



Ohio Department of Health
Bureau of Environmental Health
Residential Water and Waste Water Program

Acceptable Water Hauling Tank Materials

Revised November 2005

Effective January 2001 there were significant changes to Ohio Administrative Code (OAC) 3701-28-18 regarding the requirements for water hauling tanks. The tanks are to be constructed of stainless steel or a material that meets NSF Standard 61. This has been interpreted to mean that, in addition to a tank being constructed of an NSF Standard 61 approved material, existing steel or other metal tanks may be coated on the inside with a NSF approved epoxy coating. These are the same coatings used on the inside of public water tanks. A complete listing of NSF approved tanks, materials, and coatings can be found at the NSF web-site www.nsf.org/contact.

Plastic water hauling tanks that are manufactured in a non-NSF certified factory, by the same company, are considered acceptable by this department for hauling water if the chemical composition of the tank material and the manufacturing processes are identical. Norwesco has a plastic tank factory in Georgia that has a NSF certification for their plastic tanks. However, the plastic tank factory in Ohio does not have the NSF certification. Norwesco has notified the Bureau of Environmental Health that the manufacturing process for making their plastic tanks are identical in both factories. Norwesco tanks models listed on NSF 61 that are made in Ohio may be used in Ohio. Check the NSF listing of certified products to verify model numbers.

In addition, the use of plastic tanks manufactured with polymer products meeting FDA 21CFR Part 177 INDIRECT FOOD ADDITIVES: POLYMERS requirements for contact with food is regarded as acceptable. This CFR Standard describes the acceptable chemical composition of the plastics used in the manufacture of containers for food and water contact. FDA rated tanks that do not have NSF 61 certification *may* be considered acceptable for water hauling with a **variance** issued by the LHD for this current year. Please note that 21CFR Part 177 INDIRECT FOOD ADDITIVES: POLYMERS does not include a list of acceptable tank or actual manufactured products. The 21 CFR Part 177 is being considered as an addition to the Private Water Rules when they are modified. This information can be review at: <http://www.cfsan.fda.gov/~lrd/FCF177.html>

The question has also come up as to the acceptability of aluminum as a material for water hauling tank construction for compliance with OAC chapter 3701-28-18.

There are no aluminum products listed on NSF standard 61, other than compounds used for water treatment. However, NSF Standard 51 certifies specific products that may include aluminum in their construction for contact with food. NSF Standard 51 does not certify the aluminum. The aluminum used in the products **must** be one of the following grades that can be found in the actual standard:

Wrought Alloys
1000-6000 series

Casting Alloys
218, 308, 319, 332, 356, 360, 413, B443, 514, 520, 713

No other alloys are acceptable for contact with food. NSF does not test the alloys for compliance but relies on accurate information from the manufacturer.

Therefore, based on the information specified in NSF Standard 51, The Bureau of Environmental Health will consider the use of aluminum water hauler tanks that meet the above grade requirements as acceptable to be in compliance with OAC 3701-28-18, when a **variance** is issued by the local health district. Use of approved aluminum tanks will also be considered in future changes to OAC 3701-28.

Aluminum tanks will not be found on any NSF listing and it may be difficult (or impossible) to determine the specific grade on older tanks. New tanks should have at least manufacturer records specifying which grade of aluminum was used in the construction of the tank. There have been recent concerns raised that many older tanks were purchased as salvage and may have been used to haul toxic materials in the past. The past use of all older water hauling tanks has to be taken into consideration when inspecting them. If there is a concern about the past history of any water hauling tank then the responsibility for providing that information is up to the tank owner. Therefore, the local health department inspector should use the best professional judgment in considering the acceptability of existing water hauling tanks and verify possible past uses when there is a question.

Regarding requirements for other fittings and hoses for water hauling trucks it has been noted that the Ohio Administrative Code (OAC) rule 3701-28-18 (D) (5) is currently misprinted and indicates that components must meet NSF Standard 60 (chemicals used in water) instead of NSF Standard 61 (components in contact with water for chemicals) which was the intended Standard reference. ODH plans to correct the rule to state NSF Standard 61 when the rules are revised later this year. However, OAC rule 3701-28-11 (G) currently states that all components of

a private water system, as defined in 3701-28-01 (ZZ), which includes equipment for hauling water, must meet ANSI / NSF sixty-one.

Products listed under NSF Standard 61 are tested for chemical leaching and safety for contact with drinking water. If component products are available that meet Standard 61 then these should be used.

We have considered temporarily allowing the continued use of existing water hauling hoses in good condition that do not meet the required NSF standard, when water is flushed through the hoses for approximately 1 minute prior to filling the customer hauled water tank. As the hoses and other components wear out and need replacement, then they will need to be replaced by components meeting the applicable NSF standards. The determination for component replacement will be made at the discretion of the local health department.

