

20
20

ANNUAL
DRINKING
WATER
QUALITY
REPORT



UNIVERSITY of
SOUTH FLORIDA
TAMPA CAMPUS

We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality of 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.

Our water is sourced from five (5) ground water wells at depths from 120 to 340 feet and the City of Tampa Water System. The water, pumped from the Floridan Aquifer, is chlorinated for disinfection purposes, treated with zinc phosphate for corrosion control, and distributed to the campus. Greek Housing and USF Health are supplied separately by the City of Tampa Water System.

The Florida Department of Environmental Protection (FDEP) conducted a statewide assessment of public drinking water systems beginning in 2004. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our wells. A 2020 assessment indicated there are seven (7) unique potential source(s) of contamination identified for this system with a low susceptibility level. 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 concerning this report or your water utility, please contact **William Land, Director Environmental Health & Safety, Facilities Management**, at **(813) 974-4036**. We encourage our customers to be informed about their water utility.

The University of South Florida routinely monitors for contaminants in your drinking water according to Federal and State laws, rules, and regulations. Except where indicated, this report is based on the monitoring results for the period of January 1 to December 31, 2020. Data obtained before January 1, 2020 and presented in this report are from the most recent testing done in accordance with the laws, rules and regulations. The Environmental Protection Agency (EPA) requires monitoring of over 80 drinking water contaminants; however, the contaminants listed in the provided tables are the only contaminants detected in your drinking water during the referenced period. We are pleased to report that our drinking water meets all federal and state requirements.

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, most often naturally occurring 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.

TERMS AND DEFINITIONS

In the following tables, you may find terms and abbreviations that are not familiar to you. To familiarize you with these terms, we have provided the following definitions:

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

LRAA (Locational Running Annual Average): *The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.*

MCL (Maximum Contaminant Level): *The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the Maximum Contaminant Level Goals (MCLGs) as feasible using the best available treatment technology.*

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.*

MRDL (Maximum residual disinfectant level): *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.*

MRDLG (Maximum residual disinfectant level goal): *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 disinfectant to control microbial contaminants.*

N/A: *Means not applicable.*

ND: *Means not detected and indicates that the substance was not found by laboratory analysis.*

Units:

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 million (ppm) or Milligrams per liter (mg/l) – one part by weight of analyte to 1 million parts by weight of the water sample.

Picocurie per liter (pCi/L): *Measure of the radioactivity in water.*

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. 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Safe Drinking Water Hotline at **1-800-426-4791**.

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. USF 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 are available from the Safe Drinking Water Hotline or at www.eps.gov/safewater/lead.

SPECIAL INFORMATION FOR IMMUNOCOMPROMISED PEOPLE

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. Environmental Protection Agency (EPA) and Center for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Environmental Protection Agency's Safe Drinking Water Hotline at **1-800-426-4791**.

TEST RESULT TABLES

INORGANIC CONTAMINANTS

| 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 |
|-------------------------------------|-----------------------------|-------------------|----------------|------------------|------|-----|--|
| 1. Arsenic (ppb) | 02/2020 | N | 0.4 | 0.4 | 0 | 10 | Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes. |
| 2. Cadmium (ppb) | 02/2020 | N | 0.17 | 0.17 | 5 | 5 | Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints. |
| 3. Chromium (ppb) | 02/2020 | N | 0.27 | 0.27 | 100 | 100 | Discharge from steel and pulp mills; erosion of natural deposits |
| 4. Nitrate (as Nitrogen) (ppm) | 02/2020 | N | 1.1 | 1.1 | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits. |
| 5. Sodium (ppm) | 02/2020 | N | 13 | 13 | N/A | 160 | Salt water intrusion; leaching from soil. |
| 6. Thallium (ppb) | 02/2020 | N | 0.37 | 0.37 | 0.5 | 2 | Leaching from ore processing sites; discharge from electronics, glass, and drug factories. |

RADIOLOGICAL CONTAMINANTS

| 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 |
|--|-----------------------------|-------------------|----------------|------------------|------|-----|--------------------------------|
| 7. Gross Alpha (including Uranium) (pCi/L) | 02/2020 | N | 3.5 | 3.5 | 0 | 15 | Erosion of natural deposits. |

