Water Flushing Procedure:

Large Buildings Affected by the Fort McMurray Fire

This procedure document provides building maintenance and superintendents a step-by-step method to flush water from the large service mains that supply the building. Flushing is necessary to remove stagnant hot and cold water from plumbing systems.

What types of buildings does this procedure apply to?

This procedure applies to large buildings including apartments/condos, schools, hotels/motels, grocery stores, malls, and any other businesses with larger water service connections.

If you are unsure whether this procedure applies to your facility, please contact Alberta Health Services, Environmental Public Health, North Zone at 780-513-7517.

Flush Procedure upon Return to Building

This procedure must be conducted before the general users and/or residents return to the building, and achieves two important goals:

- removing stagnant water and sediment from plumbing systems
- replacing the stagnant water with fresh municipal water

NOTE: This procedure has been developed based on a generic building format and may need to be adapted for buildings with complex systems. If necessary, please call a plumbing firm for assistance.

1. Review the building’s plumbing including, but not limited to main water service connection, hot water system, flow direction and storage reservoirs.

2. Identify all fixtures and equipment connected to the potable water system such as:
   - faucets and hose bibbs
   - water heaters
   - ice machines and ice makers
   - refrigerator water dispensers
   - showers and toilets
   - water softeners

3. If there is a water softener and no water has been used, turn the softener to bypass before using or flushing any water.

4. Connect a hose to an outside hose bibb and run water into a white bucket or similar container. It is easier to see grit in the water inside a white bucket.
If there is grit in the water, continue to flush the line through the hose bibb until the water clears. This helps prevent grit from plugging faucet aerators (screens) and toilet flush valves.

5. Flush all water from the hot and cold water plumbing systems including any storage reservoirs.
   - Ensure all water is drained to waste.
   - Clean and disinfect any reservoirs that have build-up of sediment or are visibly dirty as per manufacturer recommendations. Continue to drain reservoirs to waste during the supply main flushing (Step 6 onward).
   - Do not run plumbing systems in recirculation mode during drainage or flushing.
   - Remove shower heads or cover with a light cloth during flushing to prevent aerosolized water droplets.

6. When steps 1-5 are complete, fully open 10 hot and 10 cold water taps closest to the street water main (or for each main riser when more than one in a building) and leave open for 20 minutes until cooler, clear (colourless) water has reached all outlets.

7. As it is critical to flush through to the far ends of each floor or section of a multi-floor supplied system, progressively move outward from the water main until all the accessible taps/outlets (hot and cold) are flushed for at least 5 minutes. In a multi-storey building, this will typically mean starting with the top floor and working downwards. This will also help flush water through roof reservoirs.

8. Reinstall all shower heads/aerators or remove aerosol-arresting light cloth covers and recheck that all outlets have been closed.

9. Restart the hot water heating system and check that the prescribed temperature is reached.

10. If necessary, please call a plumbing firm for assistance.

Note: It is important to flush each floor or distribution zone before re-entry. For those faucets that were unable to be flushed during this procedure (e.g. individual condo units), the building/maintenance manager is to notify the occupants that their unit was not flushed and that the occupant must flush these faucets for at least 5 minutes upon re-entry.

If re-entry occurs during a Boil Water Order, step 7 will need to be repeated after the Boil Water Order has been rescinded to ensure potable water is flushed into the system. The requirements for showerheads can be omitted.

For more information, please contact your nearest Environmental Public Health office.

Edmonton Main Office 780-735-1800
Calgary Main Office 403-943-2288
Lethbridge Main Office 403-388-6689
Grande Prairie Main Office 780-513-7517
Red Deer Main Office 403-356-6366
www.ahs.ca/eph