



We are once again proud to present to you our annual water quality report. The City of Clermont 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 through December 31, 2013. Data obtained before January 1, 2013, and presented in this report, are the most recent testing done in accordance with the laws, rules and regulations.

We are pleased to tell you that our compliance with all state and federal drinking water laws remains exemplary. And for the second year in a row, the City of Clermont East Water System has won the DEP Plant Operations Excellence Award.

As in the past, we are committed to delivering the best quality drinking water. To that end, we remain vigilant in meeting the challenges of source water protection, water conservation and community education while continuing to serve the needs of all of our water users. Please note that if you live west of Highway 27, you are on the West Water System, and if you live east of Highway 27, you are on the East Water System.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

City of Clermont
3335 Hancock Road
Clermont, FL 34711

Community Participation

You are invited to participate in our council meetings and voice your concerns about our water utility. We meet on the second and fourth Tuesday of each month, beginning at 7 p.m., at City Hall, 685 W. Monroe Street, Clermont, FL.

Questions?

For more information about this report, or for any questions relating to your drinking water, please call Bob Reed, Operations Manager, at (352) 241-0178.



2013 Annual Drinking Water Quality Report

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Where Do We Get Our Drinking Water?

Our drinking water originates from one of the largest sources of freshwater in the country, the Floridan Aquifer. The aquifer lies deep below much of Florida and is replenished mainly by rainwater filtering through hundreds of feet of rock and sand. This groundwater is typically of high quality, requiring only disinfection with chlorine prior to distribution to our customers.

Source Water Assessment

In 2013, 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 seven potential sources of contamination identified for both systems with moderate susceptibility levels. Potential sources of contamination identified include underground petroleum storage tanks and delineated areas. 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 Bob Reed at (352) 241-0178.

Substances that Could be in 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 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.

All Drinking Water May Contain Contaminants

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.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/hotline>.

Lead and Drinking Water

If present, 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 Clermont is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water 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>.

Water Conservation

You can play a role in conserving water and save yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.



2013 Sampling Results

During the past year, we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. The state allows us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

Radioactive Contaminants										
Substance (Units)	MCLG [MRDLG]	MCL [MRDL]	City of Clermont – East			City of Clermont – West			Violation Yes/No	Likely Source of Contamination
			Sample Date	Level Found	Range	Sample Date	Level Found	Range		
Alpha emitters (pCi/L)	0	15	05/11	2.0	ND-2.0	05/11	1.7	ND-1.7	No	Erosion of natural deposits
Inorganic Contaminants										
Arsenic (ppb)	NA	10	05/11	2.74	1.21-2.74	05/11	ND	NA	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	2	2	05/11	0.02	0.009-0.02	05/11	0.016	0.009-0.016	No	Erosion of natural deposits; discharge of drilling wastes; discharge from metal refineries
Chromium (ppb)	100	100	05/11	6.72	4.21-6.72	05/11	12.2	7.1-12.2	No	Discharge from steel and pulp mills; erosion of natural deposits
Nickel (ppb)	NA	100	05/11	2	ND-2	05/11	2.23	1.15-2.23	No	Pollution from mining and refining operations; natural occurrence in soil
Nitrate [as Nitrogen] (ppm)	10	10	02/13	3.11	1.91-3.11	02/13	ND	NA	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	50	50	05/11	2.11	ND-2.11	05/11	ND	NA	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium (ppm)	NA	160	05/11	13.6	6.23-13.6	05/11	8.49	5.38-8.49	No	Salt water intrusion; leaching from soil
Thallium (ppb)	0.5	2	05/11	1.24	ND-1.24	05/11	1.38	ND-1.38	No	Leaching from ore-processing sites; discharge from electronics, glass and drug factories
Stage 1 Disinfectants and Disinfection By-products										
Chlorine (ppm)	[4]	[4.0]	2013 Monthly	1.9	1.0-2.9	2013 Monthly	2.06	0.9-2.9	No	Water additive used to control microbes
Haloacetic Acids – Stage 1 [HAA5] (ppb)	NA	60	2013 Quarterly	5.09	3.19-8.455	2013 Quarterly	23.0	8.81-31.69	No	By-product of drinking water disinfection
Total Trihalomethanes – Stage 1 [TTHM] (ppb)	NA	80	2013 Quarterly	17.57	14.2-23.4	2013 Quarterly	31.17	20.7-38.8	No	By-product of drinking water disinfection
Stage 2 Disinfectants and Disinfection By-products										
Haloacetic Acids – Stage 2 [HAA5] (ppb)	NA	60	2013 4th Quarter	NA	3.8-9.09	2013 4th Quarter	NA	11.48-31.27	No	By-product of drinking water disinfection
Total Trihalomethanes – Stage 2 [TTHM] (ppb)	NA	80	2013 4th Quarter	NA	14.0-40.0	2013 4th Quarter	NA	22.3-39.9	No	By-product of drinking water disinfection
Lead and Copper (Tap water samples were collected from sites throughout the community)										
Substance (Units)	MCLG	AL (Action Level)	City of Clermont – East			City of Clermont – West			AL Exceedance Yes/No	Likely Source of Contamination
			Sample Date	90th Percentile Result	No. of Sampling Sites Exceeding the AL	Sample Date	90th Percentile Result	No. of Sampling Sites Exceeding the AL		
Copper [tap water] (ppm)	1.3	1.3	06/12	0.105	0	07/11	0.534	0	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead [tap water] (ppb)	0	15	06/12	2.9	0	07/11	1.1	0	No	Corrosion of household plumbing systems; erosion of natural deposits

