



Greene County Public Health

Melissa Howell MS, MBA, MPH, RN, REHS, Health Commissioner Kevin L. Sharrett, MD, Medical Director

Procedures for Cleaning Cisterns and Hauled Water Storage Tanks

Cisterns and hauled water storage tanks should be thoroughly cleaned periodically. How often this is done is dependent on several factors. Because cisterns collect rainwater off the roof, they are subject to varying amounts of potential contamination. In areas where there are large trees overhanging the roof or in areas with a lot of industrial activity cleaning should be done more often—at least every three to five years, but more often if needed.

Water systems that are used exclusively as hauled water storage tanks will not require cleaning nearly as often as cisterns if care is taken when refilling is taking place. Ohio Administrative Code 701-28-12 describes the startup, operation and disinfection of cisterns and hauled water storage tanks.

Entering an enclosed space such as a cistern or hauled water storage tank for cleaning can be a dangerous procedure without adequate ventilation! We recommend that a qualified registered private water systems contractor carry out these procedures.

Procedures for cleaning and sanitizing a water storage tank:

- 1. Drain the tank completely.
- 2. Provide adequate ventilation by using a fan.
- 3. Enter the inside of the tank only if you can be certain that someone is nearby to assist in an emergency.
- 4. Physically remove all debris from the bottom and sides of tank.
- 5. With a stiff brush or power washer, scrub the walls and floor with an unscented bleach solution of sufficient strength to remove slime and mineral encrustation.
- 6. Exit the tank, then rinse the walls with a strong chlorine water solution of 1000 parts per million (ppm). This can be obtained by mixing one gallon of 5.25% unscented chlorine bleach per each 100 gallons of water. Let the water stand in the bottom of tank for at least 8 hours.
- 7. Clean or replace the floating intake filter. Roof washer filters should be inspected and cleaned twice per year.
- 8. Circulate the chlorine solution throughout the house plumbing system and let stand for at least 8 hours.
- 9. Drain the lines and system of the high concentration chlorine water.
- 10. Refill the tank with chlorinated water from a public water supply.

If continuous chemical disinfection is used, re-calibrate the disinfection system and check the disinfectant residual. Chorine shall be at least 0.2 ppm, iodine 0.5 ppm, and ozone 0.1 ppm. Homeowners must keep a chemical test kit for monitoring the type of system in use.