



Marco Island Utilities

2007 Water Quality Report

MARCO SHORES

This report shows our water quality results and what they mean. It also provides important information about your water and how it relates to your health. In 2007 there was a treatment change in the Marco Shores water system. The treatment plant at Marco Shores was abandoned August 10th, 2007 and the utility started purchasing bulk water from Collier County Utilities. The information in this report is based primarily on 2007 facts, however, because the source water has changed the report is in 2 parts. Part 1 is based primarily on facts and figures from the water produced at the Marco Shores Water Treatment Plant and part 2 is based primarily on facts and figures from the water purchased from Collier County Utilities. However, the U.S. Environmental Protection Agency (EPA) does not require us to perform all tests every year. When necessary, some data was obtained from prior years. As directed by the agencies that regulate our industry, only values from these tests that exceeded specified criteria are included. We will notify you immediately if there is any reason for concern about our water.

Marco Island Utilities operated the water treatment and distribution system serving Marco Shores from January 1st, 2007 through August 10th, 2007. This water was obtained from surface water sources and treatment consists of lime softening, filtration and chlorination for disinfection purposes. Since August 10th, 2007 the water to the Marco Shores residence has been supplied by Collier County Utilities through a purchasing agreement with the City of Marco Island. The source water for the Collier County water System pumps groundwater from three well fields located in the Golden Gate Estates. The North Hawthorn Well Field has 19 wells that provide water to the North County Regional Water Treatment Plant. The South Hawthorn Well Field has 19 wells that provide water to the South County Regional Water Treatment Plant. The Golden Gate Tamiami Well Field has 34 wells that provide water to both treatment plants.

The Department of Environmental Protection has performed a Source Water Assessment on the Collier County system in 2004. These assessments were conducted to provide information about any potential sources of contamination in the vicinity of our wells. Potential sources of contamination identified include underground petroleum storage tanks, injection well and industrial wastewater treatment plant. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp.

If you have any questions about this report or concerns about your water utility, please contact your Marco Island Utilities Representative at (239) 394-3880. You may also visit the DEP web site at www.myflorida.com or call the EPA Safe Drinking Water Hotline at 1-(800) 426-4791. We want our valued customers to be informed about their water utility. If you would like to learn more, please call us for information about the next opportunity for public participation in decisions about your drinking water.

HOW DO I READ THIS?

It's easy. The table shows the results of our water-quality analyses. The column marked "Level Detected" shows the highest results from the last time tests were performed. "Likely Sources" shows where this substance usually originates. Descriptions below explain other important details. In this table 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.

"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.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l) - one part by weight of analyte to 1 trillion parts by weight of the water sample.

Parts per quadrillion (ppq) or Picograms per liter (picograms/l) - one part by weight of analyte to 1 quadrillion parts by weight of the water sample.

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

Millirem per year (mrem/yr) - measure of radiation absorbed by the body.

Million fibers per liter (MFL) - measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - measure of the clarity of water. Turbidity in excess of 3 NTU is just noticeable to the average person.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

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 will 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.

WHAT CAN I EXPECT TO FIND IN MY DRINKING WATER?

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 storm water 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 storm water 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 storm water 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.

2007 ANNUAL DRINKING WATER QUALITY TEST RESULTS

Marco Island Utilities 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, 2007 for **Marco Shores - PWS ID # 5110182**. The Environmental Protection Agency (EPA) requires monitoring of over 80 drinking water contaminants. Those contaminants listed in the table below are the only contaminants detected in your drinking water.

Part 1

The tables below are from the water produced from the Marco Shores Water Treatment Plant.

Microbiological Organisms						
Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Highest Monthly Number of Positive Samples	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria	Monthly 2007	Y	2 (02/07)	0	For systems collecting fewer than 40 samples per month: presence of coliform bacteria in 1 sample collected during the month.	Total Coliform. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.
Fecal Coliform and E. coli	Monthly 2007	N	1 (02/07)	0	0	Human and animal fecal waste

Note: The result in the lowest monthly percentage column is the lowest monthly percentage of samples meeting the turbidity limits reported in the Monthly Operating Report.

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	The Highest Single Measurement	The Lowest Monthly Percentage of Samples Meeting Regulatory Limits	MCLG	MCL	Likely Source of Contamination
Turbidity (NTU)	1/1/2007 8/31/2007	N	0.27	100%	N/A	TT	Soil runoff

Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. High turbidity can hinder the effectiveness of disinfectants.

