



WATER TRAILER CERTIFICATION GUIDE “BUFFALO/CAMEL/HIPPO”

FORT RILEY DEPARTMENT OF PUBLIC HEALTH

A.K.A. “*PREV MED*”

7665 NORMANDY DRIVE

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CPT SPRINKLE 15AUG2019



400 GALLON TRAILER (BUFFALO)



- The guiding documents are TB MED 577 (May 2010) and DA 5457 (NOV 2005).
- **TM 9-2330-267-14&P** is the governing technical manual for the M149 series and **TM 9-2330-397-14&P** for the M1112 series “buffalo”.
- Routine PMCS from the TM does not address the sanitary requirements of TB MED 577.
- All water containers should be inspected quarterly by field sanitation teams and sanitized/certified annually by PM.
- (/) is a discrepancy; (X) is a FAILURE

SECTION I. WATER TRAILER INSPECTION CRITERIA

		YES	NO
1. CONTAINER EXTERIOR	a. Marked "POTABLE WATER ONLY"		
	b. Clean/Good Repair		
2. MANHOLE COVERS	a. Rubber Gasket Intact		
	b. Locking Mechanism Functions		
	c. No Rust/Insulation Intact		
	d. Pressure Relief Valve Operates		
3. DISPENSING SPIGOTS	a. All Spigots Function		
	b. "T" Handle Operates Easily		
	c. Protective Box Intact		
	d. Locking Devices Function		
4. DRAIN	a. Plug Installed Hand-Tight		
	b. Cracks Do Not Expose Fiberglass		
	c. Plug/Hole Threads Undamaged		
	d. Threads Not Rusty		
5. CONTAINER INTERIOR: STAINLESS STEEL AND ALUMINUM	a. Clean/Good Repair		
	b. No Rust		
	c. Not Painted/Coated		
	d. No Cracks/Dents Exposing Polyurethane		
6. CONTAINER INTERIOR: FIBERGLASS	a. Clean/Good Repair		
	b. Cracks/Chips Less Than 10%		
	c. Fiberglass Exposed		
	d. Paint Surface Not Flaking		



BUFFALO CONTAINER EXTERIOR

- The exterior of the buffalo must be marked on both sides with a legible “POTABLE WATER ONLY”. (/)
- The tank exterior must be clean in good condition – no excessive corrosion, damage, caked on mud, etc. (/)





BUFFALO MANHOLE COVERS

- Rubber gaskets – the seal formed by the manhole cover lid to the container is of prime importance in keeping contaminants from the stored water. Both upper and lower gaskets should be in clean, non-damaged condition in order to maintain a good seal. The lower gasket should be level with both inner and outer container hull, without excess sealant that can flake off into the water. (X)



Gasket level without excess sealant



Upper gasket clean and not damaged or dry rotten



BUFFALO MANHOLE COVERS, CON'T

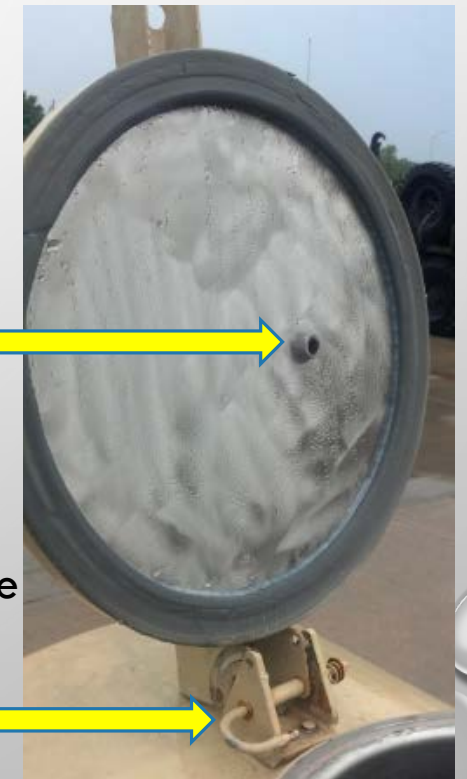
- Locking mechanisms must be operational to ensure a good seal is maintained. (X)
- There should be no rust and the unit's insulation should be intact and not exposed. (/)
- The Pressure Relief Valve must be operational. To test, blow into the inlet on the bottom of the manhole cover. The valve cover (the very top piece of the pressure relief valve) must move easily. (/)

