



City of Alachua 2007 Annual Drinking Water Quality Report

The City of Alachua is 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 goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the continual efforts we make to improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. This report shows our water quality testing results and what they mean. If you have any questions or concerns about this report or your water utility, please contact the City's Public Services Director, Mike New, at (386) 418-6140. We encourage our valued customers to be informed about their water utility.

The City of Alachua's water source is ground water drawn from the Floridan Aquifer via wells. Our drinking water is disinfected with chlorine in accordance with State disinfection regulation and good water treatment practices. In addition, the City injects fluoride into our drinking water as an aid to good dental hygiene. The City of Alachua is proud to note that our drinking water has been judged to be the best tasting drinking water in North Central Florida for the past two years.

The City of Alachua routinely monitors our drinking water for contaminants 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. Data obtained before January 1, 2007, and presented in this report are from the most recent testing done in accordance with the laws, rules and regulations.

The Florida Department of Environmental Protection (FDEP) has performed a Source Water Assessment on our system and search of the data sources indicated a low to moderate potential sources of contamination near our wells. Potential sources of contamination identified include underground petroleum storage tanks in the vicinity area of our water wells. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp.

In the table located at the end of this report, you may find unfamiliar terms and abbreviations. To help you better understand these terms we've provided the following definitions:

Initial Distribution System Evaluation (IDSE): An important part of the Stage 2 Disinfection Byproducts Rule (DBPR). The IDSE is a one-time study conducted by water systems to identify distribution system locations with high concentrations of trihalomethanes (THMs) and haloacetic acids (HAAs). Water systems use results from the IDSE, in conjunction with their Stage 1 DBPR compliance monitoring data, to select compliance monitoring locations for the Stage 2 DBPR. Our system has tested very low for disinfection by-products under Stage 1.

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 which, if exceeded, triggers treatment or other requirements that a water system must follow.

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. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

“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.

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).

The City of Alachua would like you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to insuring the quality of your water. If you have any questions or concerns about the information provided, please contact us.

NON-SECONDARY CONTAMINANTS TABLE

Radiological Contaminants							
Results in the Level Detected column for radiological contaminants and inorganic contaminants are the highest average at any of the sampling points or the highest detected level at any sampling point, depending on the sampling frequency							
Contaminant and Unit of Measurement	Sampling Dates (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Alpha Emitters (pCi/l)	10/2003	N	1.4	N/A	0	15	Erosion of natural deposits
Inorganic Contaminants							
Contaminant and Unit of Measurement	Sampling Dates (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Barium (ppm)	4/2005	N	.0062	N/A	2.0	2.0	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (ppb)	4/2005	N	.23	N/A	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride (ppm)	4/2005	N	0.65	N/A	4.0	4.0	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen) (ppm)	10/2007	N	0.182	N/A	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	4/2005	N	7.5	N/A	160	160	Salt water intrusion, leaching from soil
TTHMs and Stage 1 Disinfectant/Disinfection By-Product (D/DBP) Parameters							
For bromate, chloramines, or 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 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, including Initial Distribution System Evaluation (IDSE) results as well as Stage 1 compliance results.							
Contaminant and Unit of Measurement	Sampling Dates (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Haloacetic Acids (five) (HAA5) (ppb)	10/2007	N	3.1	N/A	NA	MCL = 60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	10/2007	N	13.8	N/A	NA	MCL = 80	By-product of drinking water disinfection

Lead and Copper (Tap Water)							
Contaminant and Unit of Measurement	Sampling Dates (mo./yr.)	AL Violation Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap-water) (ppm)	2007	N	0.70	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap-water) (ppb)	2007	N	0.0034	1	0	15	Corrosion of household plumbing systems, erosion of natural deposits