

Procedures for Flushing Water Systems After a Drinking Water Advisory

Information in this document

Details on each step are available on the pages noted. Additional steps are required for rural users and properties that are not single-family homes (e.g.: apartment/condo buildings with shared water service).

Please read these instructions carefully. Individuals only have to complete those steps that are applicable to their plumbing system. The flushing and cleaning steps contained in this document should be completed by all users of the water system **AFTER** the Emergency Boil Water Order (EBWO) or Precautionary Drinking Water Advisory (PDWA) is lifted. The steps described are to ensure that your water service and home plumbing has been adequately flushed. If these steps are not completed, unsafe water may remain in your plumbing system.

Read through this information and check off the things that apply to your home. Then follow the instructions for each item you check off. The instructions in this document are routine in nature and in most cases can be found in an owner's manual. If you find that you are unsure or require assistance, consider asking a knowledgeable individual such as your local plumber.

All users served by the waterworks need to complete the following:

Step 1: Flush the cold water plumbing in your building or home.

Step 2: Ensure that the water softeners, water filters and other water treatment or conditioning equipment are safe to use. (See page 2)

Step 3: Flush and clean other water using appliances. (See page 2)

Step 4: Discard potentially contaminated food and water. (See page 2)

Appendix A: Cleaning and flushing instructions for specific devices. (See page 3)

Appendix B: Special instructions for multi-family dwellings and rural homeowners. (See page 4)

Specific Instructions for All Users of the Water Supply

Before you begin, make sure you have the following items available:

- Owner's manual for any devices that will require flushing. If there is a difference between the advice in this document and the owner's manual, follow the owner's manual.
- Pliers and adjustable wrench.
- Garden hose.
- Wet-dry vacuum or sump pump (for Rural Water Utility users only).

NOTE: If in doubt seek the services of a trained professional such as a plumber.

Step 1: Flushing Cold Water System:

To ensure that each stage of the procedure is followed, please check off each action as it is finished.

- If applicable, disconnect your water supply from the water softener and all other treatment devices prior to the start of flushing. (See Step 3 (Page 2), or Appendix A (Page 3) for water softeners or other treatment devices prior to reconnecting to the water supply).

- Individually flush each cold water tap for 5 minutes.
- When weather permits, outdoor taps should be flushed.

While completing cold water flushing, try to refrain from using water at other fixtures (such as turning on other taps) during the flushing procedure, as you may introduce particles into your piping. If this occurs, sediments may plug aerators (screens) on faucets. Wash hands and remove aerators to remove any particles from screens. There may be high levels of chlorine in the water that can cause odours when you are flushing your water system. Levels of chlorine in the water delivered to you will be reduced after the Precautionary Drinking Water Advisory or Emergency Boil Water Order is removed.

Step 2: Water Filters, Softeners, Treatment Units or Conditioners:

To ensure that each stage of the procedure is followed, please check off each action as it is finished.

- Disposable-type filter cartridges should be discarded, including those in refrigerators and ice making units.
- If the unit is a media filter bed-type unit (e.g. sand filter): isolate unit from the household water system and consult manufacturer, supplier or qualified plumbing or water treatment professional on method to disinfect the unit.

Please see Appendix A (Sections A.2 to A.4, Page 2) for information for commercial ice makers, water softeners, reverse osmosis water treatment devices, and swimming pools.

Step 3: All Other Appliances

The following list of water-using appliances and devices is provided to assist in highlighting the post-EBWO actions that are required. Households and facilities that are using other water using appliances and devices not listed here should also be cleaned and disinfected, if possible. To ensure that each appliance or device is cleaned and disinfected, check off each item as it is finished.

