

15A NCAC 02D .0932 GASOLINE CARGO TANKS AND VAPOR COLLECTION SYSTEMS

(a) For the purposes of this Rule, the following definitions apply:

- (1) "Bottom filling" means the filling of a cargo tank or stationary storage tank through an opening flush with the tank bottom.
- (2) "Bulk gasoline plant" means a gasoline storage and distribution facility with an average daily throughput of less than 20,000 gallons of gasoline and that typically receives gasoline from bulk terminals by cargo tank transport, stores it in tanks, and subsequently dispenses it via account cargo tanks to local farms, businesses, and service stations.
- (3) "Bulk gasoline terminal" means:
 - (A) a pipeline breakout station of an interstate oil pipeline facility; or
 - (B) a gasoline storage facility that typically receives gasoline from refineries primarily by pipeline, ship, or barge; delivers gasoline to bulk gasoline plants or to commercial or retail accounts primarily by cargo tank; and has an average daily throughput of more than 20,000 gallons of gasoline.
- (4) "Cargo tank" means the storage vessels of freight trucks or trailers used to transport gasoline from sources of supply to stationary storage tanks of bulk gasoline terminals, bulk gasoline plants, gasoline dispensing facilities, and gasoline service stations.
- (5) "Cargo tank testing facility" means any facility complying with registration in 49 CFR Part 107, Subpart F.
- (6) "Cargo tank vapor collection equipment" means any piping, hoses, and devices on the cargo tank used to collect and route gasoline vapors in the tank to or from the bulk gasoline terminal, bulk gasoline plant, gasoline dispensing facility, or gasoline service station vapor control system or vapor balance system.
- (7) "Gasoline" means any petroleum distillate having a Reid Vapor Pressure (RVP) of 4.0 psi or greater.
- (8) "Gasoline dispensing facility" means any site where gasoline is dispensed to motor vehicle gasoline tanks from stationary storage tanks. For the purposes of this definition, "motor vehicle" has the meaning defined in 15A NCAC 02D .0928,
- (9) "Gasoline service station" means any gasoline dispensing facility where gasoline is sold to the motoring public from stationary storage tanks.
- (10) "Vapor balance system" means a combination of pipes or hoses that create a closed system between the vapor spaces of an unloading tank and a receiving tank such that vapors displaced from the receiving tank are transferred to the tank being unloaded.
- (11) "Vapor collection system" means a vapor balance system or any other system used to collect and control emissions of volatile organic compounds.

(b) This Rule applies to gasoline cargo tanks that are equipped for vapor collection and to vapor control systems at bulk gasoline terminals, bulk gasoline plants, gasoline dispensing facilities, and gasoline service stations equipped with vapor balance or vapor control systems.

(c) For cargo tanks, the following requirements shall apply:

- (1) Gasoline cargo tanks and their vapor collection systems shall be tested annually by a cargo tank testing facility. The facility shall follow the test procedure as defined by 15A NCAC 02D .2615 to certify the gasoline cargo tank leak tight. The gasoline cargo tank shall not be used unless it is certified leak tight.
- (2) Each gasoline cargo tank that has been certified leak tight according to Subparagraph (c)(1) of this Rule shall display a sticker near the Department of Transportation certification plate required by 49 CFR 180.415.
- (3) There shall be no liquid leaks from any gasoline cargo tank.
- (4) Any cargo tank with a leak equal to or greater than 100 percent of the lower explosive limit, as detected by a combustible gas detector using the test procedure described in 15A NCAC 02D .2615 shall not be used beyond 15 days after the leak has been discovered, unless the leak has been repaired and the cargo tank has been certified to be leak tight according to Subparagraph (c)(1) of this Rule.
- (5) The owner or operator of a gasoline cargo tank with a vapor collection system shall maintain records of all leak testing and repairs. The records shall identify the gasoline cargo tank, the date of the test or repair, and, if applicable, the type of repair and the date of retest. The records of leak tests shall include:

- (A) the name, address, and telephone number of cargo tank testing facility performing the leak test;
 - (B) the name and signature of the individual performing the leak test;
 - (C) the name and address of the owner of the tank;
 - (D) the identification number of the tank;
 - (E) the documentation of tests performed including the date and summary of results;
 - (F) the continued qualification statement and returned to service status; and
 - (G) a list or description of identified corrective repairs to the tank. If none are performed then the report shall state "no corrective repairs performed."
- (6) A copy of the most recent leak testing report shall be kept with the cargo tank. The owner or operator of the cargo tank shall also file a copy of the most recent leak testing report with each bulk gasoline terminal that loads the cargo tank. The owner or operator shall maintain records for at least two years after the date of the testing or repair and make copies of such records available to the Director upon written request.
- (d) For bulk gasoline terminals and bulk gasoline plants equipped with vapor balance or vapor control systems, the following requirements shall apply:
- (1) The vapor collection system and vapor control system shall be designed and operated to prevent gauge pressure in the cargo tank from exceeding 18 inches of water and to prevent a vacuum of greater than six inches of water.
 - (2) During loading and unloading operations there shall be:
 - (A) no vapor leakage from the vapor collection system such that a reading equal to or greater than 100 percent of the lower explosive limit at one inch around the perimeter of each potential leak source as detected by a combustible gas detector using the test procedure described in 15A NCAC 02D .2615; and
 - (B) no liquid leaks.
 - (3) If a leak is discovered that exceeds the limit in Subparagraph (d)(2) of this Rule:
 - (A) For bulk gasoline plants, the vapor collection system or vapor control system shall not be used beyond 15 days after the leak has been discovered, unless the leak has been repaired and the system has been retested and found to comply with Subparagraph (d)(2) of this Rule;
 - (B) For bulk gasoline terminals, the vapor collection system or vapor control system shall be repaired following the procedures in 15A NCAC 02D .0927.
 - (4) The owner or operator of a vapor collection system at a bulk gasoline plant or a bulk gasoline terminal shall test, according to Rule 15A NCAC 02D .0912, the vapor collection system at least once per year. If after two complete annual checks no more than 10 leaks are found, the Director shall allow less frequent monitoring. If more than 20 leaks are found, the Director shall require the frequency of monitoring be increased.
 - (5) The owner or operator of vapor control systems at bulk gasoline terminals, bulk gasoline plants, gasoline dispensing facilities, and gasoline service stations equipped with vapor balance or vapor control systems shall maintain records of all certification testing and repairs. The records shall identify each vapor collection system, or vapor control system; the date of the test or repair; and, if applicable, the type of repair and the date of retest.

History Note: Authority G.S. 143-215.3(a)(1), (a)(4); 143-215.107; 143-215.66; Eff. July 1, 1980; Amended Eff. August 1, 2008; June 1, 2008; January 1, 2007; April 1, 2003; August 1, 2002; July 1, 1994; December 1, 1989; January 1, 1985; Readopted Eff. October 1, 2020; Amended Eff. November 1, 2023.