

TIPS TO MAINTAIN WATER QUALITY IN THE HOME

Lead and Copper in Water Questions & Answers – Water Quality Work Group Review DRAFT 2

22. How do I flush my service line?

Homeowners and contractors should flush the service line and internal plumbing to reduce the amount of lead-containing particles and sediment entering the home immediately following work on lead service lines.

- *Do not consume tap water, open hot water faucets, or use icemaker or filtered water dispenser until flushing is complete.*
- *Immediately after a lead service line replacement, flush the service line by running water from an available outside tap or from the inside cold water tap closest to where the service line enters the home. Flush the line at full flow for 30 minutes. If the cold water tap has an aerator (or screen), then remove it prior to flushing, and rinse it free of debris prior to replacing it.*
- *After an initial flush of the replaced service line is complete:*
 1. *Remove faucet aerators from all cold water taps in the home.*
 2. *Beginning in the lowest level of the home, fully open the cold water taps throughout the home.*
 3. *Let the water run for at least 30 minutes at the last tap you opened (top floor).*
 4. *Turn off each tap starting with the taps in the highest level of the home. Be sure to run water in bathtubs and showers as well as faucets.*

Contact your local municipality to confirm the arrangement in your community.

This was taken from “Communicating About Lead Service Lines: A Guide for Water Systems Addressing Service Line Repair and Replacement”. May need to get permission to use but it looks like it was taken from somewhere else.

23. How do I flush my internal plumbing?

The amount of time you should run the cold water to flush your internal plumbing depends on whether you have a lead service line, the length of the lead service line and amount of plumbing in your home. Running your water until you feel a temperature change will indicate the water is from outside your premise plumbing. Once that has occurred, flush an additional 1-2 minutes to ensure you are receiving water from the water main and not your service line.

Note: At one gallon per minute, a 2-minute flush for a 50-foot service line is the recommended standard.

24. How do I remove, clean and replace my faucet aerators?

Faucet aerators are used to provide a steady flow of water from the faucet with even pressure that prevents splashing and can reduce water usage. Aerators typically include a screen and rubber washer. The screen can become dirty collecting sediment and metals including particulate lead. Monthly cleaning of aerators is recommended. If the screen is in poor condition or damaged, it should be replaced. Hardware stores sell replacement parts.

To clean your screen:

1. Unscrew the screen.
2. Separate the individual parts.
3. Remove any sediment (mineral or rust build up) on the screen and other parts. If necessary, soak the parts in white vinegar for a few minutes and scrub with a brush.
4. Reassemble the screen parts and re-attach to faucet.

25. How do I flush out my hot water heater tank?

Sediment, bacteria, minerals and metals can build up in your hot water heater tank. This can impact household water quality and water pressure. Depending on your hot water tank, flushing the tank is recommended annually to maintain performance. To protect the life of your hot water heater, we recommend following the manufacturer's instructions for flushing. It is important to keep in mind that 30 to 75 gallons of hot water will be lost during the flushing process.

You may also be able to find an online video about how to drain your brand of hot water heater.

To flush the tank:

- 1) Take note of the position of your gas control valve (Figure 1-item 1) so that it may be reset to the same position when the task is completed.
- 2) **SET YOUR GAS CONTROL VALVE TO THE PILOT OR OFF POSITION.** *(This is IMPORTANT: If the burner control is left on while the tank is empty and/or being emptied and the flame comes on, the heat will ruin the tank) You may want to use up the hot water either with a load of clothes or some other means like a shower or dishes before you continue.*
- 3) Shut off the cold water valve leading to the tank (Figure 1-item 2).
- 4) Open a hot water faucet anywhere in the home (*this will let air into the tank while it is draining*).
- 5) Attach a short garden hose to the hot water tank drain spigot and run it to a floor drain (Figure 1-item 4).
- 6) Open up the hot water tank drain spigot (Figure 1-item 4) and empty the tank. This may take several minutes.
- 7) When the tank is drained, leave the drain spigot open, turn on the cold water valve (Figure 1-item 2) in 15-second bursts and wait for it to drain after each burst. Three bursts should do the job.

To fill the tank:

- 8) Close the hot water tank drain spigot (Figure 1-item 4) and remove the hose.
- 9) Leave the hot water faucet open (*from step 4 above*).
- 10) Turn on the cold water valve (Figure 1-item 2) leading to the hot water tank until water comes out of the hot water faucet (*from step 4 above*) in a steady stream.
- 11) Shut off the hot water faucet (*from step 4 above*).
- 12) The gas control valve (Figure 1-item 1) can be turned back to its usual setting as noted in step 1 and follow the hot water tank's manufacturer's instructions for lighting the gas pilot if the tank does not have an automatic pilot.

NOTE: The above must be done in order, i.e. Burner off, hot water faucet open etc. or damage can result from heat, vacuum, pressure or water damage to the tank, faucets, pipes and/or finished floor.

After a period of time, you may find some deterioration of the washer in the hot water tank's spigot and it may need to be replaced if the hot water tank's spigot drips after closing. Plumbers often will cap the spigot with a garden hose cap found at hardware stores to prevent dripping.

