



## 2010 ANNUAL WATER QUALITY REPORT

### HEALTH INFORMATION

The sources of drinking water (both tap 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 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:

**Microbial** contaminants, such as viruses and bacteria, which 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 organics, which are by-products of industrial processes and petroleum production and can also come from gas stations, urban stormwater runoff, and septic systems.

**Radioactive** contaminants, which can be naturally occurring or result from oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Drinking water, including bottled water, may be reasonably 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 Safe Drinking Water Hotline at 800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune 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 microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

*City of Lauderhill*



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## WATER SOURCE

The City of Lauderhill is supplied by underground water pumped from six wells tapping into the Biscayne Aquifer. The Biscayne Aquifer is an underground geologic formation where water is stored, this is also the sole source of water for our utility. Water is pumped to the treatment plant where it is lime softened, filtered, disinfected and fluoridated prior to entering the water distribution system.

## SOURCE WATER ASSESSMENTS

In 2009, the Florida Department of Environmental Protection (FDEP) performed a Source Water Assessment on our system. This assessment was conducted to provide information about any potential sources of contamination in the vicinity of our wells. There were five unique potential sources of contamination with moderate susceptibility levels.

You can obtain additional information by visiting the FDEP Source Water Assessment and Protection Program website at [www.state.fl.us/swapp](http://www.state.fl.us/swapp) or by contacting our Water Treatment Plant Superintendent at (954) 730-2963.

## WATER QUALITY DATA

This report is based on test conducted between January 1 and December 31, 2009 by the City of Lauderhill. Terms used in the Water-Quality Table and in other parts of this report are defined as follows:

**Maximum Contaminant Level (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 (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 which a water system must follow.

**Picocurie Per Liter (pCi/L):** The measure of radioactivity in water.

**Maximum Residual Disinfectant Level (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 (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.



### National Primary Drinking Water Regulation Compliance Update

Recent regulations by the Florida Department of Environmental Protection (FDEP) and the United States Environmental Protection Agency (USEPA) prompted the need to upgrade our disinfection system. Through funds provided by the American Recovery and Re-investment Act (ARRA) stimulus package, the City of Lauderhill was awarded a grant for \$1,530,000 to improve the disinfection processes at the Water Treatment Plant. In August 2010, the WTP—Disinfection System Upgrade Design/Build Project was completed. This included the installation of an ammonia feed system, modification of yard piping and installation of a re-carbonation system.



For more information about the next opportunity for public participation in decisions about our drinking water, call us at 954-730-3010 or visit our website at [www.lauderhill-fl.gov](http://www.lauderhill-fl.gov).

## Drinking Water Test Results

January 1 to December 31 2010

Contaminant	Unit	MCL	MCLG	Detected Level	Range	Major Sources	Violation	Date of Sample
<b>Inorganic Contaminants</b>								
Fluoride	ppm	4	4	1.02	N/A	Erosion of natural deposits, water additive which promotes strong teeth.	NO	8/2010
Sodium	ppm	160	N/A	19.4	N/A	Salt water intrusion, leaching from soil	NO	8/2010
Barium	ppm	2	2	.006	N/A	Erosion of natural deposits	NO	8/2010
Arsenic	ppm	0.01	0	0.001	N/A	Erosion of natural deposits, runoff from orchards, glass & electronics production, industries.	NO	8/2010
Chromium	ppm	0.1	0.1	0.002	N/A	Erosion of natural deposits, discharge from steel & pulp mills.	NO	8/2010
Cyanide	ppm	0.2	0.2	.0026	N/A	Discharge from steel/metal factories, discharge from plastic & fertilizer factories.	NO	8/2010
Nitrate (as Nitrogen)	ppm	10	10	.058	N/A	Runoff from fertilizer use; leaching from septic tanks, sewage, erosion of natural deposits.	NO	8/2010
<b>Lead and Copper (Tap Water)</b>		<b>AL</b>	<b>MCLG</b>	90th Percentile Result	No. of Sampling Sites Exceeding the AL	<b>Likely Source of Contamination</b>	<b>AL Exceeded</b>	
Copper (Tap)	ppm	1.3	1.3	0.0560	0	Corrosion of household plumbing systems, erosion of natural deposits, leaching from wood preservatives.	NO	9/2010
Lead (tap)	ppb	15	0	4.2	0	Corrosion of household plumbing; erosion of natural deposits.	NO	9/2010
<b>Disinfectants &amp; Disinfection By-Products</b>								
TTHMs (Total Trihalomethanes)	ppb	80	N/A	43.8	18.6-59.7	By-product of drinking water chlorination.	NO	2010 Quarterly
HAAs (Haloacetic Acids)	ppb	60	N/A	39.13	22.1-41.05	By-product of drinking water chlorination.	NO	2010 Quarterly
Chlorine / Chloramines	ppm	MDRLG=4	MDRL=4	1.7		By-product of drinking water chlorination.	NO	1-12/2010
<b>Microbiological Contaminants</b>								
Total Coliform Bacteria	%	>5.0%	0	1.49%	0	Naturally present in the environment.	NO	1-12/2010
<b>Radioactive Contaminants</b>								
Combined Radium	pCi/L	5	0	1.164	-	Erosion of natural deposits.	NO	2008

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. The City of Lauderhill is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. You can minimize the potential for lead exposure by flushing your tap for 30 to 60 seconds before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have it 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>.

### KEY TO TABLE

AL = Action Level  
MCL = Maximum Contaminant Level  
MCLG = Maximum Contaminant Level Goal  
ppm = Parts per million or milligrams per liter (mg/l) – one part by weight of analyte to 1 million parts by weight of the water sample.  
ppb = Parts per billion or micrograms per liter (µg/l) – one part by weight of analyte to 1 billion parts by weight of the water sample.  
pCi/L = Measure of radioactivity in water.