

Operational Guidelines for Commercial and Large Public Buildings with Reduced or No Water Use during COVID-19

Due to COVID-19 many commercial and large public buildings have reduced or no water use due to low occupancy. These buildings could include schools/colleges/universities, daycares, places of worship, recreational facilities, retail buildings, restaurants, hotels, community centres, etc. Water in these buildings will be stagnant and may become unsafe. Water quality issues could include, loss of chlorine residual, high levels of lead and copper, taste and odour, and harmful microorganisms. Municipal water distribution systems may also be impacted if such buildings are concentrated in one area. Water stagnation in the distribution system in those areas may result in similar water quality issues.

Building owners and water system owners (i.e. Municipalities and Local Service Districts) can take several actions to help prevent water from becoming unsafe:

Building Owners

- When buildings reopen, recommissioning should be performed to return the plumbing system to normal use. This could include a complete flushing of the building's plumbing system. Depending on the complexity of the plumbing system this could take a substantial amount of time. Fixtures such as tap screens and aerators should be removed and cleaned.
- The following instructions pertain to specific building infrastructure:
 - **Point-of-Entry (POE) or Point-of-Use (POU) Treatment Systems:** replace any filters used in the treatment systems.
 - **Ice Machines:** discard any ice remaining in ice machine and flush water line for at least 5 minutes.
 - **In-line Water/Coffee Dispensers:** flush water lines for at least 5 minutes.
 - **Dishwashers or Washing Machines:** run through one wash cycle.
 - **Cooling Towers:** adhere to the manufacturer's recommendations for any required draining and/or disinfection of the cooling towers.
 - **Pools and Spas:** adhere to normal procedures for reopening following maintenance or a seasonal shut-down, based on manufacturer's recommendations. Pools will need to be inspected by Service NL prior to opening.
- Occupancy may not reach 100% immediately and a period of low-use may continue. Actions to return plumbing to normal may need repeating as building occupancy increases.

Water System Owners (Municipalities or LSDs)

- Develop communication materials to distribute to building owners to inform them how COVID-19 may impact water quality in the distribution system and their buildings, and about the need to maintain fresh water in their building's plumbing system.

- Consider flushing watermains that serve commercial districts where buildings currently have low occupancy or are not being used.
- Consider analyzing distribution system disinfectant residual data to identify portions of the system that are under-used to help target flushing. Temporarily expanding monitoring locations may better inform actions.
- Ask building owners to report low or no water pressure to you immediately.
- Coordinate building recommissioning so low pressure conditions do not occur in the distribution system when buildings become reoccupied. Also don't want to overload the receiving sewer system. Try to avoid all buildings recommissioning or flushing their plumbing systems at the same time.

Other resources available from the Canadian Water and Wastewater Association (CWWA) include:

CWWA guidance documents related to COVID-19 and the re-opening of buildings can be viewed or downloaded here: <https://cwwa.ca/covid-19-and-the-re-opening-of-buildings/#download>

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