15A NCAC 02D .0503 is amended as published in 37:17 NCR 1130 as follows:

15A NCAC 02D .0503 PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

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

(1) "Functionally dependent" means that structures, buildings, or equipment are interconnected through common process streams, supply lines, flues, or stacks.

(2) "Indirect heat exchanger" means any equipment used for the alteration of the temperature of one fluid by the use of another fluid in which the two fluids are separated by an impervious surface such that there is no mixing of the two fluids.

(3) "Plant site" means any single or collection of structures, buildings, facilities, equipment, installations, or operations that:

(A) are located on one or more adjacent properties;

(B) are ~~in~~under common legal control; and

(C) are functionally dependent in their operations.

(b) The definition contained in Subparagraph (a)(3) of this Rule does not affect the calculation of the allowable emission rate of any indirect heat exchanger permitted prior to April 1, 1999.

(c) The emissions of particulate matter from the combustion of a fuel that are discharged from any stack or chimney into the atmosphere shall not exceed:

Maximum Heat Input In Million Btu/Hour	Allowable Emission Limit For Particulate Matter In ~~In Lb/Million~~lb/Million Btu
Up to and Including 10	0.60
100	0.33
1,000	0.18
10,000 and Greater	0.10

For a heat input between any two consecutive heat inputs stated in the table set forth in this Paragraph, the allowable emissions of particulate matter shall be calculated by the equation $E= 1.090*Q^{-0.2594}$. "E" equals the allowable emission limit for particulate matter in lb/million Btu. "Q" equals the maximum heat input in million Btu/hour.

(d) This Rule applies to installations in which fuel is burned for the purpose of producing heat or power by indirect heat transfer. Fuels include those such as coal, coke, lignite, peat, natural gas, and fuel oils, but exclude wood and refuse not burned as a fuel. When any refuse, products, or by-products of a manufacturing process are burned as a fuel rather than refuse, or in conjunction with any fuel, this allowable emission limit shall apply.

(e) For the purpose of this Rule, the maximum heat input shall be the total heat content of all fuels which are burned in a fuel burning indirect heat exchanger, of which the combustion products are emitted through a stack or stacks. The

sum of maximum heat input of all fuel burning indirect heat exchangers at a plant site which are in operation, under construction, or permitted pursuant to 15A NCAC 02Q, shall be considered as the total heat input for the purpose of determining the allowable emission limit for particulate matter for each fuel burning indirect heat exchanger. Fuel burning indirect heat exchangers constructed or permitted after February 1, 1983, shall not change the allowable emission limit of any fuel burning indirect heat exchanger whose allowable emission limit has previously been set. The removal of a fuel burning indirect heat exchanger shall not change the allowable emission limit of any fuel burning indirect heat exchanger whose allowable emission limit has previously been established. However, for any fuel burning indirect heat exchanger constructed after, or in conjunction with, the removal of another fuel burning indirect heat exchanger at the plant site, the maximum heat input of the removed fuel burning indirect heat exchanger shall no longer be considered in the determination of the allowable emission limit of any fuel burning indirect heat exchanger constructed after or in conjunction with the removal. For the purposes of this Paragraph, refuse not burned as a fuel and wood shall not be considered a fuel. For residential facilities or institutions, such as military and educational, whose primary fuel burning capacity is for comfort heat, only those fuel burning indirect heat exchangers located in the same power plant or building or otherwise physically interconnected, such as common flues, steam, or power distribution line, shall be used to determine the total heat input.

(f) The emission limit for fuel burning equipment that burns both wood and other fuels in combination, or for wood and other fuel burning equipment that is operated such that emissions are measured on a combined basis, shall be calculated by the equation Ec = [(EW)(Qw) + (Eo)(Qo)] /Qt.

(1) Ec = the emission limit for combination or combined emission source(s) in lb/million Btu.

(2) Ew = plant site emission limit for wood only as determined pursuant to 15A NCAC 02D .0504 in lb/million Btu.

(3) Eo = the plant site emission limit for other fuels only as determined by Paragraphs (a), (b) and (c) of this Rule in lb/million Btu.

(4) Qw = the actual wood heat input to the combination or combined emission source(s) in Btu/hr.

(5) Qo = the actual other fuels heat input to the combination or combined emission source(s) in Btu/hr.

(6) Qt = Qw + Qo and is the actual total heat input to combination or combined emission source(s) in Btu/hr.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. February 1, 1976;
Temporary Amendment Eff. March 8, 1994 for a period of 180 days or until the permanent rule is effective, whichever is sooner;
Amended Eff. April 1, 1999; July 1, 1994; August 1, 1991; June 1, 1985; February 1, 1983;
Readopted Eff. November 1, ~~2020.~~2020;
Amended Eff. September 1, 2023

15A NCAC 02D .0506 is amended as published in 37:17 NCR 1130 as follows:

15A NCAC 02D .0506 PARTICULATES FROM HOT MIX ASPHALT PLANTS

(a) The allowable emission rate for particulate matter resulting from the operation of a hot mix asphalt plant that are discharged from any stack or chimney into the atmosphere shall not exceed the level calculated with the equation

$$E = 4.9445(P)^{0.4376}$$

calculated to three significant figures, for process rates less than 300 tons per hour, where "E" equals the maximum allowable emission rate for particulate matter in pounds per hour and "P" equals the process rate in tons per hour. The allowable emission rate shall be 60.0 pounds per hour for process rates equal to or greater than 300 tons per hour.

(b) Visible emissions from stacks or vents at a hot mix asphalt plant shall not exceed 20 percent opacity when averaged over a six-minute period.

(c) All hot mix asphalt batch plants shall be equipped with a scavenger process dust control system for the drying, conveying, classifying, and mixing equipment. The scavenger process dust control system shall exhaust through a stack or vent and shall be operated and maintained in such a manner as to comply with Paragraphs (a) and (b) of this Rule.

(d) Fugitive non-process dust emissions shall be controlled by 15A NCAC 02D .0540.

(e) Fugitive emissions for sources at a hot mix asphalt plant not covered by Paragraphs (a) through (d) of this Rule shall not exceed 20 percent opacity averaged over six minutes.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. February 1, 1976;
Amended Eff. August 1, 2004; July 1, 1998; January 1, 1985;
Readopted Eff. November 1, ~~2020.~~2020;
Amended Eff. September 1, 2023.

15A NCAC 02D .0532 is amended as published in 37:17 NCR 1130 as follows:

15A NCAC 02D .0532 SOURCES CONTRIBUTING TO AN AMBIENT VIOLATION

(a) This Rule applies to new major stationary sources and major modifications to which 15A NCAC 02D .0531 does not apply and which would contribute to a violation of a national ambient air quality standard but which would not cause a new violation.

(b) For the purpose of this Rule the definitions contained in Section II.A. of Appendix S of 40 CFR Part 51 shall apply.

(c) The Rule is not applicable to:

(1) emission of pollutants for which the area in which the new or modified source is located is designated as nonattainment;

(2) emission of pollutants for which the source or modification is not major;

(3) emission of pollutants other than sulfur dioxide, PM2.5, nitrogen oxides, ~~and~~ carbon ~~monoxide;~~ monoxide, and PM10;

(4) a new or modified source whose impact will not increase more than:

(A) 1.0 $\mu g/m^3$ of SO_2 on an annual basis;

(B) 5 $\mu g/m^3$ of SO_2 on a 24-hour basis;

(C) 25 $\mu g/m^3$ of SO_2 on a 3-hour basis;

(D) 0.3 $\mu g/m^3$ of PM2.5 on an annual basis;

(E) 1.2 $\mu g/m^3$ of PM2.5 on a 24-hour basis;

(F) 1.0 $\mu g/m^3$ of NO_2 on an annual basis;

(G) 0.5 mg/m^3 of carbon monoxide on an 8-hour basis;

(H) 2 mg/m^3 of carbon monoxide on a one-hour basis;

(I) 1.0 $\mu g/m^3$ of PM10 on an annual basis; or

(J) 5 $\mu g/m^3$ of PM10 on a 24-hour basis

at any locality that does not meet a national ambient air quality standard;

(5) sources which are not major unless secondary emissions are included in calculating the potential to emit;

(6) sources which are exempted by the provision in Section II.F. of Appendix S of 40 CFR Part 51;

(7) temporary emission sources which will be relocated within two years; and

(8) emissions resulting from the construction phase of the source.

(d) 15A NCAC 02Q .0102 is not applicable to any source to which this Rule applies. The owner or operator of the source shall apply for and receive a permit as required in 15A NCAC 02Q .0300 or .0500.

(e) To issue a permit to a new or modified source to which this Rule applies, the Director shall determine that the source will meet the following conditions:

(1) The sources will emit the nonattainment pollutant at a rate no more than the lowest achievable emission rate;

(2) The owner or operator of the proposed new or modified source has demonstrated that all major stationary sources in the State that are owned or operated by this person (or any entity controlling, controlled by, or under common control with this person) are subject to emission limitations and are in compliance, or on a schedule for compliance which is federally enforceable or contained in a court decree, with all applicable emission limitations and standards of this Subchapter which EPA has authority to approve as elements of the North Carolina State Implementation Plan for Air Quality; and

(3) The source will satisfy one of the following conditions:

(A) The source will comply with 15A NCAC 02D .0531(i) when the source is evaluated as if it were in the nonattainment area; or

(B) The source will have an air quality offset, i.e., the applicant will have caused an air quality improvement in the locality where the national ambient air quality standard is not met by causing reductions in impacts of other sources greater than any additional impact caused by the source for which the application is being made. The emissions reductions creating the air quality offset shall be placed as a condition in the permit for the source reducing emissions. The requirements of this Part may be partially waived if the source is a resource recovery facility burning municipal solid waste, the source must switch fuels due to lack of adequate fuel supplies, or the source is required to be modified as a result of EPA regulations and no exemption from such regulations is available and if:

(i) the permit applicant demonstrates that it made its best efforts to obtain sufficient air quality offsets to comply with this Part;

(ii) the applicant has secured all available air quality offsets; and

(iii) the applicant will continue to seek the necessary air quality offsets and apply them when they become available.

