

Reopening Buildings After Prolonged Shutdowns

Eurofins EMLab P&K is a premier provider of environmental testing services for mold, Legionella and metals in drinking water

Temporary shutdowns or reduced operations of buildings associated with reduction in water use and adjustments to HVAC systems can create hazardous conditions for returning occupants or customers. The Centers for Disease Control (CDC) mention 3 areas of concern that need to be considered and potentially addressed before re-opening buildings:

Mold

Mold will grow on building materials when moisture is present. Some sources that can contribute to excess moisture such as condensation may be exacerbated during a building shut down in particular if temperature settings have been changed to reduce energy usage.

Legionella

Stagnant water is an important factor that can increase the growth of Legionella and other biofilm-associated bacteria in the plumbing system. When the water usage is significantly reduced, disinfectant levels are depleted and planktonic bacteria are no longer flushed out. Prolonged shutdown of buildings can increase the risk of Legionnaires' disease and other diseases associated with water.

Lead and Copper

Low or no water use can create conditions that intensify corrosion which can increase the levels of lead and other metals in the building's drinking water. Lead is harmful to health, especially for children, as there is no known safe level in children's blood.

5 Steps to Minimize Your Mold Risk During and After a Prolonged Shutdown

**1**

Maintain a Low Indoor Humidity

Make sure indoor humidity is as low as possible and doesn't exceed 50%. Building managers should consider continuous monitoring of the humidity by using digital hygrometers.

**2**

Have Building Assessed Following Prolonged Shutdowns

Should dampness or mold be detected, find the source of water entry. Before the building can be reoccupied, clean-up and remediation must occur.

**3**

Operate the HVAC System

If an HVAC system hasn't been operating during the prolonged shutdown a "flush out" period should be performed before occupants return. This consists of the HVAC operating for at least 48-72 hours or until no odors are apparent.

**4**

Continually Perform Routine Checks of the HVAC

Continue to maintain indoor humidity within the recommended ranges and operate HVAC system checks.

**5**

Develop A Routine HVAC Operation and Maintenance Program

Consider inspection and maintenance of HVAC components, calibration of HVAC system controls and HVAC testing and balancing.

For more information on reducing your mold risk, contact [Eurofins EMLab P&K](#).

8 Steps To Minimize Legionella Risk Before Reopening Your Building

1

Develop a Comprehensive Water Management Program

Guides can be found on the CDC website.

2

Verify the Water Heater Is Well-maintained and Is Set To the Correct Temperature

Research if the manufacturer recommends draining the water heater after prolonged periods of disuse. Verify that your water heater is set to at least 140° F.

3

Flush Your Water System

Flush hot and cold water through all points of use until the hot water reaches it's maximum temperature.

4

Clean All Decorative Features

After following any recommended manufacturer guidelines for cleaning, ensure the decorative water features are free of visible slime or biofilm before filling with water.

5

Ensure Hot Tubs/Spas Are Safe For Use

Check for existing guidelines from your local or state regulatory agency before use. Hot tubs and spas should be free of visible slime or biofilm before filling with water.

6

Ensure Cooling Towers Are Clean and Well-maintained

Ensure tower and basin are free from visible slime, debris, and biofilm before use.

7

Ensure Safety Equipment Is Clean and Well-maintained

Regularly flush, clean, and disinfect these systems according to the manufacturer's specifications.

8

Maintain Your Water System

Follow your water management program, document activities, and promptly intervene when unplanned program deviations arise.

For more information on reducing your Legionella risk, contact [Eurofins EMLab P&K](#).