



2003 Annual Drinking Water Quality Report City of Mary Esther, Florida



We are pleased to announce that our drinking water meets all federal and state requirements.

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 constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. **We are committed to ensuring the quality of your water.** The City of Mary Esther receives its water from four(4) wells that are approximately 700 feet deep and which draw from the Floridan Aquifer. We use aeration and chlorination for disinfection purposes, and add orthopholy phosphate for corrosion control.

Improvements made during the 2003 calendar year include:

- Line replacements were made as follows: Camelia Drive had new main line and service lines installed; Azalea Drive from Palmetto Drive to Magnolia Drive had new 2" line and service lines installed; an extra service line was installed at Azalea Park for future development; Oleander Parkway had new lines installed from Palmetto Drive to Magnolia Drive; Magnolia Drive had a 2" line abandoned in place and a new 6" line installed from Camelia Drive to Palmetto Drive.
- New valves and a line pigging system were also installed in the Rosewood Subdivision.
- In the Bryn Mawr area, new valves and fire hydrants were installed in various locations. Nearly 200' of new water line was installed between Bryn Mawr Blvd. and Stonehenge Drive.
- In Oak Tree Park, a fire hydrant was replaced on South Lorraine Drive.
- At the main water plant, aerator #1 was taken offline for cleaning, and remains offline until recoating has been performed. The blower assembly was renovated as part of the maintenance.

The City of Mary Esther 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, 2003**. Data obtained before January 1, 2003, and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.

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. 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 Safe Drinking Water Hotline, 1-800-426-4791**.*

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

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 of the 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).

If you have any questions about this report or concerning your water utility, please contact Steve Trainor at (850) 243-3566, ext. 17 or any of the other numbers listed. We encourage our customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Council workshop meetings on the last Monday of each month at 7:00 p.m., City Hall, 195 Christobal Rd. North.

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

Picocurie per liter (pCi/L) - measure of the radioactivity in water.

“**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.

2003 TEST RESULTS TABLE

** Results in the Level Detected column for radiological contaminants, inorganic contaminants, synthetic organic contaminants including pesticides and herbicides, and volatile organic 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 | Dates of sampling (mo./yr.) | MCL Violation Y/N | ** Level Detected | Range of Results | MCLG | MCL | Likely Source of Contamination |
|---------------------------------------|-----------------------------|-------------------|-------------------|------------------|------|-----|---|
| Radiological Contaminants | | | | | | | |
| Alpha emitters (pCi/l) | FEB 02 | N | 3.9 | 2.4-3.9 | 0 | 15 | Erosion of natural deposits |
| Radium 226 or combined radium (pCi/l) | FEB 02 | N | 0.9 | 0.7-0.9 | 0 | 5 | Erosion of natural deposits |
| Inorganic Contaminants | | | | | | | |
| Fluoride (ppm) | FEB 02 | N | 1.2 | 0.9-1.2 | 4 | 4.0 | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
| Nitrate (as Nitrogen) (ppm) | MAY 03 | N | 0.25 | ND-0.25 | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Sodium (ppm) | FEB 02 | N | 127 | 119-127 | N/A | 160 | Salt water intrusion, leaching from soil |
| Thallium (ppb) | FEB 02 | N | 2.0 | ND-2.0 | 0.5 | 2 | Leaching from ore-processing sites; discharge from electronics, glass, and drug factories |

| 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 |
|-------------------------------------|-----------------------------|------------------|------------------------|--|------|-------------------|--|
| Lead and Copper (Tap Water) | | | | | | | |
| Copper (tap water) (ppm) | JUNE-SEP 03 | N | 0.012 | 0 of 20 | 1.3 | 1.3 | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |

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. Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).