(f) At such time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation established after August 7, 1980, on the capacity of the source or modification to emit a pollutant, such as a restriction on hours of operation, then the provisions of this Rule shall apply to the source or modification as though construction had not yet begun on the source or modification.

(g) The version of the Code of Federal Regulations incorporated in this Rule is that as of July 1, 2019, at https://www.govinfo.gov/content/pkg/CFR-2019-title40-vol2/pdf/CFR-2019-title40-vol2-part51-appS.pdf and does not include any subsequent amendments or editions to the referenced material. The publication may be accessed free of charge.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); 143-215.108(b); 150B-21.6;*
Eff. June 1, 1981;
Temporary Amendment Eff. March 8, 1994 for a period of 180 days or until the permanent rule becomes effective, whichever is sooner;

Amended Eff. July 1, 1994; December 1, 1993; December 1, 1992; October 1, 1989;
Readopted Eff. November 1, ~~2020.~~2020;
Amended Eff. September 1, 2023.

15A NCAC 02D .0614 is amended as published in 37:17 NCR 1130 as follows:

15A NCAC 02D .0614 COMPLIANCE ASSURANCE MONITORING

(a) General Applicability. Except as set forth in Paragraph (b) of this Rule, the requirements of this Paragraph shall apply to a pollutant-specific emissions unit at a facility required to obtain a permit pursuant to 15A NCAC 02Q .0500 if the unit:

(1) is subject to an emission limitation or standard for the applicable regulated air pollutant, or a surrogate thereof, other than an emission limitation or standard that is exempt pursuant to Subparagraph (b)(1) of this Rule;

(2) uses a control device to achieve compliance with any such emission limitation or standard; and

(3) has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source. For purposes of this ~~Subparagraph,~~ Rule, "potential pre-control device emissions" means the same as "potential to emit" as defined in ~~15A NCAC 02Q .0103,~~ 40 CFR 64.1, except that emission reductions achieved by the applicable control device shall not be taken into account.

(b) The following exemptions to this Rule shall apply.

(1) Exempt emission limitations or standards. The requirements of this Rule shall not apply to any of the following emission limitations or standards:

(A) emission limitations or standards proposed by the Administrator of the Environmental Protection Agency after November 15, 1990, pursuant to section 111 or 112 of the federal Clean Air Act;

(B) stratospheric ozone protection requirements pursuant to Title VI of the federal Clean Air Act;

(C) Acid Rain Program requirements pursuant to sections 404, 405, 406, 407(a), 407(b), or 410 of the federal Clean Air Act;

(D) emission limitations or standards or other applicable requirements that apply solely under an emissions trading program approved under the rules of Subchapters 02D and 02Q of this Chapter and that are incorporated in a permit issued pursuant to 15A NCAC 02Q .0500;

(E) an emissions cap that is approved pursuant to the rules of Subchapters 02D and 02Q of this Chapter and incorporated in a permit issued pursuant to 15A NCAC 02Q .0500; or

(F) emission limitations or standards for which a permit issued pursuant to 15A NCAC 02Q .0500 specifies a continuous compliance determination method, as defined in 40 CFR 64.1. This exemption shall not apply if the applicable compliance method includes an assumed control device emission reduction factor that could be affected by the actual operation and maintenance of the control device, such as a surface coating line controlled by an incinerator for which continuous compliance is determined by calculating

emissions on the basis of coating records and an assumed control device efficiency factor based on an initial performance test. In this example, 15A NCAC 02D .0614 would apply to the control device and capture system, but not to the remaining elements of the coating line, such as raw material usage.

(2) Exemption for backup utility power emissions units. The requirements of this Rule shall not apply to a utility unit, as defined in 40 CFR 72.2, that is municipally-owned if the owner or operator provides documentation in a permit application submitted pursuant to 15A NCAC 02Q .0500 that:

(A) the utility unit is exempt from all monitoring requirements in 40 CFR Part 75, including the appendices thereto;

(B) the utility unit is operated for the sole purpose of providing electricity during periods of peak electrical demand or emergency situations and will be operated consistent with that purpose throughout the permit term. The owner or operator shall provide historical operating data and relevant contractual obligations to document that this criterion is satisfied; and

(C) the actual emissions from the utility unit, based on the average annual emissions over the last three calendar years of operation, or such shorter time period that is available for units with fewer than three years of operation, are less than 50 tons per year and are expected to remain so.

(c) For the purposes of this Rule, the definitions in 40 CFR 64.1 shall apply with the following exceptions:

(1) "Applicable requirement" and "regulated air pollutant" shall have the same definition as in 15A NCAC 02Q .0103.

(2) "Part 70 or 71 permit application" means an application, or any supplement to a previously submitted application, submitted by the owner or operator to obtain a permit under 15A NCAC 02Q .0500.

(3) "Part 70 or 71 permit" means a permit issued under 15A NCAC 02Q .0500.

(4) "Permitting authority" means the Division of Air Quality.

(d) The owner or operator subject to the requirements of this rule shall comply with these requirements:

(1) 40 CFR 64.3, Monitoring Design Criteria;

(2) 40 CFR 64.4, Submittal Requirements;

(3) 40 CFR 64.5, Deadlines for Submittals;

(4) 40 CFR 64.7, Operation of Approved Monitoring; and

(5) 40 CFR 64.9, Reporting and Recordkeeping Requirements.

(e) The Division shall follow the procedures and requirements in 40 CFR Part 64.6, Approval of Monitoring, in reviewing and approving or disapproving monitoring plans and programs submitted under this Rule.

(f) Based on the result of a determination made pursuant to 40 CFR 64.7(d)(2), the Director may require the owner or operator to develop and implement a quality improvement plan. If a quality improvement plan is required, the

quality improvement plan shall be developed and implemented according to the procedures and requirements of 40 CFR 64.8, Quality Improvement Plan (QIP) Requirements.

History Note: *Authority G.S. 143-215.3(a)(3); 143-215.65; 143-215.66; 143-215.107(a)(4);*
Eff. April 1, 1999;
Amended Eff. January 1, 2009;
Readopted Eff. November 1, ~~2019.~~2019;
Amended Eff. September 1, 2023.

15A NCAC 02D .0918 is amended as published in 37:17 NCR 1130 as follows:

15A NCAC 02D .0918 CAN COATING

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

(1) "End sealing compound" means a synthetic rubber compound that is coated onto can ends and functions as a gasket when the end is assembled on the can.

(2) "Exterior base coating" means a coating applied to the exterior of a can to provide exterior protection to the metal and to provide background for the lithographic or printing operation.

(3) "Interior base coating" means a coating applied by roller coater or spray to the interior of a can to provide a protective lining between the can metal and product.

(4) "Interior body spray" means a coating sprayed on the interior of the can body to provide a protective film between the product and the can.

(5) "Overvarnish" means a coating applied directly over ink to reduce the coefficient of friction, to provide gloss, and to protect the finish against abrasion and corrosion.

(6) "Three-piece can side-seam spray" means a coating sprayed on the exterior and interior of a welded, cemented, or soldered seam to protect the exposed metal.

(7) "Two-piece can exterior end coating" means a coating applied by roller coating or spraying to the exterior end of a can to provide protection to the metal.

(b) This Rule applies to volatile organic compound emissions from coating applicators and ovens of sheet, can, or end coating lines involved in sheet exterior and interior basecoat and overvarnish; two-piece can interior body spray; two-piece spray or roll coat can exterior; and three-piece can side-seam spray and end sealing compound operations.

(c) Unless the exception in Paragraph (d) of this Rule applies, emissions of volatile organic compounds from any can coating line subject to this Rule shall not exceed:

(1) 4.5 pounds of volatile organic compounds per gallon of solids delivered to the coating applicator from sheet exterior and interior basecoat and overvarnish or two-piece can exterior basecoat and overvarnish operations;

(2) 9.8 pounds of volatile organic compounds per gallon of solids delivered to the coating applicator from two and three-piece can interior body spray and two-piece spray or roll coat can exterior end operations;

(3) 21.8 pounds of volatile organic compounds per gallon of solids delivered to the coating applicator ~~from a three-piece applicator from a three-piece can side-seam spray operations;~~<u>from either a three piece applicator or a three piece can side seam spray operations;</u> or

(4) 7.4 pounds of volatile organic compounds per gallon of solids delivered to the coating applicator from end sealing compound operations.

(d) Any source that has controlled emissions pursuant to 15A NCAC 02D .0518(e) prior to July 1, 2000 and that has installed air pollution control equipment in accordance with an air quality permit in order to comply with this Rule before December 1, 1989 may comply with the limits contained in this Paragraph instead of those contained in

Paragraph (c) of this Rule. Emissions of volatile organic compounds from any can coating line subject to this Rule shall not exceed:

(1) 2.8 pounds of volatile organic compounds per gallon of coating, excluding water and exempt compounds, delivered to the coating applicator from sheet exterior and interior basecoat and overvarnish or two-piece can exterior basecoat and overvarnish operations;

(2) 4.2 pounds of volatile organic compounds per gallon of coating, excluding water and exempt compounds, delivered to the coating applicator from two and three-piece can interior body spray and two-piece can spray or roll coat exterior end operations;

(3) 5.5 pounds of volatile organic compounds per gallon of coating, excluding water and exempt compounds, delivered to the coating applicator from a three-piece applicator from a three-piece can side-seam spray operations; or

(4) 3.7 pounds of volatile organic compounds per gallon of coating, excluding water and exempt compounds, delivered to the coating applicator from end sealing compound operations.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. July 1, 1979;
Amended Eff. July 1, 1996; July 1, 1991; December 1, 1989; January 1, 1985;
Readopted Eff. November 1, ~~2020.~~2020;
Amended Eff. September 1, 2023.

