

Fact Sheet - Implementing a School Flushing Program

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What is flushing? Flushing is opening a water outlet (i.e. faucet, water fountain, etc.) and allowing the water to run. Flushing removes water that has been stagnant in the water outlet. Depending on the duration of the flushing, the stagnant water in the interior plumbing may also be removed. Other best practices, such as a filter maintenance program and/or an aerator cleaning program, can be instituted in conjunction with a flushing program to minimize lead levels in the drinking water.

Things you need to know before starting

- 1. Is the lead contamination localized or in a small building?
- 2. What plumbing material is present in the building? Is there a lead service line? (Guidance available at
 - https://www.state.nj.us/dep/watersupply/plumb.htm.)
- 3. What is the direction that potable cold-water flows through the building?
- 4. Is there adequate amount of staff and time to perform the flushing program's task?
- 5. What is the appropriate flushing frequency? Weekly, daily, twice a day. etc.?

The answers can depend on multiple factors, such as frequency of usage of the outlet, lead levels, building's and outlet's plumbing material, etc.

Tips

- A. For best results, calculate the volume of the plumbing and the flow rate at the outlet and adjust the flushing time accordingly. Schools can utilize a licensed plumber as a resource for this task.
- B. Do not flush too many outlets at once. Sediment can be dislodged causing further lead problems or the pressure can be reduced to below safe levels.
- C. Additional sampling is required to implement an effective flushing program. See Additional Sampling for Flushing Program below.
- D. Collect the water during flushing and use it for non-consumptive purposes (e.g. watering plants).
- E. Store the Flushing Program Plan and the Flushing Log together to assist in the event that a substitute staff member must perform the flushing program's task.
- F. Flushing is not recommended as a practical remedy for water coolers. Therefore, it may be necessary to replace these outlets with lead free NSF approved devices. Click here for assistance with identifying lead-free certification marks.

Recordkeeping

The school shall maintain a written plan containing the procedure of the Flushing Program. Additionally, the school shall maintain a Flushing Log documenting the water outlet description, date and time it was flushed, and the duration of the flushing. Click here for an example of a Flushing Log.

Additional Sampling for Flushing Program

- → To determine if midday flushing is necessary, samples should be collected midday from drinking water outlets with detectable and/or elevated lead results.
- → All flushing programs should be re-evaluated every six months. First draw and flushed lead samples should be collected at the drinking water outlets with previous lead results exceeding the action level. If the flushed sample results are above the lead action level, other corrective action options should be explored. See <u>Guidance for Schools on PWS Selecting a Water Treatment System</u> for additional information on other remedial measures. If the flushed sample results are below detectable and/or not elevated, the flushing program may continue.
- → Before any changes are made to the flushing program, sampling shall be conducted as confirmation.

Types of Flushing Programs

Туре	When to implement?
Individual Outlet Flushing	When only a few outlets have lead results that exceed the action level.

Prior to the start of school and/or any consumption of water, the outlets with elevated lead levels shall be turned on and allowed to run for 30 seconds to 1 minute or until cold. For more precise flushing times, please see Tip A. If the outlet is a drinking water fountain with refrigeration, also known as a water cooler, allow the water to run for 15 minutes. Due to the extensive flush time for water coolers, please see Tip F. If midday flushing is necessary, return to these outlets midday and conduct these flushing procedures.



Drinking Water Fountain

Localized Area Flushing

When multiple outlets in one area have lead results that exceed the action level, such as a wing of a school.

Prior to the start of school and/ or any consumption of water, identify the outlets located at the end of each wing and floor of the building with the elevated lead levels and turn it on allowing it to run 30 seconds to one minute. For precise flushing times, please see Tip A. Then identify the next drinking water outlet closest to the end of the wing and flush. Continue flushing each of the drinking water outlets moving toward the entrance of the wing (moving the opposite direction as water flows through the wing). If midday flushing is necessary, return to this wing midday and conduct these flushing procedures.



Drinking Water Fountain with Refrigeration (Water Cooler)

System Wide School Flushing

When a large number of outlets have lead results that exceed the action level and are located in different area of the school.

Prior to the start of school and/or any consumption of water, identify the outlet furthest from the service line and open it to allow the cold water to run 10 minutes. For more precise flushing times, please see Tip A. Then identify the next drinking water outlet furthest from the service line and open it to allow the water to run 30 seconds to 1 minutes or until cold. Continue these steps at all drinking water outlets located in the school.

Lead Service Line Flushing

When the plumbing entering into the building (the service line) is lead.

Clearing a lead service line requires moving water rapidly through the distribution system, which is accomplished by opening multiple faucets. Prior to the start of school and/or any consumption of water, identify the outlet furthest from the service line and fully open it to allow the cold water to run 30 minutes or more. For more precise flushing times, please see Tip A. While this outlet is running, fully open the drinking water outlets in the school allowing them to flush beginning with the furthest outlet from the service line and moving throughout the school. Be certain that the outlet can accommodate all the flushed water or monitor the outlet for possible overflow.

Resources

- NJDEP Lead Sampling in Schools Guidance
- Guidance for Schools on PWS Selecting a Water Treatment System
- Flushing Log
- How to Identify Lead Free Certification Marks for Drinking Water System & Plumbing Products
- New Jersey Board of Education Lead in School Drinking Water Regulations