Pressure
relief
valve



Pressure
relief valve
inlet
w/sealant

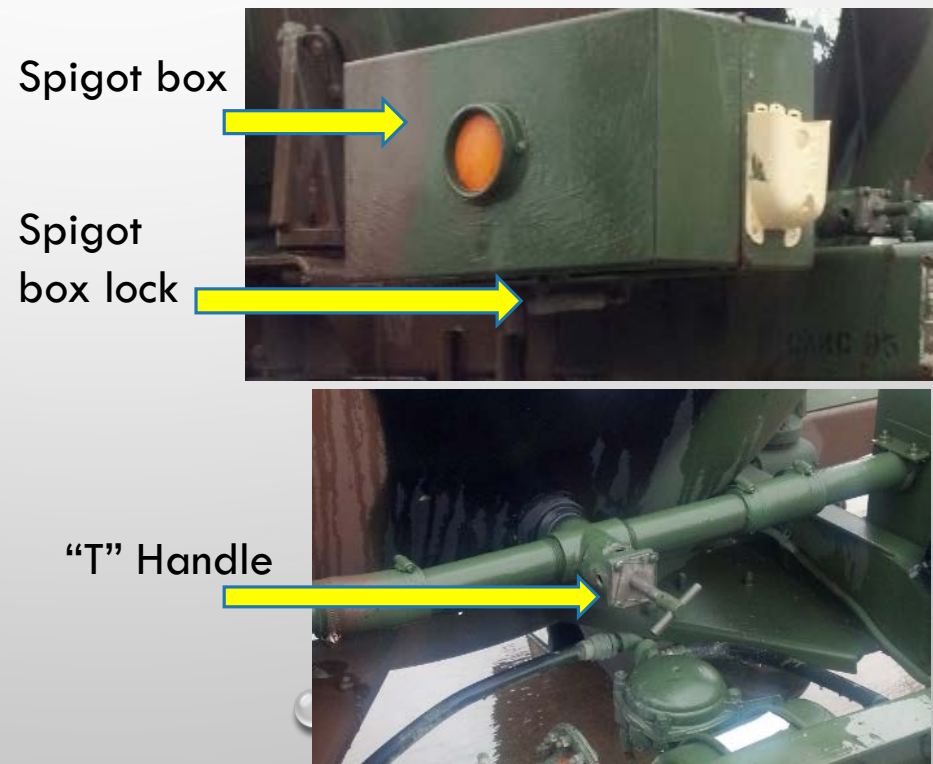
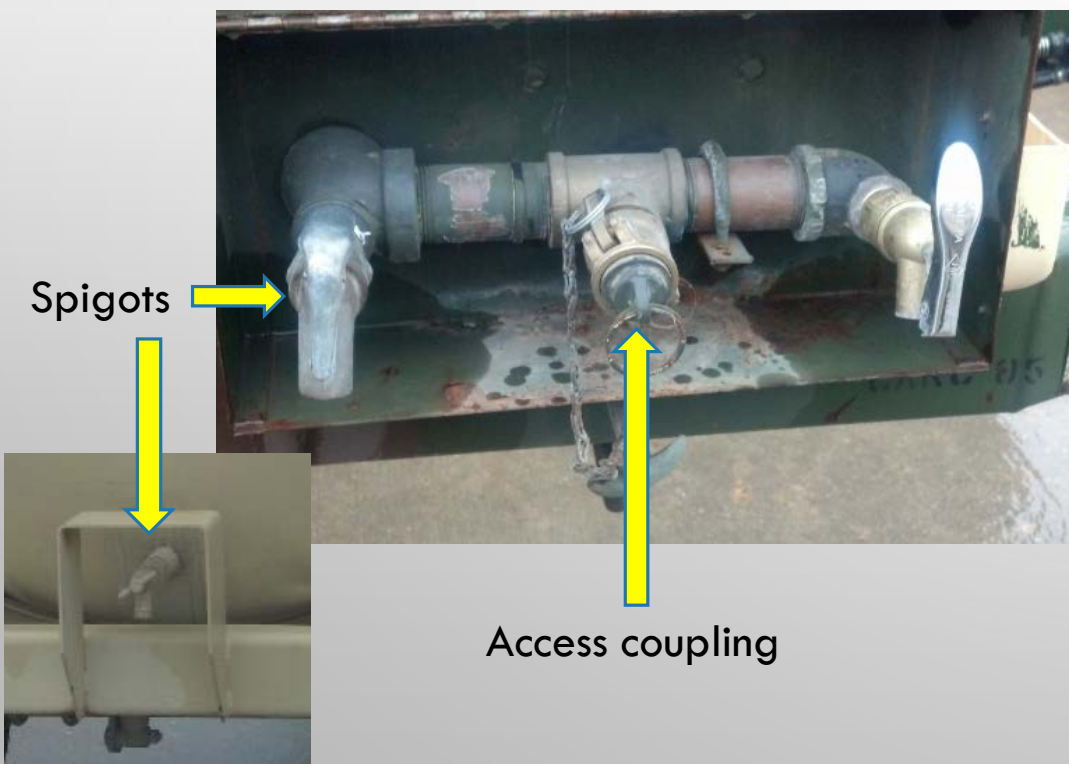
Ensure locking
mechanisms are
functional