15A NCAC 02D .0926 is amended as published in 37:17 NCR 1130 as follows:

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 cargo tank or stationary storage tank through an opening flush with the tank bottom.

(3) "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 farms, businesses, and service stations.

(4) "Bulk gasoline terminal" means 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 greater than or equal to 20,000 gallons of gasoline.

(5) "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.

(6) "Gasoline" means any petroleum distillate having a Reid Vapor Pressure (RVP) of 4.0 psi or greater.

(7) "Incoming vapor balance system" means a combination of pipes or hoses that create a closed system between the vapor spaces of an unloading cargo tank and a receiving stationary storage tank such that vapors displaced from the receiving stationary storage tank are transferred to the cargo tank being unloaded.

(8) "Outgoing vapor balance system" means a combination of pipes or hoses that create a closed system between the vapor spaces of an unloading stationary storage tank and a receiving cargo tank such that vapors displaced from the receiving cargo tank are transferred to the stationary storage tank being unloaded.

(9) "Splash filling" means the filling of a cargo tank 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.

(10) "Submerged filling" means the filling of a cargo tank 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 cargo tanks 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 unless the unloading cargo tank 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 cargo tank at such plant unless the unloading stationary storage tank and the receiving cargo tank are equipped with an outgoing vapor balance system as described in Paragraph (i) of this Rule and the receiving cargo tank 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 the limits in this Paragraph shall not load any cargo tank at such bulk gasoline plant unless the unloading stationary storage tank and receiving cargo tank are equipped with an outgoing vapor balance system as described in Paragraph (i) of this Rule and the receiving cargo tank 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 approved 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 cargo tanks at such plants unless:

(1) equipment is available at the bulk gasoline plant to provide for submerged filling of each cargo tank; or

(2) each receiving cargo tank is equipped for bottom filling.

(g) For gasoline bulk plants located in a nonattainment area for ozone, the owner or operator shall continue to comply with Paragraph (d) or (e) of this Rule even if the average daily throughput falls below the applicable threshold if ever the facility throughput triggered compliance.

(h) The owner or operator of a bulk gasoline plant shall ensure a cargo tank 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 the cargo tank and the stationary storage tank unless:

(1) the vapor balance system is in good working order and is connected and operating;

(2) cargo tank hatches are closed at all times during loading and unloading operations; and

(3) the cargo tank's pressure/vacuum relief valves, hatch covers, and the cargo tank's and storage tank's 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 that are vapor tight and will be automatically and immediately closed upon disconnection to prevent release of volatile organic material;

(2) a connecting pipe or hose equipped with fittings that are vapor tight and will be automatically and immediately closed upon disconnection to prevent release of volatile organic material; and

(3) a vapor space connection on the cargo tank equipped with fittings that are vapor tight and will be automatically and immediately closed upon disconnection to prevent release of volatile organic material.

(j) The owner or operator of a bulk gasoline plant shall paint all tanks used for gasoline storage white or silver.

(k) The pressure relief valves on cargo tanks 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 cargo tank unless the cargo tank has been certified leak tight in accordance with 15A NCAC 02D ~~.0932, .0960, and .2615.~~0932.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. July 1, 1979;
Amended Eff. July 1, 1996; May 1, 1993; March 1, 1991; December 1, 1989; January 1, 1985;
Readopted Eff. November 1, ~~2020.~~2020;
Amended Eff. September 1, 2023.

15A NCAC 02D .0927 is amended as published in 37:17 NCR 1130 as follows:

15A NCAC 02D .0927 BULK GASOLINE TERMINALS

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

(1) "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.

(2) "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.

(3) "Contact deck" means a deck in an internal floating roof tank that rises and falls with the liquid level and floats in direct contact with the liquid surface.

(4) "Degassing" means the process by which a tank's interior vapor space is decreased to below the lower explosive limit for the purpose of cleaning, inspection, or repair.

(5) "Gasoline" means a petroleum distillate having a Reid Vapor Pressure (RVP) of 4.0 psi or greater.

(6) "Leak" means a crack or hole letting petroleum product vapor or liquid escape that is identifiable through sight, sound, smell, an explosimeter, or the use of a meter that measures volatile organic compounds. When an explosimeter or meter is used to detect a leak, a leak is a measurement that is 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 Appendix B of EPA-450/2-78-051. This test procedure is incorporated by reference, including any subsequent amendments and editions. A copy of this test procedure may be obtained free of charge at https://nepis.epa.gov/Exe/ZyPDF.cgi/2000M9RD.PDF?Dockey=2000M9RD.PDF.

(7) "Liquid balancing" means a process used to degas floating roof gasoline storage tanks with a liquid whose vapor pressure is below 1.52 psi. This is done by removing as much gasoline as possible without landing the roof on its internal supports, pumping in the replacement fluid, allowing mixing, remove as much mixture as possible without landing the roof, and repeating these steps until the vapor pressure of the mixture is below 1.52 psi.

(8) "Liquid displacement" means a process by which gasoline vapors, remaining in an empty tank, are displaced by a liquid with a vapor pressure below 1.52 psi.

(9) "Pipeline breakout station" means a facility along a pipeline containing storage tanks used to:

(A) relieve surges in a hazardous liquid pipeline system; or

(B) receive and store hazardous liquids transported by pipeline for reinjection and continued transport by pipeline.

(b) This Rule applies to bulk gasoline terminals and the appurtenant equipment necessary to load the cargo tank compartments.

(c) Gasoline shall not be loaded into any cargo tank from any bulk gasoline terminal unless:

(1) the bulk gasoline terminal is equipped with a vapor control system that prevents the emissions of volatile organic compounds from exceeding 35 milligrams per liter. The owner or operator shall obtain from the manufacturer and maintain in the cargo tank's records a pre-installation certification stating the vapor control efficiency of the system in use;

(2) displaced vapors and gases are vented only to the vapor control system or to a flare;

(3) a means is provided to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected; and

(4) all loading and vapor lines are equipped with fittings that make vapor-tight connections and that are automatically and immediately closed upon disconnection.

(d) Sources regulated by this Rule shall not:

(1) allow gasoline to be discarded in sewers or stored in open containers or handled in any manner that would result in evaporation; or

(2) allow the pressure in the vapor collection system to exceed the cargo tank pressure relief settings.

(e) The owner or operator of a bulk gasoline terminal shall paint all tanks used for gasoline storage white or silver.

(f) The owner or operator of a bulk gasoline terminal shall install on each external floating roof tank with an inside diameter of 100 feet or less used to store gasoline a self-supporting roof, such as a geodesic dome.

(g) The following equipment shall be required on all tanks storing gasoline at a bulk gasoline terminal:

(1) rim-mounted secondary seals on all external and internal floating roof tanks;

(2) gaskets on deck fittings; and

(3) floats in the slotted guide poles with a gasket around the cover of the poles.

(h) Decks shall be required on all above ground tanks with a capacity greater than 19,800 gallons storing gasoline at a bulk gasoline terminal. All decks installed after June 30, 1998 shall comply with the following requirements:

(1) deck seams shall be welded, bolted, or riveted; and

(2) seams on bolted contact decks and on riveted contact decks shall be gasketed.

(i) If, upon facility or operational modification of a bulk gasoline terminal that existed before December 1, 1992, an increase in benzene emissions results such that:

(1) emissions of volatile organic compounds increase by more than 25 tons cumulative at any time during the five years following modifications; and

(2) annual emissions of benzene from the cluster where the bulk gasoline terminal is located (including the pipeline and marketing terminals served by the pipeline) exceed benzene emissions from that cluster based upon calendar year 1991 gasoline throughput and application of the requirements of this Subchapter,

then, the annual increase in benzene emissions due to the modification shall be offset within the cluster by reduction in benzene emissions beyond that otherwise achieved from compliance with this Rule, in the ratio of at least 1.3 to 1.

(j) The owner or operators of a bulk gasoline terminal that received an air permit before December 1, 1992 to emit toxic air pollutants under 15A NCAC 02Q .0700 to comply with 15A NCAC 02D .1100 shall continue to follow all terms and conditions of the permit issued under 15A NCAC 02Q .0700 and to bring the terminal into compliance with 15A NCAC 02D .1100 according to the terms and conditions of the permit, in which case the bulk gasoline terminal shall continue to need a permit to emit toxic air pollutants and shall be exempted from Paragraphs (e) through (i) of this Rule.

(k) The owner or operator of a bulk gasoline terminal shall not load, or allow to be loaded, gasoline into any cargo tank unless the cargo tank has been certified leak tight according to 15A NCAC 02D ~~.0932, .0960, and .2615.~~.0932.

(l) The owner or operator of a bulk gasoline terminal shall have on file at the terminal a copy of the certification test conducted according to 15A NCAC 02D .0932 for each gasoline cargo tank loaded at the terminal.

(m) Emissions of gasoline from degassing of external or internal floating roof tanks at a bulk gasoline terminal shall be collected and controlled by at least 90 percent by weight. Liquid balancing shall not be used to degas gasoline storage tanks at bulk gasoline terminals. Bulk gasoline storage tanks containing not more than 138 gallons of liquid gasoline or the equivalent of gasoline vapor and gasoline liquid are exempted from the degassing requirements if gasoline vapors are vented for at least 24 hours. Documentation of degassing external or internal floating roof tanks shall be made according to 15A NCAC 02D .0903.

(n) According to 15A NCAC 02D .0903, the owner or operator of a bulk gasoline terminal shall visually inspect the following for leaks each day that the terminal is both manned and open for business:

(1) the vapor collection system;

(2) the vapor control system; and

(3) each lane of the loading rack while a gasoline cargo tank is being loaded.

If no leaks are found, the owner or operator shall record that no leaks were found. If a leak is found, the owner or operator shall record the information specified in Paragraph (p) of this Rule. The owner or operator shall repair all leaks found according to Paragraph (q) of this Rule.