COPPER AND LEAD (TAP WATER)

| Disinfectant or Contaminant and Unit of Measurement | Dates of Sampling (mo./yr.) | AL Violation Y/N | 90 th Percentile Result | No. of Sampling Sites Exceeding the AL | MCLG | AL (Action Level) | Likely Source of Contamination |
|---|-----------------------------|------------------|------------------------------------|--|------|-------------------|---|
| 8. Copper (tap water) (ppm) | 09/2020 - 11/2020 | N | 0.97 | 1 | 1.3 | 1.3 | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives. |
| 9. Lead (tap water) (ppb) | 09/2020 - 11/2020 | N | 1.0 | 0 | 0 | 15 | Corrosion of household plumbing systems; erosion of natural deposits. |

STAGE 1 DISINFECTANTS AND DISINFECTION BY-PRODUCTS

| Disinfectant or Contaminant and Unit of Measurement | Dates of Sampling (mo./yr.) | MCL or MRDL Violation Y/N | Level Results | Range of Results | MCLG or MRDLG | MCL or MRDL | Likely Source of Contamination |
|---|-----------------------------|---------------------------|---------------|------------------|---------------|-------------|--|
| 10. Chlorine (ppm) | Monthly 2020 | N | 2.59 | 1.07 - 3.57 | MRDLG = 4.0 | MRDL = 4.0 | Water additive used to control microbes. |

For chlorine, the level detected is the highest running annual average (RAA), computed quarterly, of monthly averages of all samples collected. The range of results is the range of results of all the individual samples collected during the past year.

STAGE 2 DISINFECTANTS AND DISINFECTION BY-PRODUCTS

| Disinfectant or Contaminant and Unit of Measurement | Dates of Sampling (mo./yr.) | MCL or MRDL Violation Y/N | Level Results | Range of Results | MCLG or MRDLG | MCL or MRDL | Likely Source of Contamination |
|---|-----------------------------|---------------------------|---------------|------------------|---------------|-------------|--|
| 11. Haloacetic Acids (five) (HAA5)(ppb) | Quarterly 2020 | N | 16.7 | 6.8–24.1 | NA | MCL=60 | By-product of drinking water disinfection. |
| 12. TTHM (Total Trihalomethanes)(ppb) | Quarterly 2020 | N | 47.7 | 20.1–77.7 | NA | MCL=80 | By-product of drinking water disinfection. |

UNREGULATED CONTAMINANTS*

| Contaminant and Unit of Measurement | Dates of Sampling (mo./yr.) | Level Detected (Average) | Range | Likely Source of Contamination |
|-------------------------------------|-----------------------------|--------------------------|-------------|--|
| 13. Manganese(ppb) | 06/2020 | 2.6 | 2.6 | Natural occurrence from soil leaching |
| 14. Bromide(ppb) | 06/2020 | 9.2 | 9.2 | Naturally present in the environment; salt water intrusion; fossil fuel extraction and utilization, coal-fired power plants, water treatment, flame retardants, biocides, agricultural herbicides, municipal waste incinerators, landfill leachate, and pharmaceuticals. |
| 15. Total Organic Carbon(ppb) | 06/2020 | 780 | 780 | Naturally present in the environment. |
| 16. Haloacetic Acids (HAA5)(ppb) | 06/2020 | 9.3 | 7.9 – 10.4 | By-product of drinking water disinfection. |
| 17. Haloacetic Acids (HAA9)(ppb) | 06/2020 | 17.8 | 14.5 – 19.7 | By-product of drinking water disinfection. |
| 18. Haloacetic Acids (HAA6Br)(ppb) | 06/2020 | 10.3 | 8.3 – 11.2 | By-product of drinking water disinfection. |

* USF has been monitoring for unregulated contaminants (UC) as part of a study to help the U.S. Environmental Protection Agency (EPA) determine the occurrence in drinking water of UC and whether or not these contaminants need to be regulated. At present, no health standards (for example, maximum contaminant levels) have been established for UC. However, we are required to publish the analytical results of our UC monitoring in our annual drinking water quality report. If you would like more information on the EPA's Unregulated Contaminants Monitoring Rule (UCMR), please call the **Safe Drinking Water Hotline at 1-800-426-4791**.