



# LEAKAGE TEST

49 CFR, 180.407(h)

Name of Owner/Carrier: \_\_\_\_\_ Test Date: \_\_\_\_\_

Address: \_\_\_\_\_

Owner Unit #: \_\_\_\_\_ Tank serial #: \_\_\_\_\_ MAWP: \_\_\_\_\_ psi

Tank manufacturer: \_\_\_\_\_ Specification: MC/DOT \_\_\_\_\_ Tank capacity: \_\_\_\_\_ gal.

Cargo Tank: Insulated:  Lined:  Lining type: \_\_\_\_\_

Tank Service: LPG  Anhydrous Ammonia  Corrosive  Dedicated  Other

ITEM	REMARKS
Tank Shell	
Tank Head	
Product Piping	
Tank Welds	

Test pressure must be 80% of MAWP/Design pressure - Test Pressure Used: \_\_\_\_\_ psig

Test Pressure maintained for: \_\_\_\_\_ mins. (*Must be held for at least 5 minutes*)

Leak test performed under requirements of US EPA "Method 27" as contained within 40 CFR Part 60?

Cargo Tank continued qualification:  Returned to service  Withdrawn from service

Inspector's Name: \_\_\_\_\_ CT Registration #: \_\_\_\_\_

Inspector's Address: \_\_\_\_\_

I CERTIFY THAT THE INSPECTION/ TEST NOTED ON THIS FORM WAS PERFORMED BY ME AND ALL REQUIRED ENTRIES WERE PROPERLY RECORDED.

\_\_\_\_\_  
Registered Inspector's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Cargo Tank Owner or Authorized Representative's Signature

\_\_\_\_\_  
Date

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**(h) Leakage test.**

- (1) Each cargo tank must be tested for leaks in accordance with §180.407(c). The leakage test must include testing product piping with all valves and accessories in place and operative, except that any venting devices set to discharge at less than the leakage test pressure must be removed or rendered inoperative during the test. All internal or external self-closing stop valves must be tested for leak tightness. Each cargo tank of a multi-cargo tank motor vehicle must be tested with adjacent cargo tanks empty and at atmospheric pressure. Test pressure must be maintained for at least 5 minutes. Cargo tanks in liquefied compressed gas service must be externally inspected for leaks during the leakage test. Suitable safeguards must be provided to protect personnel should a failure occur. Cargo tanks may be leakage tested with hazardous materials contained in the cargo tank during the test. Leakage test pressure must be no less than 80% of MAWP marked on the specification plate, except as follows:
  - (i) A cargo tank with an MAWP of 690 kPa (100 psig) or more may be leakage tested at its maximum normal operating pressure provided it is in dedicated service or services; or
  - (ii) An MC 330 or MC 331 cargo tank in dedicated liquefied petroleum gas service may be leakage tested at not less than 414 kPa (60 psig).
  - (iii) An operator of a specification MC 330 or MC 331 cargo tank, and a non-specification cargo tank authorized under §173.315(k) of this subchapter, equipped with a meter may check leak tightness of the internal self-closing stop valve by conducting a meter creep test. (See appendix B to Part 180.)
  - (iv) An MC 330 or MC 331 cargo tank in dedicated service for anhydrous ammonia may be leakage tested at not less than 414 kPa (60 psig).
  - (v) A non-specification cargo tank required by §173.8(d) of this subchapter to be leakage tested, must be leakage tested at not less than 16.6 kPa (2.4 psig), or as specified in 180.407(h)(2).
- (2) Cargo tanks used to transport petroleum distillate fuels that are equipped with vapor collection equipment may be leak tested in accordance with the EPA's "Method 27 – Determination of Vapor Tightness of Gasoline Delivery Tank Using Pressure – Vacuum Test," as set forth in appendix A to 40 CFR Part 60. Test methods and procedures and maximum allowable pressure and vacuum changes are in 40 CFR 63.425(e). The hydrostatic test alternative, using liquid in EPA's "Method 27 – Determination of Vapor Tightness of Gasoline Delivery Tank Using Pressure-Vacuum Test," may not be used to satisfy the leak testing requirements of this paragraph. The test must be conducted using air.
- (3) A cargo tank that fails to retain leakage test pressure may not be returned to service as a specification cargo tank, except under conditions specified in § 180.411(d).
- (4) After July 1, 2000, Registered Inspectors of specification MC 330 and MC 331 cargo tanks, and non-specification cargo tanks authorized under 173.315(k) of this subchapter must visually inspect the delivery hose assembly and piping system while the assembly is under leakage test pressure utilizing the rejection criteria listed in 180.416(g). Delivery hose assemblies not permanently attached to the cargo tank motor vehicle may be inspected separately from the cargo tank motor vehicle. In addition to a written record of the inspection prepared in accordance with 180.417(b), the Registered Inspector conducting the test must note the hose identification number, the date of the test, and the condition of the hose assembly and piping system tested.
- (5) The inspector must record the results of the leakage test as specified in § 180.417(b).