



## Seasonal Noncommunity Public Water Systems Start-up and Shut-down Checklist

This checklist will help you to identify potential problems with your water system that may allow contamination to enter. Complete the following recommended actions and make any improvements needed.

<b>Well Source and Pump House</b>	<b>Start-up</b>	<b>Shut-down</b>
Pump house, if provided, and well are protected from trespassers (e.g. locked and completely secure).	<input type="checkbox"/>	<input type="checkbox"/>
Well casing is structurally sound.	<input type="checkbox"/>	<input type="checkbox"/>
Chemicals (e.g., pesticides, gas, solvents, etc.) are stored outside isolation radius or at least more than 100 feet from the well.	<input type="checkbox"/>	<input type="checkbox"/>
If you have a backup generator, the fuel and generator are stored to capture any leaks in a secondary (backup) containment area.	<input type="checkbox"/>	<input type="checkbox"/>
The well cap is on tight and has no openings that would allow an insect to crawl into the well.	<input type="checkbox"/>	<input type="checkbox"/>
The well vent is turned downward and the screen is intact.	<input type="checkbox"/>	<input type="checkbox"/>
Rodents and insects are kept out of the pump house and away from the well head (e.g., keep area mowed).	<input type="checkbox"/>	<input type="checkbox"/>
The sample tap does not leak and flows freely when opened.	<input type="checkbox"/>	<input type="checkbox"/>
A water meter or hour meter is working properly and water usage records are maintained.	<input type="checkbox"/>	<input type="checkbox"/>



### PROTECTING YOUR SOURCE OF WATER

Preventing contaminants from entering the source water is an important part of providing safe drinking water to the public.

Avoid these most common threats to source water:

- missing or inadequate well cap, and
- contaminants located within the well's isolation area.

Division of Drinking  
and Ground Waters

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**Ohio**

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### WATER TREATMENT

Water treatment will be effective only if equipment is properly operated and maintained.

Avoid these most common treatment problems:

- incorrect chemical dosing,
- chemicals are not NSF approved, and
- water softening media becomes exhausted.

### Chlorination and Other Treatment (e.g., softening, filters, & phosphate)

#### Start-up

#### Shut-down

If applicable, chlorinator is pumping chlorine at an adequate dose throughout distribution system and this was verified by testing chlorine residual twice on separate days. Adjustments were made when necessary.



The chlorine residual test kit is working, properly calibrated at beginning of the season, and the reagents are not expired.



Chlorinator maintenance has been completed (e.g., inspected tubing and other wear items).



The chemical injection point has been cleaned and chemical feed pump is working properly.



Old chlorine solution was properly disposed and new NSF approved chlorine solution was obtained.



Regular operational tests confirm other treatment is working properly.



### Monitoring and Reporting

#### Start-up

#### Shut-down

Obtained Ohio EPA sampling schedule.

N/A

Obtained Ohio EPA monthly report forms for the year, if required.

N/A

Made arrangements with certified laboratory for sample collection and analysis.

**Monitoring and Reporting  
(continued)**

All required total coliform bacteria and nitrate samples were collected and submitted to the laboratory.

**Start-up**

N/A

**Shut-down**

All monitoring and compliance reports were submitted to Ohio EPA for this year.

N/A

**Storage Tanks**

**Start-up**

**Shut-down**

Flush and disinfect the inside of the tank.



The tank overflow pipe is screened, the screen is intact and the discharge is at least 12 inches above grade.



The tank vent is turned downward and properly screened.



The access hatch is locked and the hatch area and lid are protected from insects.



The water level controls are functioning properly.



Visually inspect tank for repairs (e.g., coating on the tank, rust spots). Complete repairs.



Turn off hot water heater and drain it.

N/A

**Pressure Tanks**

**Start-up**

**Shut-down**

Check pressure tank to make sure pressure is being maintained and the tank is not waterlogged.



All valves, gauges, and controls are working properly.




**MONITORING THE  
WATER QUALITY**

Regular monitoring of the water quality is essential to ensure safe, quality water is being delivered.

Avoid these most common monitoring problems:

- taking samples late or not at all,
- taking samples at the wrong location, and
- not using the proper sample collection procedures.



### DISTRIBUTION SYSTEM INTEGRITY

An intact and well-maintained distribution system prevents water from being contaminated after treatment.

Avoid these most common distribution problems:

- storage or pressure tanks are in disrepair,
- overflow screens are not intact, and
- exposed or leaking distribution lines.

### Pressure Tanks (continued)

Thoroughly flushed before disinfection.

**Start-up**

**Shut-down**

N/A

### Distribution Lines

Walk the distribution lines to ensure lines not exposed and/or leaking.

**Start-up**

**Shut-down**

Locate each valve and close and re-open each one to ensure they are working.



If have yard hydrants with weep holes, replace them.



All outdoor hose bibs have vacuum breakers.



All testable backflow preventers have been tested by a certified tester at least every 12 months.



If there is an RV dump station, ensure an air gap is provided.



Ensure lines are empty at end of season.

N/A

### System Disinfection

Complete pre-season disinfection of the system according to guidance for disinfection of public water system wells.

**Start-up**

**Shut-down**

N/A

Obtain two sets of total coliform samples collected at least 24 hours apart.

N/A

### MORE INFORMATION

Contact your Ohio EPA District Office representative for more information. You can also contact Ohio EPA's Central Office at (614) 644-2752.

*Adapted from the State of Washington, Department of Health's Small Water System Start-up Shut-down Self-Inspection Checklist (2005)*