

Fact Sheet Shutdown Procedures For Noncommunity Water Systems

331-311 • Revised 9/30/2022

Every designated "seasonal water system" must have a stateapproved startup procedure. And every operating season, before serving drinking water to the public, you must certify that you completed the approved startup procedure to ensure the system is ready to supply safe drinking water to customers.

When you are ready to close your seasonal water system for

the year, you should inspect, clean, and protect your system so it is ready to reopen the next season. If you perform a few shutdown procedures, your water system will be in good shape and need fewer repairs and maintenance work before you re-open it.

Seasonal Water Systems:

- Don't operate year round.
- Totally depressurize the water lines at the end of the operating season.
- Have at least one month when they serve no people.

1. Evaluate the water system.

- a. Inspect the water system using the <u>Small Water System Startup Shutdown Self-</u> <u>Inspection Checklist 331-312</u>.
- b. Look for problems with the system that need attention or repair during the off-season.
- c. Take a final source meter reading and record it on the checklist.

2. Drain and repair the storage tank.

- a. Drain all water out of the storage tank or reservoir.
- b. Inspect the tank for cracks and make any needed repairs.
- c. Clean out any sediment accumulated on the bottom of the tank.
- d. Check the reservoir for openings that could allow rodents, insects, or other contaminants to enter, and correct as needed. Inspect vents and overflows, and re-screen if needed.
- e. If you see growth on the walls of the tank, you may choose to spray them with a concentrated chlorine solution of 50 parts per million (ppm) and let sit for four hours. You will be chlorinating the tank prior to re-opening, so this step may or may not be necessary. Caution! Chlorine may be hazardous in a confined space. Only a professional or a person with confined space training should perform this optional task.

3. Pressure tanks.

- a. If there is a potential for freezing, drain your pressure tank(s) when not in use. Contact the manufacturer if you need instructions on how to do this.
- b. If freezing is not an issue, you may choose to drain the tank(s) or leave it full. If you leave it full, it is important to chlorinate the full volume of water in the tank prior to startup. See <u>Startup Procedures for Noncommunity Water Systems 331-310</u> for chlorination guidance.

4. Shut down the source(s).

- a. For most sources, you will want to turn off the power supply in the off-season. Be sure to take steps necessary to protect your source, equipment, and structures. Consider freezing, vandalism, vermin, flooding, severe rain, and so on. Depending on your situation relative to these factors, you may need to leave the power supply to the source turned on.
- b. If you are closing the system through the winter, take steps to protect the system components from freezing. If possible, use Styrofoam to insulate. Shredded paper or fiberglass insulation may attract vermin, so do not use those materials to winterize.
- c. Check the source(s) for openings that could allow rodents, insects, or other contaminants to enter and correct as needed.

5. Shut down treatment.

- a. Turn off the power to all treatment systems.
- b. Discard unused chlorine solutions and stock.
- c. For other treatment systems, follow the manufacturers' instructions for equipment, chemicals, or filter media not in use for long periods.

6. Protect the distribution system.

- a. Do not leave taps open in the off-season.
- b. Never use antifreeze in your water system because it is a health hazard.
- c. Exercise valves and ensure they're working. Repair if needed.

7. When your system is closed.

- a. Compile your operations and water quality records for the year. Note periods of peak water use, any water quality problems, and unexpected events. Use this information to plan for next year.
- b. Review your coliform monitoring plan and update it if needed. Ensure sample locations are representative of the system.
- c. This is the time to make large-scale improvements to your system, if needed. Work other than repair and replacement usually requires our approval prior to the start of work. Contact your regional engineer for guidance.
- d. Take continuing education courses to improve your knowledge. Our Training webpage has many helpful links.

For more information

Our publications are online at doh.wa.gov/drinkingwater.

Contact our nearest regional office from 8 AM to 5 PM, Monday through Friday. If you have an after-hours emergency, call 877-481-4901.

Eastern Region, Spokane Valley 509-329-2100.

Northwest Region, Kent 253-395-6750.

Southwest Region, Tumwater 360-236-3030.



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