COVID-19 Update for Building Managers

Keep the water safe: Re-opening buildings closed due to “stay at home orders”

With COVID-19 restrictions, water use in many buildings, facilities, hotels, restaurants and universities has declined significantly. Extended periods of low water use can have negative impacts on water quality. It is important for facility managers and others who maintain water systems in buildings and office or industrial parks to take actions to safeguard water quality before buildings are re-occupied. We’ve summarized some of the key recommendations being made by EPA, MassDEP and CDC here, and included links to various resource materials.

It is important to note that the drinking water does not contain the coronavirus. These procedures are needed to address issues related to aging and stagnation of water within building plumbing systems that have not been used due to the COVID-19 related shut downs.

When water remains in contact with plumbing materials, lead, copper, and also other metals can leach into the drinking water. The levels will continue to increase over time and it is important to flush this accumulated material out of the plumbing.

In addition, over time the chlorine residual added to the water, which is intended to maintain the sanitary integrity of the water, will degrade. Once the chlorine residual is gone, bacteria growth may occur within the plumbing system. It is important that such water be flushed out of the plumbing system, and that new fresh water with a chlorine residual be introduced.

It is particularly important that buildings with specific at-risk populations, such as childcare facilities and schools, need to be thoroughly checked.

Many of these practices are good routine building water system maintenance practices, but are particularly important if the building has not been in use for an extended period. A good general rule is that plumbing systems should keep cold water cold, and hot water hot. And that fresh water is better than stale. These practices are designed to aggressively flush out the plumbing system to bring in fresh water, and flush to waste any stale, rusty, discolored or smelly water.
Good general practice is to evaluate the building's plumbing system, and plan to flush from taps closest to the service line proceeding towards the furthest end of the system. This should include fixtures such as showers and decorative water features.

Flushing of the system needs to take into account ice makers, hot water tanks, treatment systems, in-line filters, coffee makers, refrigerator water taps, and other fixtures where drinking water is likely to be accessed. Make sure these are fully flushed.

It is critical that cooling water towers and related systems are inspected, cleaned, and disinfected before restarting due to the potential for bacterial growth in these systems. Mechanical equipment such as boilers, pumps, backflow preventers, humidifiers, etc., should be inspected to determine if there are any issues regarding their function.