Microbiological Contaminants

Substance (Units)	MCLG	MCL	City of Clermont – East		City of Clermont – West		Violation Yes/No	Likely Source of Contamination
			Sample Date	Highest Monthly Percentage	Sample Date	Highest Monthly Percentage		
Total Coliform Bacteria (positive samples)	0	Presence of coliform bacteria in >5% of monthly samples	10/13	4.9%	NA	ND	No	Naturally present in the environment
Substance (Units)	MCLG	MCL	Sample Date	Total # of positive samples for year	Sample Date	Total # of positive samples for year	Violation Yes/No	Likely Source of Contamination
Enterococci /coliphage [at the ground water source] (positive samples)	NA	TT	03/13	1	NA	ND	Yes-East No-West	Human or animal fecal waste

About Our Violation

On March 18, 2013, we sampled the source Well #1 for the fecal-indicator. We were notified on March 19, 2013 that Well #1 tested positive for Enterococci, which was a violation of the Ground Water Rule. On March 20, 2013 we took five additional samples and were notified on March 22, 2013 that all five repeat samples were clear. The levels of total coli forms and E.coli are shown in the Test Results Table. We warned you of the situation with the required public notice. We have investigated our sampling techniques, our sampling locations and our certified laboratory. We are making improvements to prevent the recurrence of this problem.

Health Effects

Fecal indicators are microbes whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term health effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.

Definitions

In the table above, 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 that, if exceeded, triggers treatment or other requirements that a water system must follow.

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.

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

Maximum Residual Disinfectant Level or 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 or 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.

NA: Not applicable.

ND (Not Detected): 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.

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

Nephelometric Turbidity Unit (NTU) - measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

What's a cross-connection?

Cross-connections that contaminate drinking water distribution lines are a major concern. A cross-connection is formed at any point where a drinking water line connects to equipment (boilers), systems containing chemicals (air conditioning systems, fire sprinkler systems, irrigation systems), or water sources of questionable quality. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the pressure inside the drinking water line (backpressure). Contamination can also occur when the pressure in the drinking water line drops due to fairly routine occurrences (main breaks, heavy water demand), causing contaminants to be sucked out from the equipment and into the drinking water line (backsiphonage).

Outside water taps and garden hoses tend to be the most common sources

of cross-connection contamination at home. The garden hose creates a hazard when submerged in a swimming pool or when attached to a chemical sprayer for weed killing. Garden hoses that are left lying on the ground may be contaminated by fertilizers, cesspools, or garden chemicals. Improperly installed valves in your toilet could also be a source of cross-connection contamination.

Community water supplies are continuously jeopardized by cross-connections unless appropriate valves, known as backflow prevention devices, are installed and maintained. For more information, review the Cross-Connection Control Manual from the U.S. EPA's website at <http://water.epa.gov/infrastructure/drinkingwater/pws/crossconnectioncontrol/index.cfm>. You can also call the Safe Drinking Water Hotline at (800) 426-4791.

