15A NCAC 02D .0928 GASOLINE SERVICE STATIONS STAGE I

(a) Definitions. For the purpose of this Rule, the following definitions apply:

(1) "Coaxial vapor recovery system" means the delivery of the gasoline and recovery of vapors occurring through a single coaxial fill tube, which is a tube within a tube. Gasoline is delivered through the inner tube, and vapor is recovered through the annular space between the walls of the inner tube and outer tube.

(2) "Delivery vessel" means cargo tanks used for the transport of gasoline from sources of supply to stationary storage tanks of gasoline dispensing facilities.

(3) "Dual point vapor recovery system" means the delivery of the product to the stationary storage tank and the recovery of vapors from the stationary storage tank occurring through two separate openings in the storage tank and two separate hoses between the cargo tank and the stationary storage tank.

(4) "Gasoline" means a petroleum distillate having a Reid vapor pressure of four psi or greater.

(5) "Gasoline dispensing facility" means any site where gasoline is dispensed to motor vehicle gasoline tanks from stationary storage tanks.

(6) "Gasoline service station" means any gasoline dispensing facility where gasoline is sold to the motoring public from stationary storage tanks.

(7) "Line" means any pipe suitable for transferring gasoline.

(8) "Motor Vehicle" means every vehicle which is self-propelled and every vehicle designed to run upon the highways which is pulled by a self-propelled vehicle. This term shall not include mopeds or electric assisted bicycles in accordance with G.S. 20-4.01.

(9) "Operator" means any person who leases, operates, controls, or supervises a facility at which gasoline is dispensed.

(10) "Owner" means any person who has legal or equitable title to the gasoline storage tank at a facility.

(11) "Poppeted vapor recovery adaptor" means a vapor recovery adaptor that automatically and immediately closes itself when the vapor return line is disconnected and maintains a tight seal when the vapor return line is not connected.

(12) "Stationary storage tank" means a gasoline storage container that is a permanent fixture.

(13) "Submerged fill pipe" means any fill pipe with a discharge opening that is entirely submerged when the pipe normally used to withdraw liquid from the tank can no longer withdraw any liquid, or that is entirely submerged when the level of the liquid is:

(A) six inches above the bottom of the tank if the tank does not have a vapor recovery adaptor; or

(B) 12 inches above the bottom of the tank if the tank has a vapor recovery adaptor. If the opening of the submerged fill pipe is cut at a slant, the distance is measured from the top of the slanted cut to the bottom of the tank.

(14) "Throughput" means the amount of gasoline dispensed at a facility during a calendar month after November 15, 1990.

(b) Applicability. This Rule applies to all gasoline dispensing facilities and gasoline service stations, and to delivery vessels delivering gasoline to a gasoline dispensing facility or gasoline service station.

(c) Exemptions. This Rule does not apply to:

(1) transfers made to storage tanks at gasoline dispensing facilities or gasoline service stations equipped with floating roofs or technology that achieves equivalent or greater emission reductions as a floating roof;

(2) stationary tanks with a capacity of not more than 2,000 gallons that are in place before July 1, 1979, if the tanks are equipped with a permanent or portable submerged fill pipe;

(3) stationary storage tanks with a capacity of not more than 550 gallons that are installed after June 30, 1979, if tanks are equipped with a permanent or portable submerged fill pipe;

(4) stationary storage tanks with a capacity of not more than 2,000 gallons located on a farm or a residence and used to store gasoline for farm equipment or residential use if gasoline is delivered to the tank through a permanent or portable submerged fill pipe. This exemption does not apply in ozone non-attainment areas;

(5) stationary storage tanks at a gasoline dispensing facility or gasoline service station where the combined annual throughput of gasoline at the facility or station does not exceed 50,000 gallons, if the tanks are permanently equipped with submerged fill pipes; or

(6) any tanks used exclusively to test the fuel dispensing meters.

(d) With exceptions stated in Paragraph (c) of this Rule, gasoline shall not be transferred from any delivery vessel into any stationary storage tank unless:

(1) the tank is equipped with a submerged fill pipe, and the vapors displaced from the storage tank during filling are controlled by a vapor control system as described in Paragraph (e) of this Rule;

(2) the vapor control system is connected and operating with a vapor tight connection, and working as designed in accordance with the manufacturer's specifications;

(3) the vapor control system is maintained in accordance with the manufacturer's specifications and the definition of "good operation and maintenance" in 15A NCAC 02D .0602, and all damaged or malfunctioning components or elements of design are repaired, replaced, or modified;

(4) the gauges, meters, or other specified testing devices are maintained in accordance with the manufacturer's specifications and the definition of "good operation and maintenance" in 15A NCAC 02D .0602;

(5) the delivery vessel and vapor collection system comply with 15A NCAC 02D .0932; and

(6) the following records are kept in accordance with 15A NCAC 02D .0903:

(A) the scheduled date for maintenance or the date that a malfunction was detected;

(B) the date the maintenance was performed or the malfunction corrected; and

(C) the component or element of design of the control system repaired, replaced, or modified.

(e) The vapor control system required by Paragraph (d) of this Rule shall include one or more of the following:

(1) a vapor-tight line from the storage tank to the delivery vessel, and:

(A) for a coaxial vapor recovery system, either a poppeted or unpoppeted vapor recovery adaptor;

(B) for a dual point vapor recovery system, a poppeted vapor recovery adaptor; or

(2) a refrigeration-condensation system or equivalent system designed to recover at least 90 percent by weight of the volatile organic compounds in the displaced vapor.

(f) If an unpoppeted vapor recovery adaptor is used pursuant to Part (e)(1)(A) of this Rule, the tank liquid fill connection shall remain covered either with a vapor-tight cap or a vapor return line, except when the vapor return line is being connected or disconnected.

(g) If an unpoppeted vapor recovery adaptor is used pursuant to Part (e)(1)(A) of this Rule, the unpoppeted vapor recovery adaptor shall be replaced with a poppeted vapor recovery adaptor when the tank is replaced or is removed and upgraded.

(h) Where vapor lines from the storage tanks are manifolded, poppeted vapor recovery adapters shall be used. No more than one tank is to be loaded at a time if the manifold vapor lines are size 2.5 inches and smaller. If the manifold vapor lines are 3.0 inches and larger, then two tanks at a time may be loaded.

(i) Vent lines on tanks with Stage I controls shall have pressure release valves or restrictors.

(j) The vapor-laden delivery vessel:

(1) shall be designed and maintained to be vapor-tight during loading and unloading operations and during transport with the exception of normal pressure/vacuum venting as required by the Department of Transportation; and

(2) if it is refilled in North Carolina, shall be refilled only at:

(A) bulk gasoline plants complying with 15A NCAC 02D .0926; or

(B) bulk gasoline terminals complying with 15A NCAC 02D .0927 or .0524.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
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