

Instructions for Cleaning and Disinfecting a Water Delivery Truck Tank

Drinking water haulage trucks MUST be cleaned and disinfected at least once per year, or more often if required or directed by the Chief Medical Health Officer (CHMO). Before cleaning the truck, the local fire department must be notified. In the event of a fire emergency, the tank should be drained immediately and refilled with fresh water.

YOU WILL NEED:

1. For Chlorine Disinfection:
 - One (1) liter of household bleach (5.25% sodium hypochlorite, Javex or Perflex) for every 1,000 litres of water. This will give you a 50 mg/L chlorine solution. For example, if you have a 4,500 litre truck, you will need 4.5 litres of household bleach. Always use regular unscented household bleach without fabric softeners or other additives, and check the label to make sure the bleach has a strength of 5.25%.
2. To De-Chlorinate the Water for Safe Disposal:
 - 132 g of Vita-D-Chlor for every 1,000 litres of water. For the same 4,500 litre truck, you will need $4.5 \times 132 \text{ g} = 594 \text{ g}$ of Vita-D-Chlor.



STEPS TO FOLLOW:

Clean the Truck, Hose and Nozzles

1. Empty the delivery truck and inspect the inside to see if there is sediment or dirt on the bottom on the tank.
2. If there is dirt in the tank, wash the inside surfaces of the tank with potable water and drain or vacuum out the dirt and wash water. If using a vacuum, it must be a clean, disinfected vacuum hose that is only used to clean the water truck.
3. Wash and disinfect the outside of the water delivery hose and all nozzles and fittings used for water delivery.

Disinfect the Truck and Hose



4. Fill the water truck tank with clean potable water, and add the bleach to the tank as you are filling it with water to ensure thorough mixing. Use one (1) liter of household bleach for every 1,000 litres of water. Make sure the tanks is filled to the top so all inside surfaces come in contact with the bleach solution.
5. To ensure the delivery hose is also disinfected you can either:
 - a. Run the water delivery hose to the top of the tank through the access hatch, and turn on the water delivery pump for 15 minutes to circulate water through the hose; or



- b. Open the valve to the water delivery hose and run water out of the hose until you can smell the bleach in the water coming out the end of the hose (this takes about a minute). Then shut all the valves, and refill the tank to make up for the water that was lost as you cleaned the hose.
6. Let the truck sit for 12 hours or overnight to disinfect the water tank and delivery hose.

De-Chlorinate the Water for Disposal

7. Add 132 g of Vita-D-Chlor for every 1,000 litres of water to the tank to de-chlorinate the water for disposal. Pre-mixing the Vita-D-Chlor in warm water will help the granules dissolve faster.
8. To mix the Vita-D-Chlor, you can either:
 - a. Run the water delivery hose to the top of the tank through the access hatch, and turn on the water delivery pump for 15 minutes to circulate water through the hose, and mix the dechlorination solution.
 - b. Re-circulate the water in the tank using the recirculation pump to mix the dechlorination solution. Run the water delivery hose to the top of the tank through the access hatch and turn on the water delivery pump to help with mixing and dechlorinate the water in the delivery hose.



9. Collect a water sample from the top of the truck or the delivery hose and test the total chlorine (TC) residual. TC should be less than 1 mg/L for safe disposal.
10. If TC is higher than 1 mg/L, add 2.64 g of Vita-D-Chlor for every 1 mg/L and every 1,000 litres of water in the tank, and repeat Steps 8 and 9. For example, a 4,500 L truck with TC = 3.2 mg/L, will need $4.5 \times 3.2 \times 2.64 \text{ g} = 38 \text{ g}$ of Vita-D-Chlor.

11. Empty the water truck tank to the ground. Care should be taken not to create a hazard or to damage property or the environment when emptying the truck.

Confirm the Tank is Clean and Disinfected

12. Refill the tank with clean potable water, collect a bacteria sample and send it to the lab for bacteria analysis.

All fittings, nozzles and extra hose lengths should be cleaned and disinfected before every use. A bottle of bleach solution should be carried on board the water truck to clean fittings or hoses if they are dropped or dragged on the ground.