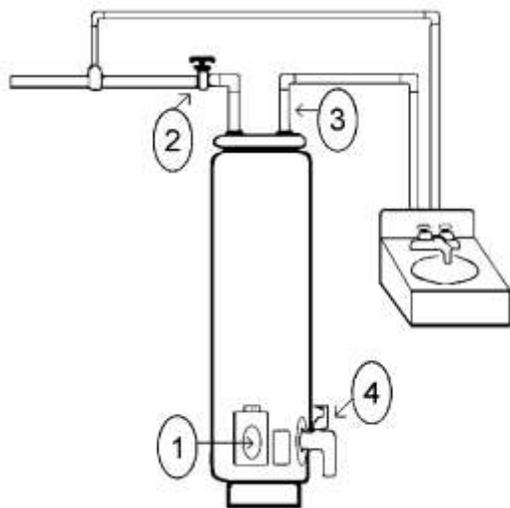


Figure 1: Standard Hot Water Tank

1. Gas control valve.
2. Cold water inlet valve.
3. Hot water outlet pipe.
4. Hot water drain spigot.

26. Where can I go for help with my home's internal plumbing?

Oakland County Community & Home Improvement Division

<https://www.oakgov.com/advantageoakland/residents/Pages/CPHADivision.aspx>

248-858-0493

Low and moderate income homeowners may qualify for an interest-free deferred payment loan to make needed home repairs, improve accessibility, and increase energy efficiency. Oakland County staff is with you all the way from helping you to apply for the loan to overseeing all repair work and paying our pre-qualified contractors.

Macomb County Home Investment Partnership Act Program

<http://mca.macombgov.org/?q=MCA-CommunityDevelopment-HOME>

Wayne County Home Investment Partnership Act Program

<http://www.waynecounty.com/hhs/home-program.htm#FirstTime>

27. What steps can I take to maintain drinking water quality in my home?

Residents can take steps to protect water quality in their home. Actions that help to preserve water quality include:

- Clean faucet aerators and strainers monthly. Replace aerators in poor condition.
- Clean and disinfect sinks and faucets regularly.
- Use cold water for drinking and preparing food.
- Run your water for 30 seconds to 2 minutes if it hasn't been used for 6 hours or more. This will protect against lead leaching from your plumbing. Household water usage activities such as showering, washing clothes and running the dishwasher are effective methods for flushing the pipes.
- Replace your refrigerator and icemaker filters according to the manufacturer's recommendations.
- Replace any other water filters used according to the manufacturer's recommendations.

Additional beneficial plumbing tips include:

- Drain and flush your hot water heater annually.
- Identify and replace plumbing fixtures containing lead. Brass faucets, fittings and valves may leach lead into drinking water. Products sold after January 4, 2014, must by law contain very low levels of lead.
- Be sure backflow protection devices are installed properly.
- Have a licensed electrician check your wiring to see if your electrical system is attached to your service line or elsewhere in the system. If this connection is electrified, it can accelerate corrosion.

Remember, if you have questions regarding your water quality, contact your municipality.

28. Can construction activity in my neighborhood affect my drinking water?

Yes, when the ground is disturbed close to your home, particles can shake free from inside the network of underground pipes including your service line. Having a lead service line can increase your risk of exposure to lead when the ground is disturbed. Particulate lead is like tiny grains of sand. These tiny pieces can fall off the sides of pipes into the water. It can cause the lead level in water to go up quickly and then go back down. During construction and until your lead service line is replaced you should take the following precautions.

- Clean your faucet aerator at least monthly. Lead particles can build up on the aerator screen so cleaning them is important.
- Run your water for 30 seconds to 2 minutes if it hasn't been used for 6 hours or more such as in the morning, when you've been away during the day, when you return from vacation, and when an individual tap in your home is not used regularly.
- Use a filter when drinking or cooking particularly if you are pregnant or have children under the age of 6. A filter is especially important if you are making baby formula. Make sure the filter used is certified for lead removal and replace a filter device as directed by the manufacturer. Contact NSF International at 800-NSF-8010 or visit their website at www.nsf.org for water filter standards.
- Do not boil water to remove lead, boiling will not remove lead.

Other information about lead is available at www.michigan.gov/deq or contact the Environmental Assistance Center at 800-662-9278 or deq-assist@michigan.gov.

29. What is the difference between particulate lead and soluble lead?

Soluble lead is lead that dissolves in water. Corrosion control treatment using orthophosphate reduces the amount of soluble lead in water by creating a protective layer inside the pipe.

Particulate lead is the size of tiny grains of sand. These tiny pieces can fall off the sides of pipes into the water. It can cause the lead level in water to go up quickly and then go back down. Construction activity in your neighborhood can increase the risk of particulate lead, especially when the ground is disturbed close to your home.

- Use a filter if you are concerned about particulate lead. Make sure the filter you purchase is designed to remove both particulate and soluble lead, and replace the filter cartridge as recommended by the manufacturer.
- Clean your aerator at least monthly or more frequently on all your faucets since lead particles can build up on the aerator screen when construction activity is close to your home.

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