Kitchen Coffee pots, coffee makers and machines	Other Medical devices that use water
Fridge filters	Hot water tanks (see Appendix A.1 – pages 4)
Fridge water dispenser (5 minute flush)	Hot tubs (empty and refill)
Water jug filters (Discard/Replace Media)	Pre-stored water (i.e. watering cans)
Ice makers (discard 1st 3 batches of ice)	Water feature (empty and refill)
Water softeners (see Appendix A.3 – page 4)	Other appliances
Bathroom Water piks	

All appliances, large or small, that have been in contact with the drinking water supply should be flushed, disinfected with a mild bleach solution, and rinsed thoroughly. If applicable, all filters must be replaced prior to use.

A mild bleach solution can be made by mixing approximately 2 tablespoons of bleach per gallon of water or 10 ml of bleach per liter of water. Chlorine is a strong oxidant and the chlorine solution is higher than normal.

Seek advice from the manufacturer or supplier of the appliance for more information regarding disinfection.

Step 4: Food Safety – if in doubt throw it out

Discard ice, juice, or other food products which may have used or been mixed with contaminated water.

Appendix: A

A.1 Commercial Ice Maker Procedure

1. Flush the water line to the machine inlet:
 - a) Close the valve on the water line behind the machine and disconnect the water line from the machine inlet.
 - b) Open the valve, run 5 gallons of water through the valve and dispose of the water.
 - c) Close the valve.
 - d) Reconnect the water line to the machine inlet.
 - e) Open the valve.
2. Flush the water lines in the machine.
3. Turn on the machine.
4. Make ice for 1 hour and dispose of the ice.
5. Clean and sanitize, following the manufacturer's instructions, all parts and surfaces that come in contact with water and ice.

A.2 Water Softener Procedure

Follow the manufacturer's instructions for disinfecting the particular unit you have. If the disinfection information is unavailable, the following steps can be used:

1. Adjust water supply valves so appliance is on-line.
2. Switch the softener to —manual regeneration.
3. Cycle the softener for 1 regeneration.
4. Adjust timer to the current time of day and resume normal online operation.

NOTE: If in doubt seek the services of a trained professional such as a plumber or a water softener supplier.

A.3 Reverse Osmosis (RO) Disinfection Procedure

Refer to manufacturer's instructions for disinfecting this water treatment unit.

NOTE: If in doubt seek the services of a trained professional such as a plumber or water treatment supplier.

A.4 Swimming Pools Procedure

Refer to fact sheet "**Operating a public pool, spa or wading pool during a PDWA/EBWO**"

NOTE: If in doubt seek the services of a trained professional such as a plumber or swimming pool professional.

Appendix B

Special Instructions for Multi-family Dwellings and Rural Homeowners.

General Instructions

Complete the steps listed for all users on Page 1.

Be sure to:

Re-start and flush any water-using fixture or piece of equipment in accordance with the manufacturer's specifications. This may vary from fixture to fixture. Consult your facility's engineer and/or the manufacturer when re-starting the equipment.

If a water-holding reservoir is present in a building or on the property; the building owner or operator should consult with their facility engineer or a plumber about draining and disinfecting the reservoir before flushing plumbing systems.

Special Instructions for Apartment buildings and other Multi-family Dwellings

The communal hot water tank (and any other treatment systems such as water softeners) should be flushed by the owner or operator of the building. The individual residents should be notified to flush their hot water taps only after the tank(s) have been flushed.

Homes with Septic System (generally applied to rural users)

Before you begin flushing the plumbing system in homes on private sewage systems, you will need a hose and buckets to prevent drainage/overloading the systems.

When flushing the plumbing system run all inside taps using a hose or bucket to avoid overloading the sewage system, directing water outside and away from a sewage field (be sensitive to potential impact on neighbouring properties).

Special Instructions for Rural Water Pipeline Utility Users:

Rural users should follow steps 1 – 4 but will need to **clean and disinfect your cistern/storage tank before flushing the water lines in order to not re-contaminate your piping and/or devices. (See fact sheet on Cleaning/Disinfecting Cistern after PDWA/EBWO)**

If you have further questions specific to your home or facility, please seek the services of a trained professional such as a plumber.