## **University of Central Florida**

Orlando, Florida

"Quality on Tap"

**Consumer Confidence Report** 

Report Date: June 2015

Prepared by: University of Central Florida 16 Libra Dr. Orlando, Florida 32816 407-823-5223

## Quality on Tap Report

Consumer Confidence Report for Year 2014

## University of Central Florida

Orlando, FL

We are pleased to present to you this year's Annual Quality Water 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 our ongoing efforts we make to improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is groundwater via four wells, which are on the premises, and taken from the Floridian Aquifer. Currently, the water is being treated two ways: chlorination for disinfection and aeration for removal of sulfur gases.

In (2014) 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 (or surface water intakes). There is (ONE) potential source of contamination identified for this system with a (MODERATE) susceptibility level. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at <a href="www.dep.state.fl.us/swapp">www.dep.state.fl.us/swapp</a>, or they can be obtained from Facilities Operations at 407-823-5223.

Thank you for allowing us to continue providing you with clean, quality water this year. In order to maintain a safe and dependable water supply, we sometimes need to make improvements that will benefit all of our customers. If you have any questions about this report or concerning your water utility, please contact Facilities Operations at (407) 843-5223 at any time during regular business hours. We want our valued consumers to be informed about their water utility.

The University of Central Florida routinely monitors for contaminants in your drinking water according to federal and state laws. Except where indicated otherwise, this report is based on the results of our monitoring for the period of **January 1 to December 31, 2014**. Data obtained before January 1, 2014, and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.

In the following table you will find many terms and abbreviations with which you might not be familiar. To help you better understand these terms, we've provided the following definitions:

*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.

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.

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.

**Action Level (AL):** The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

*Treatment Technique (TT):* A required process intended to reduce the level of a contaminant in drinking 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 (mg/l)** – one part by weight of analyte to 1 billion parts by weight of the water sample.

*Pico curie per liter (pCi/L)* - measure of the radioactivity in water.

*Not Applicable* (N/A) – Noted in the chart if the data is not applicable to that parameter.

TEST RESULTS TABLE							
Radiological Contaminants							
Contaminant and Unit of Measurement	Date of sampling (mo./yr.)	MCL Violatio n Y/N	Level Detecte	6.	MCLG	MCL	Likely Source of Contamination
Gross Alpha (pCi/L)	03/14	N	2.4	0 - 2.4	0	15	Erosion of natural deposits
Radium 226 + 228 or combined radium (pCi/L)	03/14	N	0.6	0 - 0.6	0	5	Erosion of natural deposits
Inorganic Contaminants							
Barium (ppm)	03/14	N	0.015	0 - 0.015	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Sodium (ppm)	03/14	N	14.0	N/A	N/A	160	Salt water intrusion, leaching from soil.
TTHMs and Stage 2 Disinfectant/Disinfection By-Product (D/DBP) Parameters							
Contaminant and Unit of Measurement	Date of sample analysi s	MCL Violatio n Y/N	Level Detecte d	Range of Results	MCLG	MCL	Likely Source of Contamination
Chlorine (ppm)	1/14- 11/14	N	1.727	1.44 - 2.04	4.0	4.0	Water Additive used to control microbes
Haloacetic Acids (five) (HAA5) (ppb)	1/1/14 - 12-31- 14	N	42.995	21.93 – 56.46	N/A	60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	1/1/14 – 12-31- 14	Y	84.1975	41.24 – 114.05	N/A	80	By-product of drinking water chlorination
Lead and Copper – "Around the campus" Tap Water Testing							
Contaminant and Unit of Measurement	Date of sample analysi s	AL Violatio n Y/N	90 <sup>th</sup> Percent ile Result	No. of sampling sites exceeding the AL	MCLG	AL (Actio n Level)	Likely Source of Contamination
Copper (tap water) (ppm)	10/14	N	0.16	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	10/14	N	2.1	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits

<sup>\*</sup> 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. UCF 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. 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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

If there are MCL violations or certain other types of violations, they would be noted in the chart on this page, then the following would contain statements regarding the health effects corresponding to each violation and explanations of what the potential causes were and what procedures or measures were taken to prevent future violations.

On 10/10/2014, the University received a tier 2 Notice of Violation for: Exceedance of MCL for Total Trihalomethanes (TTHM).

Some people who drink large quantities of water containing Trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer.

Measures to limit TTHM levels include adjusting the amount of the chlorine added at the water treatment plant, expanding our residual chlorine monitoring frequency to keep residuals as low as permissible, and continuing our water main flushing program. The University of Central Florida will continue to monitor and report the TTHM results, as required by FDEP.

On 1/10/2015, the University received a tier 3 Notice of Violation for: Monitoring Requirements Not Met. December 2014 Microbiological Samples Not Collected.

Total coliform bacteria are generally not harmful themselves. Coliforms are bacteria, which are naturally present in the environment and are used as an indicator that other, potentially harmful bacteria may be present.

From November 21, 2014 through January 8, 2015, UCF contracted routine maintenance and inspection activities on both the ground and elevated water storage tanks as required by Florida Department of Environment Protection (FDEP). Because of these activities, the University shut down our production site and switched over to Orange County Utilities as our water source. During the maintenance period and shut down, UCF did not take samples for microbiological monitoring. We have since collected make-up samples for the missed tests on 1/10/15 and 1/11/15. None of the samples tested positive for total coliform bacteria. Additional monitoring was conducted 1/20/15 through 1/21/15, for the routine January 2015 monthly requirements. These results were submitted to FDEP 1/23/15. These samples submitted on 1/23/15 also did not test positive for coliform bacteria. The submission of these test results on 1/23/15 to the regulatory agency has resolved this monitoring requirement matter.

**Tier 1:** Issued for violations, exceedances, situations or failures that may pose an acute risk to human health. Examples include: Exceedance or violation of the Maximum Contaminant Level (MCL) for nitrate, nitrite, or total nitrate and nitrite, E. coli in the source water or MCL in the distribution system, or failure to test for E. coli when any repeat sample tests positive for coliform. More examples are found in Rule 62-560.410(1)(a)(1)(a-g), F.A.C.

**Tier 2**: Issued for violations of a non-acute maximum contaminant level, maximum residual disinfectant level, treatment technique requirement, and variance or exemption schedule that are not described in Tier 1 (above).

Tier 3: Issued for water systems that fail to perform any required monitoring.

MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect. Some parameters do not have health concerns at this time; therefore they do not have health effects language in this report. All parameters that have been tested are listed in table form on the preceding page.

In addition, the results of the unregulated contaminant sampling required by U.S Environmental Protection Agency are available to the public. For more information, please call EPA's Safe Drinking Water Hotline at 1-800-426-4791, or access EPA's drinking water web site at: http://www.epa.gov/safewater.

The sources of drinking water, for 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 stormwater runoff, and residential uses.
- (D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts 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.

In order to ensure that tap water is safe to drink, 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.

All 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.

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 The University of Central Florida work around the clock to provide top quality water to every tap. We ask that all our consumers help us protect our water sources, which are the heart of our community, our way of life, and our children's future.

We would like you to understand the efforts we continually make to 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 information provided, please feel free to call us at 407-823-5223. UCF's drinking water meets established, acceptable parameters set forth by EPA.