



Department  
of Health

Private Water Systems Program – Bureau of  
Environmental Health and Radiation Protection

“Advancing the health and well-being of all Ohioans.”

# Cleaning and Sanitizing a Hauled Water Delivery Truck

Under Ohio Administrative Code (OAC) 3701-28-16, private water system water haulers are required to make sure that water contact surfaces and equipment are cleaned and disinfected before the equipment is put into use. At least weekly cleaning and disinfection is required during periods of operation, when the system or any of its parts have been dismantled or replaced for purpose of repair, maintenance or alteration and any time contamination is suspected.

## Procedure for Cleaning and Sanitizing a Water Hauler Delivery Tank

### Cleaning

*Make sure another person is available to provide assistance. Provide adequate ventilation using a fan or other mechanism.*

1. Drain all water from the tank.
2. Prepare soap solution by adding 1/3 cup of liquid detergent to 10 gallons of hot water.
3. Thoroughly wash the inside surfaces with a long handle brush using the soap solution.
4. Use a power washer from the manhole opening to spray the soap solution inside the tank.
5. Clean the valves and spigots by flushing the soap solution through them.
6. Rinse the inside of the tank and all valves and spigots with clean warm water at least twice and let the solution drain from the tank.

### Sanitizing

*Make sure another person is available to provide assistance. Provide adequate ventilation using a fan or other mechanism.*

1. Prepare a 100 to 200 PPM chlorine solution in a 5-gallon bucket.
2. Use a power washer from the manhole opening to clean the inside of the tank with the chlorine water solution.
3. Circulate the chlorine solution throughout the tank valves and spigots and hoses.
4. Drain the tank and rinse water with clean water.
5. Refill the tank with chlorinated water from a public water supply.
6. Test the chlorine levels using a chlorine test kit and adjust the chlorine if necessary, to maintain at least 0.2 PPM level of free chlorine.

**Examples of Amounts of 8.25 Percent Bleach Needed to Mix to get a 100 PPM Solution of Chlorine**

<b>Volume</b>	<b>Teaspoons</b>	<b>Milliliters (ML)</b>	<b>Tablespoons</b>	<b>Fluid Ounces</b>	<b>Cups</b>
5 gallons	5	5	1.7	0.83	0.104
100 gallons	100	100	33.3	16.6	2.8
1000 gallons	1000	1000	333.3	166	20.8
2500 gallons	2500	2500	833.3	415	52

Note: Off-the-shelf 8.25% chlorine bleach is replacing 5.25% bleach. For further assistance adjusting the chlorine using 8.25% bleach, use the Chlorine Calculator on the Ohio Department of Health, Private Water System Program website:

<https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/private-water-systems-program/Resources-and-Education>

Open the Fact Sheets tab and locate “Private Water Systems: Raising the Free Chlorine Residual in Hauled Water” fact sheet.

**Where can I get more information?**

Ohio Department of Health  
BEHRP/Private Water Systems Program  
246 N. High St.  
Columbus, Ohio 43215

Phone: (614) 644-7558  
BEH@odh.ohio.gov



Use a **fresh** supply of regular strength unscented household bleach. Chlorine bleach is unstable and loses available chlorine concentration over time, so it is best to always use a fresh supply. Do not use bleach that was purchased more than six months ago. The concentration of regular household bleach has recently been raised by most manufacturers from 5.25% sodium hypochlorite to 8.25% sodium hypochlorite. This calculator assumes that you are using 8.25% bleach.

Volume of water in the hauled water delivery truck:  gallons

Starting free chlorine residual (TEST the water and enter the result):  PPM or mg/L

Needed free chlorine residual:  PPM or mg/L

Change in free chlorine (Needed - Starting):  PPM or mg/L

Amount of 8.25% bleach needed per 1000 gallons =  teaspoons per 1000 gal of water

Amount of 8.25% bleach needed to raise the free chlorine by  ppm in  gallons of water

=  teaspoons of 8.25% bleach

=  mL of 8.25% bleach

=  tablespoons of 8.25% bleach

=  fl oz of 8.25% bleach

=  cups of 8.25% bleach

Remember to agitate and recirculate the water as the bleach is added to help ensure that the chlorine is distributed evenly throughout the water load. You will need to test the water again after you have added the calculated amount of bleach to ensure your target concentration was reached. Other water chemistry factors such as high levels of iron or other dissolved solids will use up available chlorine and may cause the free chlorine level to NOT reach your target free chlorine level. If that happens, perform a new calculation to determine the additional amount of chlorine you will need to add.