Recommissioning Building Water Systems

Introduction

Ottawa's water supply has continued to operate and provide safe drinking water throughout the COVID-19 pandemic. However, since the onset of COVID-19 many buildings have remained unoccupied for weeks or months. With extended periods of minimal water usage, stagnant water may effect water quality within building water systems and plumbing. Thorough flushing is recommended to restore water quality in the building prior to use by staff and occupants.

Several water industry agencies have produced guidance documents for recommissioning building water systems. Ottawa's drinking water staff have prepared a slide deck that briefly explains the issue and provides links to various guidance documents and checklists. It is recommended that facility managers follow one of the listed guidance documents. The principles are outlined below for quick reference for flushing the system:

Map or sketch your entire water system

1. Identify all building zones, treatment equipment, pumps, valves, tanks and any other additional water system appurtenances.
2. List all outlets and fixtures, such as taps, fountains, washrooms, showers, etc., and be sure to include any connected food and drinking related units such as coffee or ice makers.

Flush your system

1. Flush the water service pipe bringing fresh water to the building.
2. Starting where the water enters the building, working from closest to farthest, flush each tap fully for 10-30 minutes until stable water temperature is reached (approximately 15 - 25 °C during summer months)

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Considerations during flushing

1. Remove and clean any tap aerators.
2. Clean and/or replace any filter or treatment devices.
3. Prior to flushing, remove showerheads for cleaning and disinfection.
4. Deactivate electronic function or automatic taps.
5. Shut down, clean and disinfect any water features.

Hot water

1. Flush cold-water systems first, followed by hot water systems.
2. Hot water systems should be serviced, maintained and flushed as per your specific guidance documents.
3. Hot water systems must achieve proper temperatures to minimize risk of Legionella bacteria (60 °C in a water tank and 55 °C at the point of use).

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