(o) The owner or operator of a bulk gasoline terminal shall inspect weekly for leaks:

(1) the vapor collection system;

(2) the vapor control system; and

(3) each lane of the loading rack while a gasoline cargo tank is being loaded.

The weekly inspection shall be done using sight, sound, or smell; a meter used to measure volatile organic compounds; or an explosimeter. An inspection using either a meter used to measure volatile organic compounds or an explosimeter shall be conducted every month. If no leaks are found, the owner or operator shall record the date that the inspection was done and that no leaks were found. If a leak is found, the owner or operator shall record the information specified in Paragraph (p) of this Rule. The owner or operator shall repair all leaks found according to Paragraph (q) of this Rule.

(p) For each leak found under Paragraph (n) or (o) of this Rule, the owner or operator of a bulk gasoline terminal shall record:

(1) the date of the inspection;

(2) the findings detailing the location, nature, and severity of each leak;

(3) the corrective action taken;

(4) the date when corrective action was completed; and

(5) any other information that the terminal deems necessary to demonstrate compliance.

(q) The owner or operator of a bulk gasoline terminal shall repair all leaks as follows:

(1) The vapor collection hose that connects to the cargo tank shall be repaired or replaced before another cargo tank is loaded at that rack after a leak has been detected originating with the terminal's equipment rather than from the gasoline cargo tank.

(2) All other leaks shall be repaired as expeditiously as possible but no later than 15 days from their detection. If more than 15 days are required to make the repair, the reasons that the repair cannot be made shall be documented, and the leaking equipment shall not be used after the fifteenth day from when the leak detection was found until the repair is made.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. July 1, 1979;
Amended Eff. January 1, 2007; April 1, 2003; August 1, 2002; July 1, 1998; July 1, 1996; July 1, 1994; December 1, 1992; December 1, 1989; January 1, 1985;
Readopted Eff. November 1, ~~2020.~~2020;
Amended Eff. September 1, 2023.

15A NCAC 02D .0928 is amended as published in 37:17 NCR 1130 as follows:

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 or 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 not including mopeds or electric assisted bicycles in accordance with N.C. Gen. Stat. 20-4.01.

~~(8)~~(9) "Operator" means any person who leases, operates, controls, or supervises a facility at which gasoline is dispensed.

~~(9)~~(10) "Owner" means any person who has legal or equitable title to the gasoline storage tank at a facility.

~~(10)~~(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.

~~(11)~~(12) "Stationary storage tank" means a gasoline storage container that is a permanent fixture.

~~(12)~~(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.

~~(13)~~(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 their equivalent;

(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 in good working order and is connected and operating with a vapor tight connection;

(3) the vapor control system is properly maintained 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 proper working order;

(5) the delivery vessel and vapor collection system ~~complies~~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 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);*
Eff. July 1, 1979;
Amended Eff. July 1, 1996; July 1, 1994; March 1, 1991; December 1, 1989; January 1, 1985;
Readopted Eff. November 1, ~~2020.~~2020;
Amended Eff. September 1, 2023.

15A NCAC 02D .0932 is amended as published in 37:17 NCR 1130 as follows:

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 trailer 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.

(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 ~~(1) of this Paragraph~~(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 ~~(1) of this Paragraph.~~ (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 records shall be maintained for at least two years after the date of the testing or repair, and copies of such records shall be made available within a reasonable time 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 ~~(2) of this Paragraph:~~(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 ~~(2) of this Paragraph;~~(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); 143-215.107(a)(5);*
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.~~2020;
Amended Eff. September 1, 2023.

15A NCAC 02D .0960 is repealed as published in 37:17 NCR 1130 as follows:

15A NCAC 02D .0960 CARGO TANK LEAK TESTER REPORT

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5), (13);*
Eff. April 1, 2003;
Amended Eff. July 1, 2007;
Readopted Eff. October 1, ~~2020.~~2020;
Repealed Eff. September 1, 2023

15A NCAC 02D .0961 is amended as published in 37:17 NCR 1130 as follows:

15A NCAC 02D .0961 OFFSET LITHOGRAPHIC PRINTING AND LETTERPRESS PRINTING

(a) For the purposes of this Rule, the definitions listed in this Paragraph and 15A NCAC 02D .0101 and .0902 shall apply.

(1) "Composite partial vapor pressure" means the sum of the partial pressure of the compounds defined as volatile organic compounds. Volatile organic compounds composite partial vapor pressure is calculated as follows:

$$PP_c = \sum_{i=1}^{n} \frac{(W_i)(VP_i)/MW_i}{\frac{W_w}{MW_w} + \frac{W_c}{MW_c} + \sum_{i=1}^{n} \frac{W_i}{MW_i}}$$

Where:

Wi = Weight of the "i" volatile organic compound, in grams

Ww = Weight of water, in grams

Wc = Weight of exempt compound, in grams

MWi = Molecular weight of the "i" volatile organic compound, in g/g-mole

MWw = Molecular weight of water, in g/g-mole

MWc = Molecular weight of exempt compound, in g/g-mole

PPc = Volatile organic compounds composite partial vapor pressure at 20 degrees Celsius (68 degrees Fahrenheit), in mm Hg

VPi = Vapor pressure of the "i" volatile organic compound at 20 degrees Celsius (68 degrees Fahrenheit), in mm Hg

(2) "First installation date" means the actual date when this control device becomes operational. This date does not change if the control device is later redirected to a new press.

(3) "Fountain solution" means water-based solution that applies to lithographic plate to render the non-image areas unreceptive to the ink.

(4) "Heatset" means any operation in which heat is required to evaporate ink oils from the printing ink, excluding ultraviolet (UV) curing, electron beam curing, and infrared drying.

(5) "Letterpress printing" means a printing process in which the image area is raised relative to the non-image area and the paste ink is transferred to the substrate directly from the image surface.

(6) "Non-heatset" means a lithographic printing process where the printing inks are set by absorption or oxidation of the ink oil, not by evaporation of the ink oils in a dryer. For the purposes of this Rule, use of an infrared heater or printing conducted using ultraviolet-cured or electron beam-cured inks is considered non-heatset.

(7) "Offset lithography" means a printing process that uses sheet-fed or web method of press feeding and transfers ink from the lithographic plate to a rubber-covered intermediate "blanket" cylinder and then from the blanket cylinder to the substrate.

(8) "Press" means a printing production assembly composed of one or more units used to produce a printed substrate including any associated coating, spray powder application, heatset web dryer, ultraviolet or electron beam curing units, or infrared heating units.

(9) "Sheet-fed printing" means offset lithographic printing when individual sheets of paper or other substrate are fed to the press.

(10) "Web printing" means offset lithographic printing when continuous rolls of substrate material are fed to the press and rewound or cut to size after printing.

(b) This Rule applies to any offset lithographic and any letterpress printing operations sources that are not covered by 15A NCAC 02D .0966(c)(1) and whose emissions of volatile organic compounds exceed:

(1) the threshold established in 15A NCAC 02D .0902(b) and (f); or

(2) an equivalent level of three tons per 12-consecutive month rolling period.

(c) Volatile organic compounds content in the fountain solution for on-press (as-applied) heatset web offset lithographic printing shall meet one of the following requirements or equivalent level of control as determined in permit conditions:

(1) contain 1.6 percent alcohol or less, by weight, as applied, in the fountain solution:

(2) contain three percent alcohol or less, by weight, on-press (as-applied) in the fountain solution if the fountain solution is refrigerated to below 60 degrees Fahrenheit; or

(3) contain five percent alcohol substitute or less, by weight, on-press (as-applied) and no alcohol in the fountain solution.

(d) Volatile organic compounds content in the fountain solution for on-press (as-applied) sheet-fed lithographic printing shall meet one of the following requirements or equivalent level of control as determined in permit conditions:

(1) contain five percent alcohol or less, by weight, on-press (as-applied) in the fountain solution;

(2) contain 8.5 percent alcohol or less, by weight, on-press (as-applied) in the fountain solution if the fountain solution is refrigerated to below 60 degrees Fahrenheit; or

(3) contain five percent alcohol substitute or less, by weight, on-press (as-applied) and no alcohol in the fountain solution.

(e) Volatile organic compounds content in emissions from fountain solution from non-heatset web offset lithographic printing shall not exceed five percent alcohol substitute (by weight) on-press (as-applied) and contain no alcohol in the fountain solution.

(f) An owner or operator of an individual web offset lithographic printing press dryer or letterpress-printing heatset press subject to this Rule that emits 25 or more tons per year potential emissions of volatile organic compounds shall:

(1) use an enforceable limitation on potential emissions to keep individual heatset press below 25 tons per year potential to emit volatile organic compounds (petroleum ink oil) threshold, which can be achieved by using inks and coatings that contain less than 31.25 tons per year volatile organic compound (petroleum ink oil) where 20 percent retention factor of petroleum ink oil applies, or by using other methods established by permit conditions; or

(2) use an add-on control system that meets one of the following requirements:

(A) reduces volatile organic compounds emissions from each dryer by at least 90 percent volatile organic compounds emissions control efficiency established by procedures defined in Paragraph (h) of this Rule for a control device from heatset dryers whose first installation date was prior to July 1, 2010, at facilities with potential to emit 100 tons or more of volatile organic compounds per year;

(B) reduces volatile organic compounds emissions from each dryer by at least 90 percent volatile organic compounds emissions control efficiency established by procedures defined in Paragraph (h) of this Rule for a control device from heatset dryers whose first installation date was prior to May 1, 2013, at facilities with potential to emit less than 100 tons of volatile organic compounds per year;

(C) reduces volatile organic compounds emissions from each dryer by at least 95 percent volatile organic compounds emissions control efficiency established by procedures defined in Paragraph (h) of this Rule for a control device from heatset dryers whose first installation date was on or after July 1, 2010, at facilities with potential to emit 100 tons or more of volatile organic compounds per year;

(D) reduces volatile organic compounds emissions from each dryer by at least 95 percent volatile organic compounds emissions control efficiency established by procedures defined in Paragraph (h) of this Rule for a control device from heatset dryers whose first installation date was on or after May 1, 2013, at facilities with potential to emit less than 100 tons of volatile organic compounds per year; or

(E) maintains a maximum volatile organic compounds outlet concentration of 20 parts per million by volume (ppmv), as hexane (C_6H_{14}) on a dry basis.

