

# Negotiated DOT Cargo Tank Motor Vehicle Requirements as Published in the Federal Register 5/24/99

## Part A: Regulations that do not require written verification

### To be Done per Transfer

Effective Date of Regulation	Regulation Requirements
7/1/99	Conduct visual inspection of delivery hose deployed during each unloading. Rejection criteria include exposed reinforcement; permanently deformed wire braid reinforcement; soft spots; bulging loose outer covering; damaged, slipped or worn couplings; missing or severely corroded bolts. [49cfr 180.416(c)]
7/1/99	Verify each component of discharge system that is readily observable during the normal course of unloading is of sound quality, free of leaks, and connections are secure after pressure in discharge system has reached equilibrium with pressure in cargo tank. [49cfr 177.840(m)]
7/1/99	Observe both cargo tank and receiving tank at least once every 5 minutes during any delivery taking more than 5 minutes. Remain alert and within 150 feet of cargo tank and 25 feet of delivery hose throughout unloading procedure. [49cfr 177.840(p)(1)]
7/1/99	For a truck so equipped, attendant must possess off-truck remote activation device at all times during the unloading operation. [49cfr 177.840(s)]

### To be Done Daily

7/1/99	For a truck so equipped, check that off-truck remote mechanism is in good operating order within 18 hours prior to the first delivery of each day and from 150 feet of vehicle. [49cfr 177.840 (o)]
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## Part B: Regulations that require written verification

### To be Done Monthly

Effective Date of Regulation	Regulation Requirements	Verified by/date
7/1/99	Visually inspect delivery hose assembly [49cfr 180.416(d)(1)] Hose ID# _____	
7/1/99	Conduct visual inspection of piping system. Include fusible elements and components such as bolts, connections and seals. [49 cfr 180.416(d)(2)]	
7/1/99	Actuate all emergency discharge control devices designed to close the internal self-closing stop valve (internal self-closing stop valve emergency closure test-see notes) [49cfr 180.416(d)(3)]	
7/1/99	Check internal self-closing stop valve in the liquid discharge opening for leakage (meter creep test or internal self-closing stop valve test-see notes). [49cfr 180.416(d)(4)]	

### Annual

7/1/2000	Ensure visual inspection of delivery hose assembly performed by registered inspector while hose is under normal operating pressure. Record from registered inspector retained in office. [49cfr 180.407(h)]	
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## Part C: Miscellaneous-record retention noted per item

Upon repair/replacement	Conduct one time pressure test of new/repared hose assembly at 120% of maximum working pressure. Verification must include record of inspection, date of test, signature of inspector, name of hose owner, hose ID number, date of original hose assembly and test, note of defects and repairs, and pass or fail status. {49cfr 180.416(f)}	Record to be retained in office [49cfr 180.416(d)(5)]
7/1/99	Each new delivery hose must be marked with a permanent identification number. [49cfr 180.416(b)]	Number must be recorded in monthly and annual hose inspection [49cfr 180.417(a)]
7/1/01	Truck must be retrofitted with emergency discharge control (off-truck remote) at first requalification after 7/1/01. All retrofits must be complete by 7/1/06. [49cfr 173.315(n)(3)]	Record to be retained in office [49cfr 180.417(a)]
7/1/99	Fusible elements (thermal means of closure) must be installed on cargo tanks at first annual leakage test after 7/1/99. [49cfr 173.315(p) and 49cfr 178.337-8(a)(4)]	Included in piping visual inspection [49cfr 180.416(d)(2)]

# Notes

## **Cargo tanks in metered delivery service with a capacity greater than 3,500 gallons water capacity**

Must have a means to enable the operator to stop the delivery from any location he/she may need to be during unloading and for unobstructed view deliveries either a passive shutdown capability or a means to shut down the unloading operation unless prompted by the operator at least once every 5 minutes.

This is effective as of 7/1/01 for new cargo tanks. Cargo tanks currently in service must be retrofitted at 1st pressure test after 7/1/01 or before 7/1/03 whichever is earlier.

[cfr49 173.315(n)(3) and (4), 177.840(p)(2)(ii)]

## **Written emergency discharge control procedures**

Effective 1/1/00 trucks must carry written emergency discharge control procedures for all delivery operations. The procedures must describe the cargo tank motor vehicle's emergency discharge control features and, for passive shutdown capability, the parameters within which they are designed to function. The procedures must describe the process to be followed if using a facility-provided hose for unloading when the cargo tank motor vehicle has a specially equipped delivery hose assembly to meet the requirements of 173.315(n)(2)-(This section refers to cargo tank motor vehicles in other than metered service). [cfr49 177.840(1)]

## **Internal self-closing stop valve emergency closure test**

1. In performing this test, all internal self-closing stop valves must be opened. Each emergency discharge control remote actuator (on-truck and off-truck) must be operated to ensure that each internal self-closing stop valve's lever, piston, or other valve indicator has moved to the closed position.
2. On pump-actuated pressure differential internal valves, the three-way toggle valve handle or its cable attachment must be activated to verify that the toggle handle moves to the closed position. [cfr49 appendix A to part 180]

## **Meter creep test**

1. An operator of a cargo tank equipped with a calibrated meter may check the internal self-closing stop valve for leakage through the valve seat using the meter as a flow measurement indicator. The test is initiated by starting the delivery process or returning product to the cargo tank through the delivery system. This may be performed at an idle. After the flow is established, the operator closes the internal self-closing stop valve and monitors the meter flow. The meter flow must stop within 30 seconds with no meter creep within 5 seconds after the meter stops.
2. On pump-actuated pressure differential internal self-closing stop valves, the valve must be closed with the remote actuator to assure that it is functioning. On other types of internal self-closing stop valves, the valve(s) may be closed using either the normal valve control or the discharge control system (e.g., remote).
3. Rejection criteria: Any detectable meter creep within the first five seconds after initial meter stoppage. [cfr 49 appendix B to part 180]

### **Internal self-closing stop valve test**

An operator of a cargo tank that is not equipped with a meter may check the internal self-closing stop valve(s) for leakage as follows:

1. The internal self-closing stop valve must be in the closed position.
2. All of the material in the downstream piping must be evacuated, and the piping must be returned to atmospheric temperature and pressure.
3. The outlet must be monitored for 30 seconds for detectable leakage.
4. Rejection criteria: Any detectable leakage is considered unacceptable.  
[49cfr appendix B to part 180]

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This should not be interpreted as precluding other procedures which would enhance safe LP-gas operations. NCPGA does not perform these services on behalf of any party and assumes no liability for reliance on the contents of this bulletin. Text of the regulation can be found in the Federal Register Volume 64, No. 99, Monday May 24, 1999, Rules and Regulations, and 49CFR Parts 171, 173, 177, 178, and 180 [Docket No. RSPA-97-2718 (HM-225A)].