

15A NCAC 02D .0926 BULK GASOLINE PLANTS

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

- (1) "Average daily throughput" means annual throughput of gasoline divided by 312 days per year.
- (2) "Bottom filling" means the filling of a tank truck or stationary storage tank through an opening that is flush with the tank bottom.
- (3) "Bulk gasoline plant" means a gasoline storage and distribution facility which has an average daily throughput of less than 20,000 gallons of gasoline and which usually receives gasoline from bulk terminals by trailer transport, stores it in tanks, and subsequently dispenses it via account trucks to local farms, businesses, and service stations.
- (4) "Bulk gasoline terminal" means a gasoline storage facility which usually receives gasoline from refineries primarily by pipeline, ship, or barge; and delivers gasoline to bulk gasoline plants or to commercial or retail accounts primarily by tank truck; and has an average daily throughput of more than 20,000 gallons of gasoline.
- (5) "Gasoline" means any petroleum distillate having a Reid vapor pressure of four psia or greater.
- (6) "Incoming vapor balance system" means a combination of pipes or hoses which create a closed system between the vapor spaces of an unloading tank truck or trailer and a receiving stationary storage tank such that vapors displaced from the receiving stationary storage tank are transferred to the tank truck or trailer being unloaded.
- (7) "Outgoing vapor balance system" means a combination of pipes or hoses which create a closed system between the vapor spaces of an unloading stationary storage tank and a receiving tank truck or trailer such that vapors displaced from the receiving tank truck or trailer are transferred to the stationary storage tank being unloaded.
- (8) "Splash filling" means the filling of a tank truck or stationary storage tank through a pipe or hose whose discharge opening is above the surface level of the liquid in the tank being filled.
- (9) "Submerged filling" means the filling of a tank truck or stationary tank through a pipe or hose whose discharge opening is entirely submerged when the pipe normally used to withdraw liquid from the tank can no longer withdraw any liquid, or whose discharge opening is entirely submerged when the liquid level is six inches above the bottom of the tank.

(b) This Rule applies to the unloading, loading, and storage facilities of all bulk gasoline plants and of all tank trucks or trailers delivering or receiving gasoline at bulk gasoline plants except stationary storage tanks with capacities less than 528 gallons.

(c) The owner or operator of a bulk gasoline plant shall not transfer gasoline to any stationary storage tanks after May 1, 1993, unless the unloading tank truck or trailer and the receiving stationary storage tank are equipped with an incoming vapor balance system as described in Paragraph (i) of this Rule and the receiving stationary storage tank is equipped with a fill line whose discharge opening is flush with the bottom of the tank.

(d) The owner or operator of a bulk gasoline plant with an average daily gasoline throughput of 4,000 gallons or more shall not load tank trucks or trailers at such plant after May 1, 1993, unless the unloading stationary storage tank and the receiving tank truck or trailer are equipped with an outgoing vapor balance system as described in Paragraph (i) of this Rule and the receiving tank truck or trailer is equipped for bottom filling.

(e) The owner or operator of a bulk gasoline plant with an average daily throughput of more than 2,500 gallons but less than 4,000 gallons located in an area with a housing density exceeding specified limits as described in this Paragraph shall not load any tank truck or trailer at such bulk gasoline plant after November 1, 1996, unless the unloading stationary storage tank and receiving tank truck or trailer are equipped with an outgoing vapor balance system as described in Paragraph (i) of this Rule and the receiving tank truck or trailer is equipped for bottom filling. In the counties of Alamance, Buncombe, Cabarrus, Catawba, Cumberland, Davidson, Durham, Forsyth, Gaston, Guilford, Mecklenburg, New Hanover, Orange, Rowan, and Wake, the specified limit on housing density is 50 residences in a square one mile on a side with the square centered on the loading rack at the bulk gasoline plant and with one side oriented in a true North-South direction. In all other counties the specified limit on housing density is 100 residences per square mile. The housing density shall be determined by counting the number of residences using aerial photographs or other methods determined by the Director to provide equivalent accuracy.

(f) The owner or operator of a bulk gasoline plant not subject to the outgoing vapor balance system requirements of Paragraph (d) or (e) of this Rule shall not load trucks or trailers at such plants unless:

- (1) Equipment is available at the bulk gasoline plant to provide for submerge filling of each tank truck or trailer; or
- (2) Each receiving tank truck or trailer is equipped for bottom filling.

(g) For a gasoline bulk plants located in nonattainment area for ozone, once the average daily throughput of gasoline at the bulk gasoline plant reaches or exceeds the applicability threshold in Paragraph (d) or (e) of this Rule or if Paragraph (d) or (e) is currently applicable to the bulk gasoline plant, the bulk gasoline plant shall continue to comply with the outgoing vapor balance system requirements of Paragraph (d) or (e) of this Rule, as is applicable, even though the average daily gasoline throughput falls below the threshold contained in Paragraph (d) or (e) of this Rule.

(h) The owner or operator of a bulk gasoline plant, tank truck or trailer that is required to be equipped with a vapor balance system pursuant to Paragraphs (c), (d), or (e) of this Rule shall not transfer gasoline between tank truck or trailer and stationary storage tank unless:

- (1) The vapor balance system is in good working order and is connected and operating;
- (2) Tank truck or trailer hatches are closed at all times during loading and unloading operations; and
- (3) The tank truck's or trailer's pressure/vacuum relief valves and hatch covers and the truck tanks or storage tanks or associated vapor and liquid lines are vapor tight during loading or unloading.

(i) Vapor balance systems required under Paragraphs (c), (d), and (e) of this Rule shall consist of the following major components:

- (1) a vapor space connection on the stationary storage tank equipped with fittings which are vapor tight and will be automatically and immediately closed upon disconnection so as to prevent release of organic material;
- (2) a connecting pipe or hose equipped with fittings which are vapor tight and will be automatically and immediately closed upon disconnection so as to prevent release of organic material; and
- (3) a vapor space connection on the tank truck or trailer equipped with fittings which are vapor tight and will be automatically and immediately closed upon disconnection so as to prevent release of organic material.

(j) The owner or operator of a bulk gasoline plant shall paint all tanks used for gasoline storage white or silver at the next scheduled painting or before November 1, 2002, whichever is sooner.

(k) The pressure relief valves on tank trucks or trailers loading or unloading at bulk gasoline plants shall be set to release at the highest possible pressure (in accordance with state or local fire codes or the National Fire Prevention Association guidelines). The pressure relief valves on stationary storage tanks shall be set at 0.5 psi for storage tanks placed in service on or after November 1, 1992, and 0.25 psi for storage tanks existing before November 1, 1992.

(l) No owner or operator of a bulk gasoline plant may permit gasoline to be spilled, discarded in sewers, stored in open containers, or handled in any other manner that would result in evaporation.

(m) The owner or operator of a bulk gasoline plant shall observe loading and unloading operations and shall discontinue the transfer of gasoline:

- (1) if any liquid leaks are observed, or
- (2) if any vapor leaks are observed where a vapor balance system is required under Paragraphs (c), (d), or (e) of this Rule.

(n) The owner or operator of a bulk gasoline plant shall not load, or allow to be loaded, gasoline into any truck tank or trailer unless the truck tank or trailer has been certified leak tight in accordance with Rule .0932 of this Section within the last 12 months where the bulk gasoline plant is required to use an outgoing vapor balance system.

*History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1979;*

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