BUFFALO DISPENSING SPIGOTS

- All five spigots (four in the two spigot boxes and one in rear) must be functional. The piping from the tank must be intact. There should be no burst pipes from ice damage or leaks from the spigots or the passenger side access coupling. **Testing must be done with potable water ONLY!**
- The “T” handle controls water flow to the spigots and should operate easily. The valve is open when the handle is pushed toward the tank. (X)
- The spigot boxes must be intact and the locking mechanism on each operational. (/)



Close the “T” handle and drain the spigots after use! This will PREVENT ICE DAMAGE that will deadline the unit!



BUFFALO DRAIN

- The lower drain plug must be installed hand tight. **TOOL USE WILL DAMAGE THE THREADS.** (X)
- There must be no crack between the tank hull and the drain that exposes the insulation. (/)
- The plug/hold threads must be undamaged and no corrosion present. (/)
- A class III leak in any of these components will result in a deadline. If necessary, PFTE/plumber's tape can be applied to the **lower** threads of the plug (to limit flaking off into the tank, even though it is inert). (X)



Drain Plug installed
hand tight; gap
between hull and drain
sealed; no leaks

Plug and drain
threads
undamaged
with no
corrosion





BUFFALO CONTAINER INTERIOR

- The interior tank must be clean and in good repair; with no paint or other coating; or any cracks or dents exposing insulation. (X)
- There should be no/an absolute minimum of rust in the interior of the tank. **Refer to the TM and TB MED 577 for proper cleaning procedures. Power tools will damage the tank, DO NOT use them to clean! (/ or X)**
- This is a confined space. **Ensure you have proper training before entry!**





2000 GALLON WATER TANK (HIPPO)

- The 2000 gallon water tank trailer (“Hippo”) is inspected with Section 2 of the DA 5457. The applicable TM is 10-5430-244-10.
- In addition to the items on the form, **ensure the self-contained generator is fully fueled and operational (X).**



SECTION II. WATER TANK TRUCK INSPECTION CRITERIA			
1. CONTAINER EXTERIOR	a. Marked "POTABLE WATER ONLY"	b. Clean/Good Repair	<input type="checkbox"/>
2. MANHOLE COVERS AND FILLING PORTS	a. Rubber Gaskets Intact	b. Locking Mechanisms Function	<input type="checkbox"/>
	c. No Rust/Insulation Intact		<input type="checkbox"/>
3. DISPENSING VALVES	a. Valves Operate Easily	b. Hose Coupling Threads Undamaged	<input type="checkbox"/>
	c. Dust Caps Attached to Valve Ports		<input type="checkbox"/>
4. TANK INTERIOR	a. Clean/Good Repair	b. No Rust	<input type="checkbox"/>
	c. Steel/Aluminum Not Painted		<input type="checkbox"/>



