Ensure Your Plumbing System Safety

INACTIVE SYSTEMS MAY REQUIRE CARE

Water provided by the Water Authority and its member agencies continues to meet all state and federal drinking water standards -- but after water leaves the agencies’ distribution systems and enters private service connections, the water quality can deteriorate if water becomes stagnant.

Most commercial and industrial buildings have been partially occupied even during the COVID-19 shutdown, and HVAC and water systems continue to be maintained and operated even though many employees are working remotely. However, buildings across the nation that have been vacant or have had periods of low water use require special care of their plumbing systems to protect the public and employees returning to work.

That’s because building owners and managers must actively manage and maintain plumbing systems to prevent bacteria growth. Bacteria can flourish in pipes, fixtures and associated equipment (like fountains, cooling towers and HVAC systems) that aren’t used for several days. Schools, for example, commonly flush pipes before kids and teachers return from breaks.

Building owners and managers need to take several steps to prepare inactive plumbing systems for building re-occupancy, and workers performing start-up tasks should wear PPE and receive appropriate training. The steps involve flushing the entire plumbing system with water and testing to ensure “residual chlorine” levels are within the safe range. Testing to ensure effective flushing is recommended; if testing reveals high levels of bacteria in the system, additional steps are needed.

The Centers for Disease Control and Prevention offers several resources for proper management of plumbing systems to reduce the risk of bacteria growth. Links to the CDC and other resources are at www.sdcwa.org.

8 Key Steps for Reopening Buildings

1. Develop a comprehensive water management program (WMP) for your water system and all devices that use water. Guidance to help with this process is available from CDC and others.
2. Ensure your water heater is properly maintained and the temperature is correctly set.
3. Flush your water system. (See graphic on back.)
4. Clean all decorative water features, such as fountains.
5. Ensure hot tubs/spas are safe for use.
6. Ensure cooling towers are clean and well-maintained.
7. Ensure safety equipment including fire sprinkler systems, eye wash stations, and safety showers are clean and well-maintained.
8. Maintain your water system.

Local water agencies are providing public notice about plumbing system safety, however, it is the responsibility of building owners and managers to address any related issues on their own properties. Details about these recommendations from the CDC are at https://bit.ly/CDCBuildingGuidance.
Flush your water system

Flush your water system by disconnecting any point-of-entry device filters and cleaning faucet aerators. Next, locate the cold water faucet closest to where the water enters the building. Then, turn on the faucets in kitchens and bathrooms. Let the cold water flow for 20 minutes or more. Flush all appliances that use water. Run an empty load in the dishwasher, let water flow through drinking water fountains and kitchen sink sprayers. Empty the ice from the ice maker bin, run and discard two additional batches of ice. Flush all toilets, spas and water features like fountains. Follow manufacturer’s instructions on filter replacement. Increase the temperature on the hot water heater to at least 140 degrees and wait for the water heater to reach that temperature (times may vary). Turn on the hot water tap closest to the water heater and in kitchens and bathrooms; leave them on until cool water flows from the faucets. Remember to turn off all faucets and reset the water heater to the desired temperature.

Flushing hot and cold water through all points of use (e.g., showers, sink faucets) is part of the process for ensuring safety when reopening buildings after long periods of inactivity. Flushing may need to be done in segments (e.g., by floor or individual rooms) due to facility size and water pressure. The purpose of building flushing is to replace all water inside building pipes with fresh water. Flush until the hot water reaches its maximum temperature.