

Flush Water Lines in Vacant, Underused Buildings

Ensure Water Quality Before Use and During Periods of Little Use

Before resuming use of a building or during periods of underutilized use, take steps to remove any stale and potentially unhealthy water in your building's water system by flushing the water system and all water devices.

It's important to include flushing as part of the cleaning and routine maintenance that must be completed before opening. This also protects the health of anyone still living or working in an underutilized building. A final flush in the 24 to 48 hours before a building officially resumes use is recommended.



Background

When buildings are vacant or operating at significantly reduced capacity for a long period of time, the water that would flow every day is left sitting in the pipes and devices. The chlorine and ammonia that the Hillsborough Water Treatment Plant adds to disinfect the water will begin to dissipate over time.

Without proper levels of disinfectant, disease-causing microorganisms, like the one that causes Legionnaires' disease, can begin to grow. Corrosion control can be affected.

How to flush water systems and devices

Flushing in stages is best. Begin at the main service line and include all the plumbing, storage tanks, fixtures, fire suppression systems, and equipment such as water fountains and ice machines. The first flush pulls out stale water, while follow-up flushes ensure fresh water with disinfectant is drawn fully through the building. For larger buildings, a single flush isn't enough to reestablish good water quality. The longer service is interrupted, the more flushing also is needed.

Consider the following steps when flushing your buildings. Also consider capturing and reusing flushed water for outdoor watering or cleaning purposes.

- Flush all interior and exterior faucets (remove faucet aerators, if possible) for 10 to 30 minutes.
- Open all outlets at once to flush the service line and then open them again, individually, starting near where the water enters the building.
- Flush cold water first. Then flush hot water until it reaches its maximum temperature.
- Follow manufacturer recommendations to flush water fountains, hot water tanks, hot water recirculating loops, ice makers, dishwashers, humidifiers, and cooling towers.

More information

Flushing pipes is a precaution that should be taken after any shutdown of more than a few days. Depending on the complexity of a building's water system, facility managers should develop a comprehensive water management program for this process, but it should not replace a facility-specific Water Management Plan.

For additional questions, contact the Hillsborough Water Treatment Plant at 919-732-3621.