HIPPO CONTAINER EXTERIOR/MANHOLE

- The exterior of the hippo must be marked on both sides with a legible “POTABLE WATER ONLY”. (/)
- The tank exterior must be clean in good condition – no excessive corrosion, damage, caked on mud, etc. (/)
- Manhole hatch gasket must be in good repair (X) and hatch locks must work (X) with no rust (/).

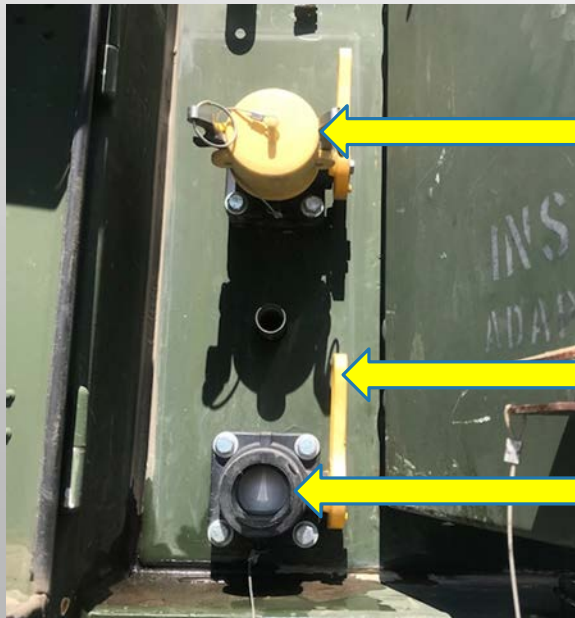


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HIPPO DISPENSING VALVES / CONTAINER INTERIOR

- The Valve lever must operate easily (/), with the dust cap attached (/) and hose coupling threads undamaged (/)
- The tank interior must be clean in good condition – no rust or paint, etc. (/ or X)
- This is a **confined space**. **Ensure you have proper training before entry!**

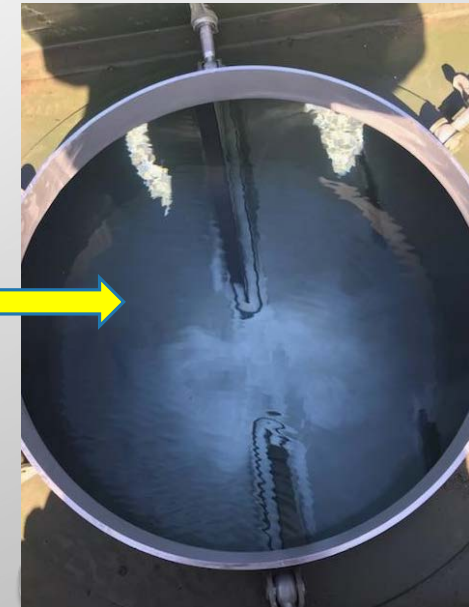


Dust Cap attached

Valve lever operates easily

Hose coupling threads undamaged

Clean with no
rust or paint





800 GALLON WATER TANK (CAMEL)

- The replacement for the 400 gallon “buffalo”, the 800 gallon water tank trailer “Camel” is a hybrid of the buffalo and hippo. It is effectively is a smaller hippo with a gravity-powered port instead of a pump. (A pump/heater is optional). It is equipped with both a spigot and a distribution station.
- The Camel is inspected with (mostly) Section 2 of the DA 5457, just like the hippo, as well as parts of Section 1 (for the access port and valve).
- The applicable TM is **10-2330-402-13&P**.

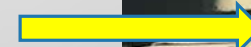
Access Port
Box



Spigot /
Distribution
Station
Storage



Port Valve



Access Port