(g) The control limits established in:

(1) Paragraphs (c), (d), and (e) of this Rule shall not be applied to any press with total fountain solution reservoir of less than one gallon;

(2) Paragraph (d) of this Rule shall not be applied to sheet-fed presses with maximum sheet size 11x 17 inches or smaller; and

(3) Subparagraph (f)(2) of this Rule shall not be applied to a heatset press used for book printing, or to a heatset press with maximum web width of 22 inches or less.

(h) If the owner or operator of a printing press is required by permit conditions to determine:

(1) the volatile organic compounds content, Method 24 of Appendix A to 40 CFR Part 60 or approved alternative methods pursuant to 15A NCAC 02D .2602(h) shall be used; and

(2) the control efficiency by measuring volatile organic compounds at the control device inlet and outlet, Methods 18, 25, or 25A of Appendix A to 40 CFR Part 60, or approved alternative methods pursuant to 15A NCAC 02D .2602(h) shall be used.

(i) All test methods defined in Paragraph (h) of this Rule shall be conducted at typical operating conditions and flow rates.

(j) The owner or operator of any facility subject to this Rule shall demonstrate compliance with RACT applicability requirements by calculating volatile organic compounds emissions and keep records of the basis of the calculations required by 15A NCAC 02D .0605 and .0903. Volatile organic compounds emissions from offset lithographic printing and letterpress printing shall be determined by permit condition requirements or by using the following retention and capture efficiency factors:

(1) the retention factors are:

(A) 20 percent for heatset petroleum ink oils;

(B) 100 percent for heatset vegetable ink oils;

(C) 95 percent for sheet-fed and coldset web petroleum ink oils; and

(D) 100 percent for sheet-fed and coldset web vegetable ink oils.

(2) the retention factor is 50 percent for low volatile organic compounds composite vapor pressure cleaning materials in shop towels where:

(A) volatile organic compounds composite vapor pressure of the cleaning material is less than 10 mm Hg at ~~20ºC;~~ 20 degrees Celsius; and

(B) cleaning materials and used shop towels are kept in closed containers.

(3) carryover (capture) factors of volatile organic compounds from automatic blanket wash and fountain solution to offset lithographic heatset dryers are:

(A) 40 percent VOC carryover (capture) factor for automatic blanket washing when the volatile organic compounds composite vapor pressure of the cleaning material is less than 10mm Hg at ~~20ºC.~~ 20 degrees Celsius.

(B) 70 percent VOC carryover (capture) factor for alcohol substitutes in fountain solution.

(4) capture efficiency for volatile organic compounds (petroleum ink oils) from oil-based paste inks and oil-based paste varnishes (coatings) in heatset web offset lithographic presses and heatset web letterpress presses shall be demonstrated by showing that the dryer is operating at negative pressure relative to the surrounding pressroom. As long as the dryer is operated at negative pressure, the capture efficiency for VOC from the heatset lithographic inks and varnishes (coatings) formulated with low volatility ink oils is 100 percent of the VOC (ink oils) volatilized in the dryer. Capture efficiency test is not required in this situation.

(k) Except as specified in this Paragraph, all cleaning materials used for cleaning a press, press parts, or to remove dried ink from areas around the press shall meet one of the following requirements:

(1) the volatile organic compounds content shall be less than 70 percent by weight; or

(2) composite partial vapor pressure of volatile organic compounds shall be less than 10 mm Hg at 20 degrees Celsius.

No more than 110 gallons per year of cleaning materials that do not meet the requirements of Subparagraph ~~(1) or (2) of this Paragraph~~ (k)(1) or (k)(2) of this Rule shall be used during any 12 consecutive months.

(l) The owner or operator of any facility subject to this Rule shall maintain the following records for a minimum of five years:

(1) parametric monitoring for processes and control devices as determined and at the frequency specified in the permit or by Paragraph (f) of this Rule;

(2) the total amount of each individual or class of fountain solution and ink used monthly for the printing operations and the percentage of volatile organic compounds, alcohol, and alcohol substitute as applied in it;

(3) the total amount of each individual or class of cleaning solutions used monthly with vapor pressure and the percentage of volatile organic compounds as applied in it;

(4) the total amount of cleaning solutions used monthly with the vapor pressure and the percentage of volatile organic compounds as applied ~~that does not meet~~not meeting the vapor pressure or percentage of volatile organic compounds ~~requirements of~~as required in Paragraph (k) of this Rule;

(5) the temperature of fountain solutions for lithographic printing presses using alcohol at the frequency specified in the permit; and

(6) any other parameters required by the permit in accordance with 15A NCAC 02D .0605 and .0903.

(m) The owner or operator of any source subject to this Rule shall comply with 15A NCAC 02D .0903 and .0958.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. September 1, 2010;
Amended Eff. May 1, 2013;
Readopted Eff. November 1, ~~2020.~~2020;
Amended Eff. September 1, 2023.

15A NCAC 02D .0964 is amended as published in 37:17 NCR 1130 as follows:

15A NCAC 02D .0964 MISCELLANEOUS INDUSTRIAL ADHESIVES

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

(1) "Air-assisted airless spray" means a system that consists of an airless spray gun with a compressed air jet at the gun tip to atomize the adhesive.

(2) "Airless spray" means the application ~~of~~using a pump forcing an adhesive through an atomizing nozzle at high pressure of 1,000 to 6,000 pounds per square ~~inch by a pump forces.~~inch.

(3) "Application process" means a process that consists of a series of one or more adhesive applicators and any associated drying area or oven where an adhesive is applied, dried, and cured.

(4) "Dip coating" means application where substrates are dipped into a tank containing the adhesive. The substrates are then withdrawn from the tank and any excess adhesive is allowed to drain.

(5) "Electrocoating" means a specialized form of dip coating where opposite electric charges are applied to the waterborne adhesive and the substrate.

(6) "Electrostatic spray" means application where the adhesive and substrate are oppositely charged.

(7) "Flow coating" means conveying the substrate over an enclosed sink where the adhesive is applied at low pressure as the item passes under a series of nozzles.

(8) "HVLP" means a system with specialized nozzles that provide better air and fluid flow than conventional air atomized spray systems at low air pressure, shape spray pattern, and guide high volumes of atomized adhesive particles to the substrate using lower air pressure of 10 pounds per square inch or less at the spray cap.

(9) "Miscellaneous industrial adhesives" means adhesives, including adhesive primers used in conjunction with certain types of adhesives used at industrial manufacturing and repair facilities for a wide variety of products and equipment that operate adhesives application processes.

(10) "Roll coating," "brush coating," and "hand application" means application of high viscosity adhesives onto small surface area.

(b) Control of volatile organic compounds emissions from miscellaneous industrial adhesives product categories covered by 15A NCAC 02D .0923, .0935, .0961, .0962, .0963, .0965, .0966, .0967, and .0968 are exempted from the requirements of this Rule.

(c) This Rule applies to miscellaneous industrial adhesive application sources whose volatile organic compounds emissions meet the threshold established in 15A NCAC 02D .0902(b).

(d) With the exception established in Paragraph (b) of this Rule, all volatile organic compounds containing materials applied by each miscellaneous industrial adhesive application processes before control shall:

(1) not exceed limits established in Table 1 of this Rule; and

(2) be used in one of the following application methods in conjunction with using low volatile organic compounds adhesives or adhesive primers:

(A) electrostatic spray;

(B) HVLP spray;

(C) flow coat;

(D) roll coat or hand application, including non-spray application methods similar to hand or mechanically powered caulking gun, brush, or direct hand application;

(E) dip coat including electrodesposition;

(F) airless spray;

(G) air-assisted airless spray; or

(H) any other adhesive application method capable of achieving a transfer efficiency equivalent to or better than that achieved by HVLP spraying.

(e) Emission limits established in Subparagraph (d)(1) of this Rule shall be:

(1) met by averaging the volatile organic compounds content of materials used on a single application unit for each day; and

(2) calculated as mass of volatile organic compounds per volume of adhesive primer, excluding water and exempt compounds, as applied.

(f) If an adhesive is used to bond dissimilar substrates together in general adhesive application process as set forth in Table 1, then the applicable substrate category with the highest volatile organic compounds emission limit shall be established as the limit for such application.

Table 1. Volatile Organic Compounds Emission Limits for General and Specialty Adhesive Application Process.

General Adhesive Application Processes	VOC Emission Limit (lb/gal)
Reinforced Plastic Composite	1.7
Flexible vinyl	2.1
Metal	0.3
Porous Material (Except Wood)	1
Rubber	2.1
Wood	0.3
Other Substrates	2.1

Specialty Adhesive Application Processes	VOC Emission Limit (lb/gal)
Ceramic Tile Installation	1.1
Contact Adhesive	2.1
Cove Base Installation	1.3
Floor Covering Installation (Indoor)	1.3
Floor Covering Installation (Outdoor)	2.1
Floor Covering Installation (Perimeter Bonded Sheet Vinyl)	5.5
Metal to Urethane/Rubber Molding or Casting	7.1

Motor Vehicle Adhesive	2.1
Motor Vehicle Weatherstrip Adhesive	6.3
Multipurpose Construction	1.7
Plastic Solvent Welding (ABS)	3.3
Plastic Solvent Welding (Except ABS)	4.2
Sheet Rubber Lining Installation	7.1
Single-Ply Roof Membrane Installation/Repair (Except EPDM)	2.1
Structural Glazing	0.8
Thin Metal Laminating	6.5
Tire Repair	0.8
Waterproof Resorcinol Glue	1.4
Adhesive Primer Application Processes	VOC Emission ~~Limit1~~ Limit (lb/gal)
Motor Vehicle Glass Bonding Primer	7.5
Plastic Solvent Welding Adhesive Primer	5.4
Single-Ply Roof Membrane Adhesive Primer	2.1
Other Adhesive Primer	2.1

(g) Any miscellaneous industrial adhesive application processes subject to this Rule, which chooses to use add-on control for adhesive application processes rather than to comply with the emission limits established in Paragraph (d) of this Rule, shall install control equipment with overall control efficiency of 85 percent or use a combination of adhesives and add-on control equipment on an application process to meet limits established in Paragraph (d) of this Rule.

