 80/100	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
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Lead and Copper (Tap Water)

84. Copper (tap water) (ppm)	9/06	N	0.05	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
85. Lead (tap water) (ppb)	9/06	N	1.1	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits

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
13. Total Dissolved Solids (ppm)	2/06	Y	642		500	Natural occurrence from soil leaching

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).

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.