Guidance for Flushing Building Plumbing Systems after Prolonged Shutdown

Public water supplies are safe and unaffected by the SARS-CoV-2 virus that causes COVID-19. However, water quality within buildings that have been vacant or have seen little use during the pandemic restrictions may be impacted due the closure. To make sure stagnant water is fully removed before employees return to work, it’s important that building owners thoroughly flush their establishment’s plumbing systems before reopening. These practices are recommended for schools, daycares, lodging, offices, places of worship, event venues, retail, libraries, museums, restaurants, gyms, healthcare and other facilities which have remained closed during the COVID-19 shutdown. To flush water systems in closed buildings, Hampton Roads utility directors advise owners and property managers to follow these steps:

**Flush cold water first.**

- Remove aerators and screens from all faucets. Then, turn on the cold water and open all cold water outlet valves, such as faucets (bathroom, kitchen, and laundry) and bath tubs and showers. Outlets should be turned on to full open.
- Start with the outlets on the lowest floor, then move to the second floor, and then higher floors in order.
- All cold water outlets should be flowing at the same time during flushing.
- Flush toilets and urinals two or three times each, to purge any stagnant water and bring in fresh water.
- The outlets should run for at least 30 minutes. After this time has elapsed, turn off faucets and outlets in the same order as you opened them. Larger facilities will have more water stored in the pipes and tanks so it will take longer to flush the system.

**Flush hot water second.**

- Turn on the hot water and open all hot water outlets, in the same way as you opened the cold water outlets.
- The hot water should run for 45 minutes for a residence or small business, to ensure that all water in the heater is flushed out.
- After the time has elapsed, close the outlets in the same order as you opened them. Then, clean and replace all aerators and screens. Note: water heaters should be set to at least 120 degrees to prevent microorganisms from growing

Another best practice, especially for schools and daycare facilities, is the removal and thorough cleaning of end-point devices such as drinking fountain filters.

**Additional information**

- For more details and guidance for large businesses, check with The Environmental Science, Policy, and Research Institute and the Centers for Disease Control and Prevention websites.
- Hampton Roads business owners and operators seeking additional guidance should contact their local water utility department or visit www.hrpdcva.gov/buildingflushing.