(h) EPA Method 24 or 25A of Appendix A to 40 CFR Part 60 shall be used to determine the volatile organic compounds content of adhesives, other than reactive adhesives, and the procedure established in Appendix A of the NESHAP for surface coating of plastic parts (40 CFR Part 63, Subpart PPPP) shall be used to determine the volatile organic compounds content of reactive adhesives unless the facility maintains records to document the volatile organic compounds content of adhesives from the manufacturer.

(i) The owner or operator of any facility subject to this Rule shall comply with ~~the~~ 15A NCAC 02D .0903 and .0958.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. September 1, 2010;
Readopted Eff. November 1, ~~2020.~~2020;
Amended Eff. September 1, 2023.

15A NCAC 02D .1403 is amended as published in 37:17 NCR 1130 as follows:

15A NCAC 02D .1403 COMPLIANCE SCHEDULES

(a) Applicability. This Rule applies to sources regulated by 15A NCAC 02D .1402(d), (e), (f), or (g).

(b) Maintenance area and Charlotte ozone nonattainment area contingency plan. The owner or operator of a source subject to this Rule because of the applicability of 15A NCAC 02D .1402(d), (e), (f), or (g) shall adhere to the following increments of progress and schedules:

(1) If compliance with this Section is to be achieved through a demonstration to certify compliance without source modification:

(A) The owner or operator shall notify the Director in writing within six months after the Director's notice in the North Carolina Register that the source is in compliance with the applicable limitation or standard;

(B) The owner or operator shall perform any required testing, pursuant to 15A NCAC 02D .1415, within 12 months after the Director's notice in the North Carolina Register to demonstrate compliance with the applicable limitation; and

(C) The owner or operator shall implement any required recordkeeping and reporting requirements pursuant to 15A NCAC 02D .1404, within 12 months after the Director's notice in the North Carolina Register to demonstrate compliance with the applicable limitation.

(2) If compliance with this Section is to be achieved through the installation of combustion modification technology or other source modification:

(A) The owner or operator shall submit a permit application and a compliance schedule within six months after the Director's notice in the North Carolina Register.

(B) The compliance schedule shall contain the following increments of progress:

(i) a date by which contracts for installation of the modification shall be awarded or orders shall be issued for purchase of component parts;

(ii) a date by which installation of the modification shall begin;

(iii) a date by which installation of the modification shall be completed; and

(iv) if the source is subject to a limitation, a date by which compliance testing shall be completed.

(C) Final compliance shall be achieved within three years after the Director's notice in the North Carolina Register unless the owner or operator of the source petitions the Director for an alternative limitation pursuant to 15A NCAC 02D .1412. If a petition has been submitted and approved, final compliance shall be achieved within four years after the Director's notice in the North Carolina Register.

(3) If compliance with this Section is to be achieved through the implementation of an emissions averaging plan pursuant to 15A NCAC 02D .1410;

(A) The owner or operator shall abide by the applicable requirements of ~~Subparagraphs (1) or (2) of this Paragraph~~Subparagraphs (b)(1) or (b)(2) of this Rule for certification or modification of each source to be included under the averaging plan.

(B) The owner or operator shall submit a plan to implement an emissions averaging plan pursuant to 15A NCAC 02D .1410 within six months after the Director's notice in the North Carolina Register.

(C) Final compliance shall be achieved within one year after the Director's notice in the North Carolina Register unless implementation of the emissions averaging plan requires the modification of one or more of the averaging sources. If modification of one or more of the averaging sources is required, final compliance shall be achieved within three years.

(4) If compliance with this Section is to be achieved through the implementation of a seasonal fuel switching program pursuant to 15A NCAC 02D .1411:

(A) The owner or operator shall make all necessary modifications according to ~~Subparagraph (2) of this Paragraph.~~Subparagraph (b)(2) of this Rule.

(B) The owner or operator shall include a plan for complying with the requirements of 15A NCAC 02D .1411 with the permit application required ~~under Part (2)(A) of this Subparagraph.~~in Subparagraph (b)(2) of this Rule.

(C) Final compliance shall be achieved within three years after the Director's notice in the North Carolina Register.

(5) Increments of progress certification. The owner or operator shall certify to the Director, within five days after each increment deadline of progress in this Paragraph, whether the required increment of progress has been met.

(c) Nonattainment areas. The owner or operator of a source subject to this Rule because of the applicability of 15A NCAC 02D .1402(d), shall adhere to the following:

(1) If compliance with this Section is to be achieved through a demonstration to certify compliance without source modification:

(A) The owner or operator shall notify the Director in writing by August 1, 2007;

(B) The owner or operator shall perform any required testing, according to 15A NCAC 02D .1415, by January 1, 2008; and

(C) The owner or operator shall implement any required recordkeeping and reporting requirements, according to 15A NCAC 02D .1404, by January 1, 2008.

(2) If compliance with this Section is to be achieved through the installation of combustion modification technology or other source modification:

(A) The owner or operator shall submit a permit application and a compliance schedule by August 1, 2007.

(B) The compliance schedule shall contain a date by which contracts for installation of the modification shall be awarded or orders shall be issued for purchase of component parts.

(C) The compliance schedule shall contain a date by which installation of the modification shall begin.

(D) The compliance schedule shall contain a date by which installation of the modification shall be completed.

(E) If the source is subject to a limitation, the compliance schedule shall contain, a date by which compliance testing shall be completed.

(F) Final compliance shall be achieved no later than April 1, 2009.

(3) If compliance with this Section is to be achieved through the implementation of an emissions averaging plan as provided for in 15A NCAC 02D .1410:

(A) The owner or operator shall abide by the applicable requirements of ~~Subparagraph (1) or (2) of this Paragraph~~Subparagraphs (c)(1) or (c)(2) of this Rule for certification or modification of each source to be included under the averaging plan.

(B) The owner or operator shall submit a plan to implement an emissions averaging plan according to 15A NCAC 02D .1410 by August 1, 2007.

(C) Final compliance shall be achieved within one year no later than January 1, 2008.

(4) If compliance with this Section is to be achieved through the implementation of a seasonal fuel switching program as provided for in 15A NCAC 02D .1411:

(A) The owner or operator shall make all necessary modifications according to ~~Subparagraph (2) of this Paragraph.~~Subparagraph (c)(2) of this Rule.

(B) The owner or operator shall include a plan for complying with the requirements of 15A NCAC 02D .1411 with the permit application required ~~under Part (2)(A) of this Subparagraph.~~in Subparagraph (c)(2) of this Rule.

(C) Final compliance shall be achieved no later than April 1, 2009.

(5) Increments of progress certification. The owner or operator shall certify to the Director, within five days after the deadline for each increment of progress in this Paragraph, whether the required increment of progress has been met.

(d) Sources already in compliance.

(1) Maintenance area and Charlotte ozone nonattainment area contingency plan. Paragraph (b) of this Rule shall not apply to sources ~~that~~that:

(A) are in compliance with the applicable rules of this Section when the Director notices in the North Carolina Register the implementation of rules ~~in the North Carolina Register~~ that resolves a violation of the ambient air quality standard for ~~ozone~~ozone; and

(B) ~~that has~~have determined and certified compliance to the Director within six months after the Director notices in the North Carolina Register the implementation of rules ~~in the North Carolina Register~~ that resolves a violation of the ambient air quality standard for ozone.

(2) Nonattainment areas. Paragraph (c) of this Rule shall not apply to sources in an area named in 15A NCAC 02D .1402(d) that are in compliance with applicable rules of this Section on March 1, 2007.

(e) New sources.

(1) Maintenance area and Charlotte ozone nonattainment area contingency plan. The owner or operator of any new source of nitrogen oxides not permitted before the date the Director notices in the North Carolina Register according to 15A NCAC 02D .1402(e), (f), or (g) shall comply with all applicable rules in this Section upon start-up of the source. The owner or operator of any new source covered by 15A NCAC 02D .1407, .1408, .1409, .1413, or .1418 shall comply with all applicable rules in this Section upon start-up of the source.

(2) Nonattainment areas. The owner or operator of any new source of nitrogen oxides not permitted before March 1, 2007 in an area identified in 15A NCAC 02D .1402(d) shall comply with all applicable rules in this Section upon start-up of the source.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.65; 143.215.107(a)(5); 143.215.107(a)(7); 143.215.107(a)(10);*
Eff. April 1, 1995;
Amended Eff. April 1, 1997;
Temporary Amendment Eff. November 1, 2000;
Amended Eff. April 1, 2001;
Temporary Amendment Eff. August 1, 2001;
Amended Eff. July 1, 2007; March 1, 2007; July 18, 2002;
Readopted Eff. October 1, ~~2020.~~2020;
Amended Eff. September 1, 2023.

15A NCAC 02D .1708 is amended with changes as published in 37:17 NCR 1130 as follows:

15A NCAC 02D .1708 REPORTING REQUIREMENTS

(a) The owner or operator of an existing MSW landfill subject to this Rule according to 15A NCAC 02D .1702 shall submit a design capacity report to the Director as follows:

(1) The initial design capacity report shall be submitted no later than 90 days after the effective date of the EPA approval of the State Plan pursuant to Section 111(d) of the Clean Air Act.

