

Guidance for reopening Noncommunity waterworks after temporary closure due to COVID-19

VDH Office of Drinking Water

May 22, 2020

Many businesses in Virginia that also own and/or operate a waterworks as the water supply for the business have been temporarily closed due to the novel coronavirus (COVID-19) and the Governor's Executive Order Number 53, issued on March 23, 2020. The Governor's Executive Order Number 61 allows some businesses to reopen beginning May 15, 2020, subject to specified requirements. Should you choose to reopen your business to the public, please follow the appropriate guidelines to ensure the waterworks is safe and operating properly. The Virginia Department of Health Office of Drinking Water (ODW) has developed guidance for you to follow prior to serving water to the public.

Step 1 Flushing:

- Flush all stagnant water from the well(s) by using the well blow-off line, the raw water sample tap or the bladder tank drain tap. Flush water from well onto the ground and directed away from the well. Avoid flushing water into creeks, rivers, etc.
- Flush stagnant water from all storage tanks if water has not been used for approximately one month or more. Use caution when flushing pressurized tanks. You may want to flush a little water at a time through the storage drain tap.
- Flush all water lines in buildings to remove stagnant water and any sediment that may have settled since the closure.

Tips for flushing building plumbing systems:

- Flush the cold water first. Remove all aerators, filters, screens, etc. Turn on the cold water from every faucet in the building, starting with the lowest floor first, moving to higher floors (if any), in sequence. All faucets should be flowing as fully as possible, without causing overflows or flooding, and all faucets should be flowing at the same time. Flush all toilets and urinals two or three times each. Flush kitchen sprayers and drinking fountains. Empty the ice from all ice makers and discard. Make and discard two more batches. Look through the building to identify and flush any other fixtures that are connected to the plumbing system. After 30 minutes, turn off the faucets, in the same order that you turned them on.
- Flush the hot water next. Turn on the hot water from every faucet in the building, in the same way you opened the cold water outlets. Run the hot water until it runs cold. If you can drain the water heater, that could reduce the hot water flush time. Close the outlets in the same order that you opened them.
- If needed, clean all aerators, filters, screens, etc., once the flush has been completed before replacing them.

- Larger facilities with complex piping systems will need to flush for longer periods of time to ensure that all water stored in the piping system is flushed out.

Step 2 Treatment:

- If your waterworks provides disinfection treatment, ensure that fresh chlorine solution is prepared. Increase chlorine dose to approximately 1.5 - 2.0 mg/L for the next several days as a precautionary measure.
- If your waterworks does NOT provide disinfection treatment, you may wish to disinfect the waterworks in addition to flushing. Please contact your District Engineer or Environmental Health Specialist, at the phone number provided below for guidelines.
- If you have a treatment unit such as a softener, carbon filter, etc., please follow manufacturer guidance.
- Always follow appropriate safety guidelines / procedures and manufacturer instructions while conducting these tasks.

Step 3 Testing:

- We recommend that one or more “special” total coliform bacteria samples be collected after flushing and prior to resuming normal operations. This helps to ensure that bacteria that may have developed in the stagnant water was completely flushed out of the system. Please note that if you use the state lab (DCLS), you will need to call this office to request a sample kit.
- Collect your regular monthly or quarterly routine total coliform sample(s) as required in your approved Bacteriological Sample Siting Plan after resuming normal operation.

Please inform the Office of Drinking Water of your plans for reopening by contacting your District Engineer or Environmental Health Specialist. You can find Field Office contact information at ODW's [Contact Us](#) page

For more information on flushing building plumbing systems, see the resources available at ODW's [COVID-19 Resources – Drinking Water](#) page. If you have questions contact your ODW Field Office by phone or email.

Thank you for your efforts to protect public health and to provide drinking water that is safe, reliable, and meets water quality standards, particularly during this time of COVID-19. Your efforts are greatly appreciated.