** 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.

Radiological Contaminants

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Level Detected	MCLG	MCL	Likely Source of Contamination
Alpha emitters (pCi/l)	2/16/06	N	2.1	0	15	Erosion of natural deposits
Radium 226 or combined radium (pCi/l)	2/16/06	N	1.3	0	5	Erosion of natural deposits

Inorganic Contaminants

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range	MCLG	MCL	Likely Source of Contamination
Barium (ppm)	12/06	N	0.017	NA	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	12/06	N	0.058	NA	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen) (ppm)	4/07	N	0.06	0.16-0.23	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen) (ppm)	4/07	N	0.33	0-.24	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Mercury (inorganic) (ppb)	12/06	N	0.1	NA	2	2	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder
Sodium (ppm)	12/06	N	70	NA	N/A	160	Salt water intrusion, leaching from soil

LEAD AND COPPER

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range	MCLG	MCL	Likely Source of Contamination
Copper (tap water) (ppm)	2006	N	0.13	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	2006	N	5.1	0	15	15	Corrosion of household plumbing systems, erosion of natural deposits

TTHMs and Stage 1 Disinfectant/Disinfection By-Product (D/DBP) Parameters

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
77. Chloramines (ppm)		N	2.4	1.2 – 3.7	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
79. Haloacetic Acids (five) (HAA5) (ppb)	7/09-4/07	N	27.05	12.4-42.79	NA	MCL = 60	By-product of drinking water disinfection
80. TTHM [Total trihalomethanes] (ppb)	7/06-4/07	N	28.87	19.4-35.1	NA	MCL = 80	By-product of drinking water disinfection

The monthly TOC removal ratio is the ratio between the actual TOC removal and the TOC rule removal requirements. We failed to meet required TOC removal rate and required alkalinity levels in 2007 which was resolved through in a Consent Order with the Department of Environmental Protection. This violation was resolved when we connected to Collier County Utilities.

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	TT Violation Y/N	Annual Average Monthly Removal Ratio	Range of Monthly Removal Ratios	MCLG	MCL	Likely Source of Contamination
83. Total organic carbon (ppm)	7/06 – 4/07	N	.89	.73– 1.0	N/A	TT	Naturally present in the environment

Part 2

The tables below are from the water supplied by Collier County Utilities.

Microbiological Organisms						
Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Highest Monthly Number of Positive Samples	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria	Monthly 2007	N	0.9% during (07/07)	0	For systems collecting at least 40 samples per month: presence of coliform bacteria in 5% or more of monthly samples.	Naturally present in the environment

Radionuclides							
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
Alpha emitters (pCi/L)	3,6,9,12-2005	N	5.0	ND-5.0	0	15	Erosion of natural deposits
Radium 226+228 or combined radium (pCi/L)	3,6,9,12-2005	N	1.1	ND-1.1	0	5	Erosion of natural deposits
Uranium (µg/L)	3,6,9,12-2005	N	4.6	ND-4.6	0	30	Erosion of natural deposits

Inorganic Chemicals							
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
Arsenic (ppb)	4/05	N	0.22	ND-0.22	N/A	10	Erosion of natural deposits; runoff from orchards; run off from glass and electronics production wastes
Barium (ppm)	4/05	N	0.0016	0.0001-0.0016	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	Monthly 2007	N	0.93	0.79-1.05	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 1.3 ppm
Nitrate (as Nitrogen) (ppm)	5/07	N	0.31	0-0.31	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	4/05	N	0.50	ND-0.50	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.
Sodium (ppm)	4/05	N	53	32-53	N/A	160	Salt water intrusion, leaching from soil
Thallium (ppb)	4/05	N	0.4	0.3-0.4	0.5	2	Leaching from ore processing sites; discharge from electronics, glass, and drug factories

Volatile Organic Chemicals							
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
Carbon tetrachloride (ppb)	3,5,8,11-2007	N	1.1	ND-1.1	0	3	Discharge from chemical plants and other industrial activities

Stage 1 Disinfectant/Disinfection By-Product (D/DBP) Parameters							
Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chloramines (ppm)	Monthly 2007	N	3.8	0.6-5.6	MRDLG = 4	MRDL = 4	Water additive used to control microbes
Haloacetic Acids (five) (HAA5) (ppb)	1,4,7,8, 10,11-2007	N	9.57	ND-32	NA	MCL = 60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	1,4,7,8, 10,11-2007	N	16.4	ND-40	NA	MCL = 80	By-product of drinking water disinfection

Lead and Copper (Tap Water)							
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
Copper (tap water) (ppm)	11/2005	N	0.0521	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	11/2005	N	1.1	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits

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).

We at Marco Island Utilities 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 feel free to call any of the numbers listed above.