May 15, 2020

**Flushing Guidance for Premise Plumbing**

Due to the outbreak of the Covid-19 virus and the “Safer at Home” orders issued by Florida Governor Ron DeSantis, many businesses and public facilities have been left vacant with very little water usage for an extended period of time.

Some facilities may have a water use plan in place for situations like these, but many do not. The City of Ocala is providing this guide in response to these circumstances to ensure the safety of the water supply and the health and welfare of our customers as businesses and facilities begin to reopen. Facilities should contact a plumber to assist with this guidance. To determine if you are a business or facility that should implement this guidance please refer to the [EPA Checklist](https://www.epa.gov/sites/production/files/2021-10/documents/water-management-plan-for-building-water-systems.pdf).

The City of Ocala’s water contains a residual disinfectant. With little or no water running through building water pipes (premise plumbing) and fixtures for an extended period of time, the water will become stagnant, causing a loss of this residual disinfectant which can lead to biological growth, taste and odor issues, discolored water, and potential leaching of higher than normal concentrations of service line and premise plumbing materials such as lead and copper. Keep the water moving, flushed and refreshed is a crucial step in these situations to ensure clean, clear water free of these unhealthy contaminants.

To address stagnation and improve water quality, the City of Ocala recommends the following steps.

1. Remove or bypass devices like point-of-entry treatment units prior to flushing. Ex: water softeners, treatment units, or other devices that the water may travel through prior to use or consumption.
2. Take steps to prevent backflow or - siphoning of contaminants into plumbing (e.g., close valves separating irrigation systems from home plumbing, disconnect hoses attached to faucets, etc.)
3. Organize flushing to maximize the flow of water (e.g. opening all outlets simultaneously to flush the service line and then flushing outlets individually starting near where the water enters the structure).
4. Run enough water through all outlets (e.g., hose bibs, faucets, showerheads, toilets, etc.), removing aerators when possible. Typical durations in existing protocols range from 10 to 30 minutes for each outlet (duration varies based on outlet velocity).
5. Flush the cold-water lines first, and then the hot water lines. Note: the hot water tank can be drained directly; it can require roughly 45 minutes to fully flush a typical 40-gallon hot water tank.
6. Replace all point-of-use filters, including the filter in refrigerators.
7. Additional precautions may be warranted if there is excessive disruption of pipe scale or if there are concerns about biofilm development. Actions that might be warranted include continued use of bottled water, installation of a point-of-use device, or engaging a contractor to thoroughly clean the plumbing system.

For more information about specific businesses, visit the Center for Disease Control (CDC) website.

U.S. Centers for Disease Control and Prevention (CDC) issued guidance to ensure the safety of building water systems and end-use devices after a prolonged shutdown. Additional information for building owner/operators is in existing CDC resources, such as the Developing a Water Management Program to Reduce Legionella Growth and Spread in Buildings toolkit.