

# **2006 WATER QUALITY REPORT**

## **City of Commerce, Georgia**

PWSID#: 1570001

P.O. Box 348 X Commerce, GA X 30529 X (706) 335-3164

Prepared in Accordance With:  
The U. S. Environmental Protection Agency  
National Primary Drinking Water Regulation  
40 CFR Parts 141 and 142

### **Is my water safe?**

The City of Commerce is pleased to report that your community's drinking water met or exceeded all safety and quality standards set by the State of Georgia and EPA during the previous year (2005). This Water Quality Report is intended to inform our customers of where their drinking water comes from, how its treated, what it contains, and how it compares to standards set by regulatory agencies. Our employees are committed to providing you with safe, dependable tap water on a year round basis and are proud to provide the enclosed information.

### **Where does my water come from?**

The City of Commerce utilizes surface water as its raw water source from the 325 acre Grove Creek Reservoir located North of downtown Commerce in Banks County. This reservoir is supplied by water draining the Grove Creek watershed. A Reservoir Management Plan and a Watershed Protection Plan exist to protect the drinking water source through such measures as establishing buffer zones around streams and water bodies, specifying allowable impervious surface densities within the watershed, and addressing the recreational use of the reservoir.

A source water assessment plan (SWAP) has been completed which identified potential sources of surface water pollution that may pose a threat to the water supply within the Grove Creek Watershed. According to the GA EPD ranking methodology, this assessment determined that the watershed's susceptibility to pollution was MEDIUM. To obtain a copy of the SWAP, contact Bryan Harbin at 706-335-5202.

### **How is this water treated?**

The raw water from the reservoir is pumped to the nearby water treatment plant on Water Plant Road. When this water enters the plant, a coagulant is added so particles will settle out in a basin. The water is then filtered through a dual media filter of anthracite and sand to remove remaining particles, including natural organic materials, clays and silt, iron and manganese, and microorganisms. Phosphate (to make the water non-corrosive

to plumbing systems), lime (for pH control), and fluoride (for dental health) are each added, and the water is disinfected with chlorine to make it biologically safe.

### **Contaminants and Health Risks Found in Drinking Water**

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791). Additional information can be obtained over the Internet from:

<http://www.epa.gov/ow>  
<http://www.dnr.state.ga.us/epd>  
<http://www.awwa.org>  
<http://www.amwa-water.org>

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 other 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 (1-800-426-4791).

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. Contaminants that may be present in source water include the following:

- **Microbial contaminants**, such as viruses and bacteria, 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 storm water 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 storm water runoff, and residential uses.
- **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 storm water runoff, and septic systems.
- **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, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

### **Water Quality Data**

The table below lists all of the drinking water contaminants that were detected through monitoring and testing during the calendar year of 2005. The

presence of contaminants in the water does not necessarily indicate that the water poses a health risk. The State requires us to monitor for certain contaminants on a daily basis and others monthly, yearly, or less than once per year because the concentrations of these contaminants do not change frequently.

## Terms and Abbreviations Used In Table

- **MCLG (Maximum Contaminant Level Goal):** *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.*
- **MCL (Maximum Contaminant Level):** 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 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 microbiological 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.
- **AL (Action Level):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which 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.
- **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.
- **Turbidity Units (NTU):** Measure of the clarity of water.

## TABLE OF DETECTED CONTAMINANTS

Detected Substance	Units	MCLG	MCL	Result (a)	Range Detected	Violation?	Probable Source
Regulated Contaminants							
Turbidity (b)	NTUs	N/A	TT	0.30 (100%)(c)	N/A	NO	Soil runoff.
Total Organic Carbon (TOC)	Ratio	N/A	TT ≥ 2.0	1.29 (d)	1.0-2.2 (e)	NO	Naturally present in the environment.
Inorganic Contaminants							
Copper (f)	ppb	AL=1300	AL=1300	47 (g)	0 (h)	NO	Corrosion of household plumbing
Lead (f)	ppb	0	AL=15	7(g)	0 (h)	NO	Corrosion of household plumbing
Fluoride	ppm	4	4	1.12 (i)	0.80 - 1.20 (j)	NO	Water additive that promotes strong teeth
Volatile Organic Contaminants (VOCs)							
Chlorine	ppm	MRDLG = 4	MRDL = 4	1.35 (i)	.40 - 1.80	NO	Added to water for disinfection.
Trihalomethanes (THMs)	ppb	N/A	80	48.0 (i)	27 - 79	NO	By-product of drinking water chlorination
Haloacetic Acids (HAAs)	ppb	N/A	60	39 (i)	17 - 83	NO	By-product of drinking water chlorination
Unregulated Contaminants							
Sodium	ppm	N/A	N/A	8.1	N/A	NO	

- (a) Values represent highest single measurement unless otherwise noted.
- (b) Turbidity is a measure of the cloudiness of water and is monitored because it is a good indicator of the effectiveness of the filtration system.
- (c) Lowest % of monthly samples meeting turbidity limits.
- (d) Average of monthly averages.
- (e) Range detected in mg/l.
- (f) Water from the treatment plant does not contain lead or copper, however under EPA test protocol, water is tested at the tap. Tap tests reveal whether lead or copper is corroding from the piping system and contaminating the water supply. Phosphate, a corrosion inhibitor, is added prior to distribution.
- (g) 90<sup>th</sup> percentile.
- (h) Number of sites exceeding AL.
- (i) Annual average.
- (j) Monthly Average.

## **Lead**

Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span or learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure. Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home=s plumbing. If you are concerned about elevated lead levels in your home=s water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

## **Cryptosporidium**

No *Cryptosporidium* was detected in our finished drinking water. *Cryptosporidium* is a microbial contaminant commonly found in surface water. Source Water quality monitoring conducted as part of the City's SWAP project indicated the presence of this organism in one out of five samples obtained from the Grove Creek Reservoir. Symptoms of *Cryptosporidium* infection include diarrhea, abdominal pain, vomiting, and fever

## **Opportunities for public participation**

The City of Commerce holds its City Council meetings on the 2<sup>nd</sup> Monday of every month at 6:30 PM at the Commerce Civic Center located at 110 State Street.

## **For more information**

For more information regarding this report or to receive an individual copy, please contact Jerry McLocklin at the Commerce Water Treatment Plant at 706-335-6330. Individual copies of this report will not be mailed to each consumer.

**This water quality report was prepared by Stevenson & Palmer Engineering, Inc., as a service to the City of Commerce, GA.**



