218.477.8070
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# Resuming Business Operations

Moorhead Public Service would like to help you resupply your building with safe, fresh drinking water prior to opening back up to the public.

If your business has been closed or had little to no water use, the water in your building needs to be refreshed. The Minnesota Department of Health recommends that building owners and managers take action to ensure that the water in their buildings is safe for use. Please see: Ensuring Water Quality in Building Premise Plumbing: Guidance for Building Owners and Managers During and After COVID-19 (attached), and the Check List on the back of this page.

MPS is prepared to help businesses develop flushing plans, as well as provide equipment and testing supplies to ensure that the disinfection residuals are at a safe and effective level.

In that same regard, the water that serves your building may also require flushing. Prior to beginning your own flushing, please contact Moorhead Public Service to schedule the flushing of the water mains leading to your business. In summary:

1. Using the above referenced **Guidance**, develop a flushing plan.
2. Several days before using your flushing plan, call **Jake Long** at **218.477.8074** to schedule the water main flushing.
3. If you require chlorine testing assistance, call **Gena Louden** at **218.477.8070** to schedule training and/or drop off testing equipment and supplies.

We at Moorhead Public Service understand this is a stressful time for our community and for the businesses we serve. Please know that we are here for you and are committed to taking all steps necessary to maintain a safe, reliable water service.

If there are any questions regarding premise plumbing flushing, please call **Marc Pritchard**, Water Plant Supervisor, at **218.477.8072**.

# RESTORING WATER QUALITY IN BUILDINGS FOR REOPENING

## CHECKLIST

Building and business closures for weeks or months reduce water usage, potentially leading to stagnant water inside building plumbing. This water can become unsafe to drink or otherwise use for personal or commercial purposes. EPA recommends that building owners, building managers, and businesses take steps to flush the building's plumbing before reopening.

***Flushing** involves opening taps and letting the water run to remove water that has been standing in the interior pipes and/or outlets. The flushing time can vary by the plumbing configuration and type of outlet being cleared.*

## 1 BEFORE FLUSHING BUILDINGS

- ☐ Contact MPS at 218.477.8070 about local water quality and to coordinate maintenance activities.
- ☐ Check information from Clay Co. Env. Health at 218.299.5004 for any local requirements for reopening.
- ☐ Follow appropriate regulations and policies for worker safety and health.

## 2 STEPS FOR FLUSHING BUILDINGS

- ☐ Review how water moves through your building, from the street to each point of use.
- ☐ Inspect the plumbing.
- ☐ Maintain any water treatment systems (e.g., filters, water-softeners) following manufacturer's instructions.
- ☐ Ensure the hot water system is operating as specified.
- ☐ Flush the service line that runs from the water main to the building.
- ☐ Flush the cold water lines.
- ☐ Drain and clean water storage facilities and hot water heaters.
- ☐ Flush the hot water lines.
- ☐ Flush, clean, and maintain devices connected to the plumbing system following manufacturer's instructions.

*Consider checking water quality parameters to verify that fresh water is being flushed through the entire plumbing system.*

## 3 OTHER ACTIONS TO CONSIDER

- ☐ Notify your building occupants of the status of the water systems and the flushing program.
- ☐ Limit access to or use of the water as an appropriate cautionary phase.
- ☐ Determine if proactive disinfection/heat treatment is necessary.
- ☐ Develop a water management program.

# Ensuring Water Quality in Building Premise Plumbing

## GUIDANCE FOR BUILDING OWNERS AND MANAGERS DURING AND AFTER COVID-19

Due to the COVID-19 pandemic, many buildings are experiencing periods of little to no water usage due to shutdowns or a reduction in business activities. Water quality problems can arise as water sits in building plumbing systems. Examples of these problems include:

- Warming of cold water and cooling of hot water to temperatures that provide ideal growth conditions for bacteria, including opportunistic pathogens such as *Legionella* that can pose a health threat.
- Sediment build-up in pipes, leading to mechanical issues and bacterial growth.
- Loss of disinfectant residual and formation of disinfection byproducts.
- Increased lead and copper levels due to stagnant water increasing corrosion of pipes and fittings.
- Growth of bacteria in water treatment equipment such as softeners and filters, plumbing fixtures, and hot water heaters that have not been in use regularly.

