

REMOVAL OF RUST; CLEANING AND SANITIZING PROCEDURES FOR 400 GALLON WATER TANK (M149, M149A1)

REFERENCES

FM 21-10, FIELD HYGIENE AND SANITATION, JUNE 2000

FM 4-25.12, UNIT FIELD SANITATION TEAM, JANUARY 2002

TB MED 577, SANITARY CONTROL AND SURVEILLANCE OF FIELD WATER SUPPLIES, MAY 2010

SUPPLIES USED

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| NSN: 7920-00-753-5242 | Pad, scouring, type II |
| 7930-01-294-1115 | Scouring Powder, 14 oz can |
| 7930-00-899-9534 | Dishwashing Compound, 5 gal bottle |
| 7920-00-061-0038 | Brush, Scrub, Plastic |
| 6810-00-598-7316 | Sodium Hypochlorite (household bleach), 5 gal bottle |

RUST REMOVAL

Rust in a 400 gallon water trailer can be removed from interior surfaces, to include manhole cover and drain hole threads. To remove rust, use a nonmetallic green scrubbing pad, and non-abrasive, non-chlorinated scouring powder. This can be accomplished by:

a. Using a long handled brush.

b. Entering the interior of the container (during non-combat emergencies when working in a 400 gallon water trailer, workers will adhere to standards for working in confined spaces set by the National Institute for Occupational Safety and Health (NIOSH).

CLEANING PROCEDURES

a. Prepare a soap solution by adding 1/3 cup of liquid dishwashing compound to 10 gal of hot water.

b. Thoroughly wash the interior surface of the tank, manhole cover, gasket, and manhole entrance with the long handled scrub brush to remove particles of dirt and dust. To clean the T-handle, pipes, and spigots, open all valves and spigots to allow solution to drain.

c. Drain remaining soap solution through bottom drain hole. Fill and empty tank twice to remove cleaning solution. To rinse T-handle, pipes, and spigots, open all valves and spigots to allow rinse water to drain.

SANITIZING PROCEDURES

To sanitize a water trailer with a 100 ppm chlorine concentration:

- a. Add 3 quarts of unscented liquid bleach directly into a full tank (400 gallons) of water. Mix completely. Interior of tank must be kept in contact with solution for at least 60 min.
- b. If there is a shortage of water or bleach, prepare 5 gallons of water with 8 teaspoons of unscented liquid bleach. Using a long-handled brush, stick, or rod with a cloth secured to the end (or some other method), swab the interior walls of the tank every 10 min or as often as necessary to keep the interior walls wet with the sanitizing solution for 60 min.
- c. Sanitize plumbing by opening and draining solution through T-handle, pipes, and spigots, for at least 3-5 minutes on each spigot. Drain remaining solution into an approved location. Thoroughly rinse the tank twice with potable water.

STORAGE

All equipment must be completely dry before storage.

- a. Open all ports and manhole.
- b. Remove drain plug.
- c. Allow equipment to dry.
- d. Once dry, close all ports to prevent possible contamination of interior of tank.

FREQUENCY OF INSPECTIONS

An inspection will be performed on all water trailers by the unit Field Sanitation Team no less than 5 days prior to dispatch of the trailer for the purpose of transportation or storage of potable water. Every water trailer will be inspected by the Field Sanitation Team, at a minimum of once every 90 days, whether it is dispatched or not.

If you have questions concerning the above procedures, contact Fort Eustis Environmental Health, 314-8039.