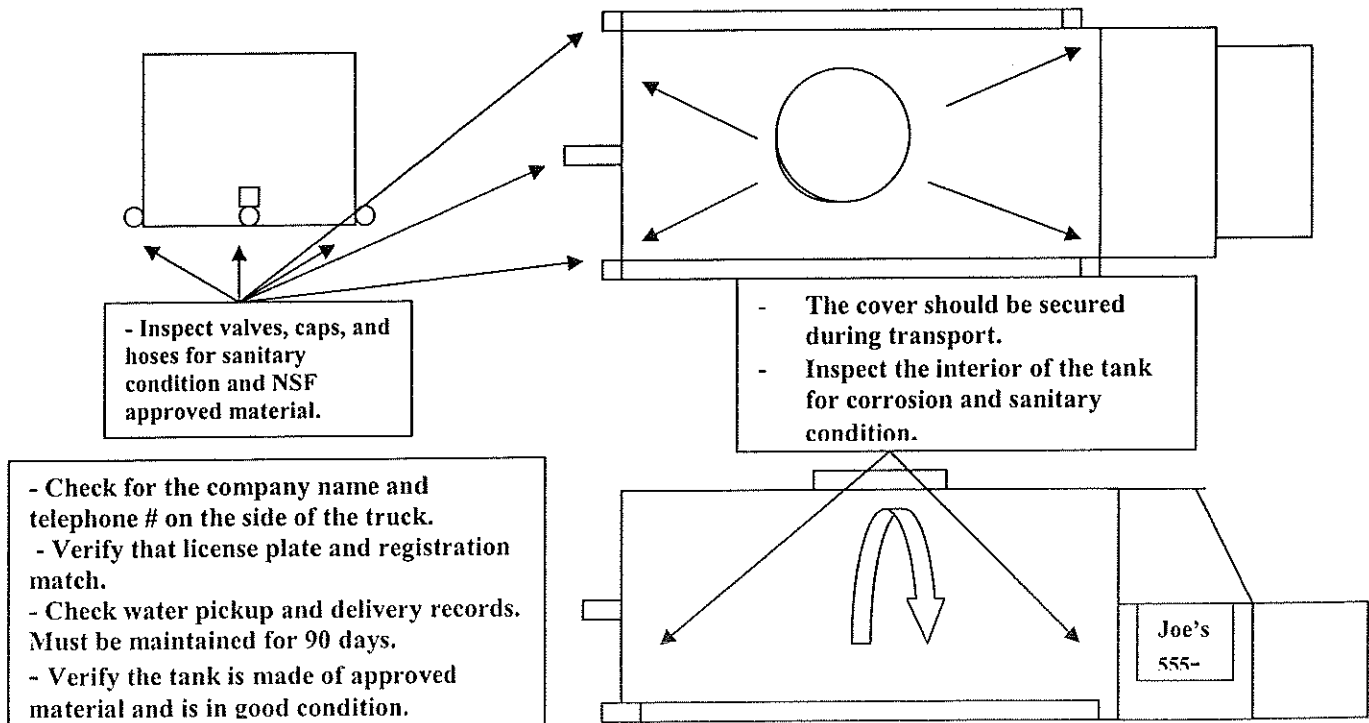


Ohio Department of Health Bureau of Environmental Health Inspecting a Water Hauler Truck

February 2001

Inspecting a water hauler truck is a relatively short, but important process. This is a general guideline for inspection of a water hauler truck by a local health department sanitarian.

1. Check for the name, address, and telephone number on the side of the truck.
2. Check that the truck registration matches with the truck your inspecting.
3. Look at the water loading location and delivery records. Must maintain records for 90 days.
4. Verify that the water hauler has a method to test the chlorine residual.
5. If there is a water load, check for the chlorine residual of at least 0.2 PPM.
6. Verify the tank material being used is stainless steel, or a plastic or aluminum that meets OAC 3701-28-18.
7. Check the outside of the truck tank for corrosion and deterioration.
8. Check the valves and hoses for deterioration and sanitary conditions, including presence of hose caps. Valves and hoses should be of NSF approved materials per OAC 3701-28-18.
9. Open the cover (cover should be secured shut during transport). Look inside the tank using a strong flashlight for signs of deterioration and corrosion.
10. Verify the presence of a NSF epoxy coating if a low carbon steel tank is being used. Paints and epoxy coatings are not the same.
11. Issue a sticker to the water hauler if the truck passes your inspection or give the water hauler a list of deficiencies that will need correction before resuming delivery of water to private water systems.
12. Use good professional judgement.



Please contact the Bureau of Local Environmental Health Services with questions at (614) 466-1390.