

2006

Annual Drinking Water Quality Report of the City of Longwood

This is an annual report on the quality of water delivered by the City of Longwood. It meets the federal Safe Drinking Water Act (SDWA) requirement for "Consumer Confidence Reports" and contains information on the source of our water, its constituents, and the health risks associated with any contaminants. Safe water is vital to our community. Please read this report carefully and, if you have questions, call the numbers listed below.

We encourage public interest and participation in our community's decisions affecting drinking water. Regular City Commission meetings occur on the 1st and 3rd Mondays of each month, at the City Hall Commission Chambers located at 175 West Warren Avenue. The public is welcome. We'll be happy to answer any questions about the City of Longwood water system and our water quality. Call Richard Kornbluh at 407-263-2388.

More information is available on the World Wide Web at www.longwoodfl.org

Overview

Water Source and Treatment

What is the source of our water? Five wells at a depth of 300 to 500 feet in the City of Longwood supply our system with groundwater of high purity. Our water is then chlorinated for disinfection purposes and fluoridated for dental health purposes.

Source Water Assessment

In 2004 the Department of Environmental Protection performed a Source Water Assessment on our system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our wells. There are 5 potential sources of contamination identified for this system with moderate to high susceptibility levels. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp or they can be obtained from the Utilities Manger at 407-263-2388.

An Explanation of the Water-Quality Data Table

This report is based upon tests conducted between January 1 and December 31 in the year 2006 by the City of Longwood. The data presented in this report is from the most recent testing done in accordance with regulations. The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

Terms used in the Water-Quality Table and in other parts of this report are defined here.

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.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter (µg/l) - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

Not Applicable (N/A) - does not apply.

Key To Table

AL = Action Level

MCL = Maximum Contaminant Level

MCLG = Maximum Contaminant Level Goal

pCi/l = picocuries per liter (a measure of radioactivity)

ppm = parts per million, or milligrams per liter (mg/l)

ppb = parts per billion, or micrograms per liter (µg/l)

ND= Non-Detects

N/A= Not Applicable

TEST RESULTS TABLE

Contaminant and Unit of Measurement	Date of sample analysis	MCL Violation Y/N	Highest Monthly Number	Range	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants							
Total Coliform Bacteria	10 & 12 /2006	N	1	N/A	0		Presence of coliform bacteria in 1 sample collected during a month. Naturally present in the environment
Contaminant and Unit of Measurement	Date of sample analysis	MCL Violation Y/N	Level Detected	Range	MCLG	MCL	Likely Source of Contamination
Radiological Contaminants							
Gross Alpha (pCi/l)	12/2002	N	0.9	0.6-0.9	0	15	Erosion of natural deposits
Inorganic Contaminants							
Barium (ppm)	06/2005	N	0.0088	0.0068-0.0088	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Cadmium (ppb)	06/2005	N	0.1	0.0-0.1	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Fluoride (ppm)	06/2005	N	0.927	0.201-.927	4	4	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at optimum levels between 0.7 and 1.2 ppm
Lead (point of entry) (ppb)	06/2005	N	28.7	0-28.7	N/A	15	Residue from man-made pollution such as auto emissions and paint.; lead pipe, casing, and solder
Mercury (inorganic) (ppb)	06/2005	N	0.1	0.1	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
Nickel (ppb)	06/2005	N	5.3	3.2-5.3	N/A	100	Pollution from mining and refining operations. Natural occurrence in soil.
Nitrate (as Nitrogen) (ppm)	03/2006	N	0.05	0.05	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen) (ppm)	03/2006	N	0.05	0.05	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	06/2005	N	4.2	2.9-4.2	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium (ppm)	06/2005	N	19	16.4-19	N/A	160	Salt water intrusion, leaching from soil

Volatile Organic Contaminants							
Contaminant and Unit of Measurement	Date of sample analysis	MCL Violation Y/N	Level Detected	Range	MCLG	MCL	Likely Source of Contamination
Ethylbenzene (ppb)	09/2005	N	0.38	0-0.38	700	700	Discharge from petroleum refineries
Xylenes (ppm)	09/2005	N	2.03	0-2.03	10	10	Discharge from petroleum factories; discharge from chemical factories

Contaminant and Unit of Measurement	Date of sample analysis	AL Exceeded Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
-------------------------------------	-------------------------	-----------------	------------------------	--	------	-------------------	--------------------------------

Lead and Copper (Tap Water)

Lead (tap water) (ppb)	2006	N	1.6	No sampling site exceeded AL	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Copper (tap water) (ppm)	2006	N	0.312	No sampling site exceeded AL	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

- For the following contaminants and disinfectant residuals monitored under Stage 1 D/DBP regulations, the level detected is the annual average of the quarterly averages: Bromate, Chloramines, Chlorine, Haloacetic Acids, and/or TTHM (MCL 80 ppb). Range of Results is the range of results (lowest to highest) at the individual sampling sites, including IDSE results.

Trihalomethanes

Contaminant and Unit of Measurement	Date of sample analysis	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
TTHM [Total Trihalomethanes] (ppb)	2006	N	59.33 (annual average) ¹	39.1 -84.5	0	80	By-product of drinking water chlorination
HAA5 (Total Haloacetic Acids) (ppb)	2006	N	34.97 (annual average) ²	6.03 – 48.8	0	60	By-product of drinking water chlorination
Chlorine (ppm)	Jan-Dec 2006	N	2.17	0.4 - 5.0	MRDL G = 4	MRDL = 4.0	Water additive used to control microbes

Water-Quality Table Footnotes

- This number is based on an average of 10 samples in 2006 which ranged from 39.1 to 84.5 ppb.
- This number is based on an average of 8 samples in 2006 which ranged from 6.03 to 48.8 ppb.

As you can see by the tables, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements.

Required Additional Health Information

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 is 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* are available from the Safe Drinking Water Hotline 800-426-4791.

Other Monitoring

In addition to testing we are required to perform, our water system voluntarily tests for hundreds of additional substances and microscopic organisms to make certain our water is safe and of high quality. We'll be happy to answer any questions about the City of Longwood water system and our water quality. If you are interested in a more detailed report, contact Richard Kornbluh at 407-263-2388. This report was prepared using CCRbuilder and technical assistance provided by the American Water Works Association, the Florida Rural Water Association and the Florida Department of Environmental Protection.

Water Quality Data for community water systems throughout the United States is available at www.waterdata.com.