# Lane Community College Plan for Reopening Building Water Systems After a Prolonged Shutdown

**Prepared on 5/25/20**
**Edited on 6/22/20**

According to EWEB, "Water quality within commercial buildings that have been vacant or have seen little use during the pandemic restrictions may be impacted as a result of low flow or stagnant water in pipes. Stagnant water in pipes can create conditions that favor the growth and spread of Legionella and other harmful bacteria, result in lower chlorine levels in buildings, and/or result in increased lead and copper levels that can leach out of building pipes and fixtures."

This plan for reopening building water systems after a prolonged shutdown is consistent with guidance from EWEB[1], the Oregon Health Authority[2], and the Centers for Disease Control[3].

## Flushing Plan

**Sinks**

- The following flushing protocols are to be done on all sinks including sinks in kitchens, breakrooms and bathrooms:
    - If flushing a sink that has hot and cold water:
        - Remove aerators, if possible.
        - Flush cold water for 5 minutes.
        - Flush hot water for 5 minutes.
        - Rinse off any debris in aerators and replace.
    - If flushing a sink that has water at one temperature, remove aerator (if possible), flush for 10 minutes, rinse off any debris in aerator and replace.
    - Flush insta-hots for 5 minutes.
    - Replace filters if applicable.

**Kitchen**

- Disconnect plumbed in coffee makers to flush line for 5 minutes.
- Disconnect plumbed in steam tables to flush line for 5 minutes.

**Showers and athletic soaking tubs**

- Flush cold water for 5 minutes
- Flush hot water for 5 minutes

**Eye wash stations and safety showers**

- Flush for 5 minutes.

**Drinking fountains**

[1] http://www.eweb.org/outages-and-safety/water-safety-in-your-home-or-business/reopening-buildings-after-covid-19-closures
[2] https://www.oregon.gov/oha/PH/HEALTHYENVIRONMENTS/DRINKINGWATER/Documents/reopening-guidance.pdf
[3] https://www.cdc.gov/coronavirus/2019-ncov/php/building-water-system.html

- Flush each drinking fountain and bottle filling station for 5 minutes.
- Replace all filters in those drinking fountains that have filters.

**Hot water heaters**

- Ensure water heaters are maintaining water at $140^0$F minimum. If the water heater is at a lower temperature, drain, refill, drain, and refill it.

**Ice Machines**

- Discard ice.
- Allow ice machine to refill and discard one additional batch of ice.
- After removing second batch of ice, disinfect the interior of the ice machine with a bleach solution prior to allowing it to refill with ice for consumption.
- Replace filters if applicable.

**Department Refrigerators with Water Dispensers and/or Ice Makers**

- Flush refrigerator water dispensers for 5 minutes.
- Discard ice.
- Allow ice machine to refill and discard one additional batch of ice.
- After removing second batch of ice, disinfect the interior of the ice machine with a bleach solution prior to allowing it to refill with ice for consumption.

**Dishwashers**

- Run a cycle with no dishes.

**Washing machines (Child care & Building 6)**

- With washing machines empty, run one hot and one cold cycle.

**Decorative fountain**

- There is only one decorative fountain at LCC and it has not been turned off, so no flushing plan is required.

## Documentation

- Staff conducting flushing will carry a floor plan book and mark locations where flushing occurs and where samples are taken.
- Document that hot water heaters are at 140 or above by taking photo of thermostat.

## Personal Protective Equipment

Employees conducting flushing are required to wear disposable gloves. When flushing showers (including safety showers) employees are to wear disposable gloves and a face shield.

## Water Testing

- After flushing, test water in at least two locations in each building and at least one location on each floor.
- Test for lead, legionella, and chlorine.
    - Lead:
        - Analytical Labs: Lead testing cost per sample is $18

- Legionella
  - PBS Engineering and Environmental Inc will collect samples and send them to Nielson Research.
- Chlorine
  - Utilize the college-owned colorimeter.

## Timing

LCC will conduct an initial round of flushing and testing in July. This represents a period of approximately 3 months where most buildings have been largely vacant. If test results are within acceptable parameters, Lane will not conduct further testing but will implement additional flushing on a building-by-building basis as the Reopening PIan indicates more building use.