(2) The initial design capacity report shall contain the information given in 40 CFR 60.38f(a)(1) and 40 CFR 60.38f(a)(2).

(b) The owner or operator of an existing MSW landfill subject to this Section shall submit an amended design capacity report providing notification of an increase in the design capacity of the landfill, within 90 days of an increase in the maximum design capacity of the landfill to meet or exceed 2.5 million megagrams and 2.5 million cubic meters. An increase in design capacity may result from an increase in the permitted volume of the landfill or an increase in the density as documented in the annual recalculation required in 15A NCAC 02D .1709(j).

(c) The owner or operator of an existing MSW landfill subject to this Rule shall submit a NMOC emission report to the Director no later than 90 days after the effective date of EPA approval of the State plan pursuant to Section 111(d) of the Clean Air Act and annually thereafter, except as provided for in 40 CFR 60.38f(c). The NMOC emission rate report shall:

(1) contain an annual or five-year estimate of the NMOC emission rate calculated using the formula and procedures provided in 40 CFR 60.35f(a) or (b), as applicable;

(2) include all the data, calculations, sample reports, and measurements used to estimate the annual or five-year emissions; and

(3) if the estimated NMOC emission rate as reported in the annual report is less than 34 megagrams per year in each of the next five consecutive years, the owner or operator may elect to submit an estimate of the NMOC emission rate for the next five-year period in lieu of the annual report. This estimate shall include the current amount of solid waste-in-place and the estimate waste acceptance rate for each year of the five years for which an NMOC emission rate is estimated. All data and calculations shall be provided. This estimate shall be revised at least once every five years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the five-year estimate, a revised five-year estimate shall be submitted. The revised estimate shall cover the five-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate.

Each owner and operator subject to the requirements of this Rule shall be exempted from the requirements to submit an NMOC emission rate report, after installing a compliant collection and control system, during such time as the collection and control system is in operation and in compliance with 15A NCAC 02D .1705 and .1706.

(d) The owner or operator of an existing MSW landfill subject to 15A NCAC 02D .1703(b) shall submit a collection and control system design plan to the Director within one year of the first NMOC emission rate report, required under

Paragraph (c) of this Rule, in which the emission rate equals or exceeds 34 megagrams per year, except as provided for in 40 CFR 60.38f(d)(4)(i), 60.38f(d)(4)(ii), and 60.38f(d)(4)(iii). The collection and control system design plan shall include:

(1) a description of the collection and control system;

(2) a description of any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping, or reporting provisions provided in this Rule; and

(3) a description indicating how the plan conforms to specifications for active collection systems or a demonstration of sufficient alternative provisions as given in 40 CFR 60.40f.

(e) The owner or operator of an existing MSW landfill who ~~has already~~ previously submitted a design plan pursuant to Paragraph (d)~~-~~ of this Rule, pursuant to 40 CFR Part 60, Subpart WWW, or a State plan implementing 40 CFR Part 60, Subpart Cc, shall submit a revised design plan that includes the information in Subparagraphs (d)(1) through ~~(d)(3).~~(d)(3) of this Rule. The revised design plan shall be submitted to the Director as follows:

(1) at least 90 days before expanding operations to an area ~~no~~ not covered by the previously approved design plan; and

(2) prior to installing or expanding the gas collection system in a way that is not consistent with the design plan that was submitted to the Director in Paragraph (d) of this Rule.

(f) The owner or operator of a controlled landfill shall submit a closure report to the Director within 30 days of cessation of waste acceptance. If a closure report has been submitted to the Director, no additional waste shall be placed into the landfill without first filing a notification of modification as described pursuant to 40 CFR 60.7(a)(4). The Director may request such additional information to verify that permanent closure of the MSW landfill has taken place pursuant to the requirements of 40 CFR 258.60.

(g) The owner or operator of a controlled MSW landfill shall submit an equipment removal report 30 days prior to removal or cessation of operation of the control equipment according to 15A NCAC 02D .1703(f). The report shall contain the items listed in 40 CFR 60.38f(g). The Director may request such additional information to verify that all the conditions for removal in 40 CFR 60.33f(f) have been met.

(h) The owner or operator of a MSW landfill seeking to comply with 15A NCAC 02D .1703(b) using an active collection system designed in accordance with 40 CFR 60.33f(b) shall submit, following the procedures pursuant to 60.38f(j)(2), annual reports of the recorded information in 40 CFR 60.38f(h)(1) through (h)(7). The initial annual report shall be submitted within 180 days of installation and start-up of the collection and control system, and shall include the initial performance test report required under 40 CFR 60.8. The initial performance test report shall be submitted by following the procedures pursuant to 60.38f(j)(1). Each owner or operator that chooses to comply with the operational provisions of 40 CFR 63.1958, 63.1960, and 63.1961, as allowed by 15A NCAC 02D .1705, .1706, and .1707 the owner or operator shall follow the semi-annual reporting requirements in 40 CFR 63.1981(h) in lieu of this Paragraph.

(i) The owner or operator of an existing MSW landfill required to comply with 15A NCAC 02D .1703(b) shall include the information given in 40 CFR 60.38f(i)(1) through (i)(6) with the initial performance test report required pursuant to 40 CFR 60.8.

(j) The owner or operator of an existing MSW landfill shall submit a report within 60 days after the date of completing each performance test pursuant to 40 CFR 60.38f(j).

(k) The owner or operator of an existing MSW landfill required to implement corrective ~~active,~~action, shall submit reports to the Director pursuant to 40 CFR 60.38f(k)(1) and (k)(2). Each owner or operator that chooses to comply with the operational provisions of 40 CFR 63.1958, 63.1960, and 63.1961, as allowed by 15A NCAC 02D .1705, .1706, and .1707 shall follow the corrective action and the corresponding timeline reporting requirements in 40 CFR 63.1981(j) in lieu of this Paragraph.

(l) The owner or operator of an affected landfill with a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters that has employed leachate recirculation or added liquids based on a Research, Development, and Demonstration permit within the last 10 years shall submit an annual report to the Director that includes the information pursuant to 40 CFR 60.38f(l)(1) through (l)(10). The annual report shall be submitted by following the procedures pursuant to 60.38f(j)(2).

(m) The owner or operator of an affected landfill with a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters that intends to demonstrate site-specific surface methane emissions are below 500 parts per million methane, based on Tier 4 provisions of 40 CFR 60.35f(a)(6), shall provide notifications to the Director in accordance with 40 CFR 60.38f(m)(1) and (m)(2).

(n) Each owner or operator that chooses to comply with the operational provisions of 40 CFR 63.1958, 63.1960, and 63.1961, as allowed by 15A NCAC 02D .1705, .1706, and .1707, shall submit the 24-hour high temperature report according to 40 CFR 63.1981(k).

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5); 143-215.107(a)(10);*
Eff. July 1, 1998;
Amended Eff. July 1, 2000;
Readopted Eff. October 1, 2020;
Amended Eff. July 1, ~~2021.~~2021;
Amended Eff. September 1, 2023.

15A NCAC 02Q .0102 is amended as published in 37:17 NCR 1130 as follows:

15A NCAC 02Q .0102 ACTIVITIES EXEMPTED FROM PERMIT REQUIREMENTS

(a) For the purposes of this Rule, the definitions listed in 15A NCAC 02D .0101 and 15A NCAC 02Q .0103 shall apply.

(b) This Rule shall not apply to:

(1) facilities whose potential emissions require a permit pursuant to 15A NCAC 02Q .0500 (Title V Procedures); or

(2) a source emitting a pollutant that is part of the facility's 15A NCAC 02D .1100 (Control of Toxic Air Pollutants) modeling demonstration if that source is not exempted pursuant to 15A NCAC 02Q .0702.

(c) The owner or operator of an activity exempt from permitting pursuant to this Rule shall not be exempt from demonstrating compliance with any other applicable State or federal requirement.

(d) Any facility whose actual emissions of particulate matter (PM10), sulfur dioxide, nitrogen oxides, volatile organic compounds, carbon monoxide, hazardous air pollutants, and toxic air pollutants are each less than five tons per year and whose actual total aggregate emissions are less than 10 tons per year shall not be required to obtain a permit pursuant to 15A NCAC 02Q .0300. This Paragraph shall not apply to synthetic minor facilities that are regulated pursuant to 15A NCAC 02Q .0315.

(e) Any facility that is not exempted from permitting pursuant to Paragraph (d) of this Rule and whose actual total aggregate emissions of particulate matter (PM10), sulfur dioxide, nitrogen oxides, volatile organic compounds, carbon monoxide, hazardous air pollutants, and toxic air pollutants are greater than or equal to five tons per year and less than 25 tons per year may register their facility pursuant to 15A NCAC 02D .0202 instead of obtaining a permit pursuant to 15A NCAC 02Q .0300. This Paragraph shall not apply to:

(1) synthetic minor facilities that are regulated pursuant to 15A NCAC 02Q .0315;

(2) facilities with a source subject to maximum achievable control technology pursuant to 40 CFR Part 63;

(3) facilities with sources of volatile organic compounds or nitrogen oxides that are located in a nonattainment area; or

(4) facilities with a source regulated pursuant to New Source Performance Standards (NSPS), unless the source is exempted pursuant to Paragraph (g) or (h) of this Rule.

(f) The Director may require the owner or operator of a facility to register such facility pursuant to 15A NCAC 02D .0200 or obtain a permit pursuant to 15A NCAC 02Q .0300, if necessary to obtain compliance with any other applicable State or federal requirement.