## Actions for Building Owners and Managers

- **Watch for information about any upcoming flushing of water mains near your building.**

  Building owners may notice colored water entering their building after the water mains are flushed. Flushing of mains often will stir up sediments that will move into building water plumbing. When you flush the water in your building, the water will become clear again.

- **Share information about flushing.**

  We recommend that large building owners share their building flushing schedules with other large users in the immediate area. Try to stagger flushing times to avoid a low pressure incident and/or high water demand, which could happen if everyone flushes their building plumbing at the same time.

- **Flush all water in your building.**

  You should flush all water lines and plumbing fixtures in your building to remove stagnant water. Run the water in each fixture until the water runs cold, for cold-water taps, and hot, for hot water taps. Having a method to measure temperature is helpful. Begin the flushing process closest to where the water enters the building, working your way out to the most distant points. Be sure to flush and clean appliances that use water such as dishwashers and ice machines.

- **Remove and disinfect all showerheads and faucet screens.**

  Remove and disinfect all showerheads and faucet screens to remove any visible slime or biofilms that may harbor bacteria.

- **Check water quality.**

  If your water supply is chlorinated, measure chlorine residuals throughout the building. If you find an area without chlorine, you should flush the plumbing again. Consider measuring temperature and pH, which also indicate water quality. *Note*: Industrial users may not expect a chlorine residual since water may be treated for process use.

- **Clean all decorative water features.**

  Clean all water features according to the manufacturer's instructions to remove any visible slime or biofilms that may harbor bacteria. Maintain recommended disinfectant levels.

- **Maintain all pools and spas.**

  Ensure refillable pool spas, whirlpools, and hot tubs are free of slime and biofilm before filling. Maintain the recommended disinfectant levels as directed by the manufacturer and according to local regulations.

- **Maintain all cooling towers.**

  Cooling towers that are not properly maintained harbor and amplify pathogens that may be distributed into the air and cause illness such as Legionnaire's disease. Follow all manufacturer's recommendations for startup, shutdown, and maintenance of these systems.

- **Continue to maintain your water system.**

  Do not allow water in your building to become stagnant. Water quality can deteriorate in less than a week of low water use. Establish a water management plan for your building to maintain water quality. This may include periodic flushing of plumbing lines, measuring chlorine residuals, and checking hot and cold water temperatures.

*Additional considerations:* A well designed and implemented flushing program is both an effective and safe method of restoring water quality, and shock disinfection of premise plumbing is usually not needed. When performing an inspection, flushing, or disinfection, make sure to wear appropriate personal protective equipment (PPE) for the hazard (including chemical, physical, and bacteriological hazards) and to inform water users of any hazardous conditions (e.g. elevated chlorine residual). Also keep in mind that plumbing and well repair work require hiring properly licensed professionals.

## For More Information

- Information on water management plans: Prevention with Water Management Programs (https://www.cdc.gov/legionella/wmp/index.html)
- Downloadable flushing plans and videos for large buildings: Flushing Plans (https://engineering.purdue.edu/PlumbingSafety/resources/flushing-plans)
- Building Water Quality and Coronavirus: Flushing Guidance for Periods of Low or No Use (PDF) (https://esprinstitute.org/wp-content/uploads/2020/04/FINAL_Coronavirus-Building-Flushing-Guidance-20200403-rev-1.pdf)
- Guidance for Building Water Systems: Ensure the safety of your building water system and devices after a prolonged shutdown (https://www.cdc.gov/coronavirus/2019-ncov/php/building-water-system.html)
- Minnesota Department of Health Spa Pools, Whirlpools and Hot Tubs (https://www.health.state.mn.us/communities/environment/recreation/pools/spapoolinfo.html)
- COVID-19 Public Pool Closure Guidance (https://www.horizonpoolsupply.com/news-media/covid-19-public-pool-closure-guidance)

- Cooling Technology Institute's Legionellosis - Guideline: Best Practices for Control of Legionella (PDF) (http://www.cti.org/downloads/WTP-148.pdf)
- Improving Water Quality in Schools and Childcare Facilities During COVID-19 (https://www.healthandenvironment.org/webinars/96535)

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*To obtain this information in a different format, call: 651-201-4700.*