(g) The following activities shall not require a permit or permit modification pursuant to 15A NCAC 02Q .0300:

(1) maintenance, upkeep, and replacement:

(A) maintenance, structural changes, or repair activities that do not increase the capacity of such process and do not cause any change in the quality or nature or an increase in quantity of an emission of any regulated air pollutant;

(B) housekeeping activities or building maintenance procedures, including painting buildings, paving parking lots, resurfacing floors, repairing roofs, washing, using portable vacuum cleaners, sweeping, using and associated storing of janitorial products, or removing insulation;

(C) using office supplies, supplies to maintain copying equipment, or blueprint machines;

(D) using firefighting equipment (excluding engines regulated pursuant to 40 CFR 63, Subpart ZZZZ); or

(E) replacing existing equipment with equipment of the same size (or smaller), type, and function that does not result in an increase to the actual or potential emission of regulated air pollutants, does not affect the facility's compliance with any other applicable State or federal requirements, and that fits the description of the existing equipment in the permit, including the application, such that the replacement equipment can be lawfully operated pursuant to that permit without modifying the permit;

(2) air conditioning or ventilation: comfort air conditioning or comfort ventilating systems that do not transport, remove, or exhaust regulated air pollutants to the atmosphere;

(3) laboratory or classroom activities:

(A) bench-scale, on-site equipment used for experimentation, chemical or physical analysis for quality control purposes or for diagnosis of illness, training, or instructional purposes;

(B) research and development activities that produce no commercial product or feedstock material; or

(C) educational activities, including wood working, welding, and automotive repair;

(4) storage tanks with no applicable requirements other than Stage I controls pursuant to 15A NCAC 02D .0928, Gasoline Service Stations Stage I;

(5) combustion and heat transfer equipment:

(A) heating units used for human comfort, excluding space heaters burning used oil, that have a heat input of less than 10 million Btu per hour and that do not provide heat for any manufacturing or other industrial process;

(B) residential wood stoves, heaters, or fireplaces; or

(C) water heaters that are used for domestic purposes only and are not used to heat process water;

(6) wastewater treatment processes: industrial wastewater treatment processes or municipal wastewater treatment processes for which there are no state or federal air requirements;

(7) dispensing equipment: equipment used solely to dispense gasoline, diesel fuel, kerosene, lubricants, or cooling oils;

(8) electric motor burn-out ovens with secondary combustion chambers or afterburners;

(9) electric motor bake-on ovens;

(10) burn-off ovens with afterburners for paint-line hangers;

(11) hosiery knitting machines and associated lint screens, hosiery dryers and associated lint screens, and hosiery dyeing processes that do not use bleach or solvent dyes;

(12) woodworking operations processing only green wood;

(13) solid waste landfills: This does not apply to flares and other sources of combustion at solid waste landfills. These flares and other combustion sources shall obtain a permit pursuant to 15A NCAC 02Q .0300 unless they qualify for another exemption pursuant to this Paragraph; or

(14) miscellaneous:

(A) equipment that does not emit any regulated air pollutants;

(B) sources for which there are no applicable requirements;

(C) motor vehicles, aircraft, marine vessels, locomotives, tractors, or other self-propelled vehicles with internal combustion engines;

(D) engines regulated pursuant to Title II of the Federal Clean Air Act (Emission Standards for Moving Sources);

(E) equipment used for preparing food for direct on-site human consumption;

(F) a source whose emissions are regulated only pursuant to Section 112(r) or Title VI of the Federal Clean Air Act;

(G) exit gases from in-line process analyzers;

(H) stacks and vents that prevent the escape of sewer gases from domestic waste through plumbing traps;

(I) refrigeration equipment that complies with the regulations set forth in Sections 601 through 618 of Title VI (Stratospheric Ozone Protection) of the Federal Clean Air Act, 40 CFR Part 82, and any other regulations promulgated by EPA pursuant to Title VI for stratospheric ozone protection, except refrigeration equipment used as or in conjunction with air pollution control equipment. Refrigeration equipment used as or in conjunction with air pollution control equipment shall obtain a permit pursuant to 15A NCAC 02Q .0300 unless it qualifies for another exemption pursuant to this Paragraph;

(J) equipment not vented to the outdoor atmosphere, with the exception of equipment that emits volatile organic compounds. Equipment that emits volatile organic compounds shall obtain a permit pursuant to 15A NCAC 02Q .0300 unless it qualifies for another exemption pursuant to this Paragraph;

(K) animal operations not required to have control technology pursuant to 15A NCAC 02D .1800. If an animal operation is required to have control technology, it shall obtain a permit pursuant to this Subchapter;

(L) any incinerator that meets the requirements set forth in 15A NCAC 02D .1201(c)(4); or

(M) dry cleaning operations, regardless of NSPS or NESHAP applicability.

(h) The following activities shall not require a permit or permit modification pursuant to 15A NCAC 02Q .0300. These activities shall be included in determining applicability of any rule or standard that requires facility-wide aggregation of source emissions, including activities regulated by 15A NCAC 02D .0530, 15A NCAC 02D .0531, 15A NCAC 02Q .0500, and 15A NCAC 02Q .0700:

(1) combustion and heat transfer equipment (including direct-fired equipment that only emit regulated pollutants from fuel combustion):

(A) fuel combustion equipment (excluding internal combustion engines) not regulated pursuant to 40 CFR Part 60, NSPS, firing exclusively unadulterated liquid fossil fuel, wood, or an approved equivalent unadulterated fuel as defined in 15A NCAC 02Q .0103;

(B) fuel combustion equipment (excluding internal combustion engines) firing exclusively natural gas or liquefied petroleum gas or a mixture of these fuels; or

(C) space heaters burning waste oil if:

(i) the heater burns only oil that the owner or operator generates or used oil from do-it-yourself oil changers who generate used oil as household wastes; and

(ii) the heater is designed to have a maximum heat input of not more than 500,000 Btu per hour;

(2) gasoline distribution: bulk gasoline plants, as defined in 15A NCAC 02D .0926(a)(3), with an average daily throughput of less than 4,000 gallons;

(3) paint spray booths or graphic arts operations, coating operations, and solvent cleaning operations, as defined in 15A NCAC 02Q .0803, located at a facility whose facility-wide actual uncontrolled emissions of volatile organic compounds are less than five tons per year, except that such emission sources whose actual uncontrolled emissions of volatile organic compounds are less than 100 pounds per year shall qualify for this exemption regardless of the facility-wide emissions. For the purpose of this exemption, water wash and filters that are an integral part of the paint spray booth shall not be considered air pollution control devices;

(4) electrostatic dry powder coating operations with filters or powder recovery systems;

(5) miscellaneous: any source whose potential uncontrolled emissions of particulate matter (PM10), sulfur dioxide, nitrogen oxides, volatile organic compounds, and carbon monoxide shall each be no more than five tons per year; or

(6) case-by-case exemption: activities that the applicant demonstrates to the Director do not violate any applicable emission control standard.

(i) The owner or operator of a facility or source claiming that an activity is exempt pursuant to Paragraphs (d), (e), (g) or (h) of this Rule shall submit emissions data, documentation of equipment type, or other supporting documents to the Director upon request that the facility or source is qualified for that exemption.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(4); 143-215.108;*

Temporary Adoption Eff. March 8, 1994 for a period of 180 days or until the permanent rule becomes effective, whichever is sooner;
Eff. July 1, 1994;
Amended Eff. April 1, 1999; July 1, 1998; July 1, 1997; November 1, 1996;
Temporary Amendment Eff. December 1, 1999;
Amended Eff. June 13, 2016; May 1, 2013; January 1, 2009; July 1, 2007; June 29, 2006; July 18, 2002; July 1, 2000;
Readopted Eff. April 1, ~~2018.~~2018;
Amended Eff. September 1, 2023.

15A NCAC 02Q .0706 is amended as published in 37:17 NCR 1130 as follows:

15A NCAC 02Q .0706 MODIFICATIONS

(a) The owner or operator shall comply with Paragraphs (b) and (c) of this Rule for a modification that is subject to a Section in 15A NCAC 02D other than 15A NCAC 02D .1100 and that:

(1) requires a permit pursuant to 15A NCAC 02Q ~~.0300;~~.0300 or .0500; or

(2) occurs at a facility with a permit pursuant to 15A NCAC 02Q .0500 and emits a pollutant that is part of the facility's previous modeling demonstration conducted pursuant to 15A NCAC 02D .1104 and 15A NCAC 02Q .0709, if that modification is not exempted pursuant to 15A NCAC 02Q .0702.

This Rule shall not apply to facilities whose emissions of toxic air pollutants result only from insignificant activities, as defined in 15A NCAC 02Q .0103(20), or result only from sources exempted pursuant to 15A NCAC 02Q .0102.

(b) The owner or operator of the facility shall submit a permit application ~~to~~ that complies with 15A NCAC 02D .1100 if the modification results in:

(1) a net increase in emissions or ambient concentration as previously determined pursuant to 15A NCAC 02D .1106 and -15A NCAC 02Q .0709 of any toxic air pollutant that the facility was emitting before the modification; or

(2) emissions of any toxic air pollutant that the facility was not emitting before the modification if such emissions exceed the levels set forth in 15A NCAC 02Q .0711.

(c) The permit application filed pursuant to this Rule shall include an evaluation for all toxic air pollutants identified pursuant to Paragraph (b) of this Rule.

All sources at the facility, excluding sources exempt from evaluation pursuant to 15A NCAC 02Q .0702, emitting these toxic air pollutants shall be included in the evaluation. Sources meeting the exemption set forth in 15A NCAC 02Q .0702(a)(27) shall be reviewed by the Division pursuant to G.S. 143-215.107(a)(5)b.

(d) If a source is included in an air toxic evaluation but is not the source that is being added or modified at the facility, and if the emissions from this source must be reduced in order for the facility to comply with the rules in this Section and 15A NCAC 02D .1100, the emissions from this source shall be reduced by the time the new or modified source begins operating such that the facility shall be in compliance with the rules of this Section and 15A NCAC 02D .1100.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107; 143-215.108; 143B-282;*
Rule originally codified as part of 15A NCAC 2H .0610;
Eff. July 1, 1998;
Amended Eff. May 1, 2014; July 10, 2010; December 1, 2005; April 1, 2005;
Readopted Eff. July 1, ~~2018.~~2018;
Amended Eff. September 1, 2023.