

Appendix M

Adopted State Measures

INTRODUCTION

This Appendix contains the North Carolina rules and legislation that has been adopted or are in the process of being adopted. Below is listed the rules and legislations, with a short description, and the corresponding page numbers where the measure can be found.

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Emissions Inventory Statement Requirement (2Q.0207)	229
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<p>This document outlines Duke Energy's compliance plan to meet the requirements of the North Carolina Clean Smokestacks Act.</p>	

**15A NCAC 02D .0530 PREVENTION OF SIGNIFICANT
DETERIORATION**

(a) The purpose of the Rule is to implement a program for the prevention of significant deterioration of air quality as required by 40 CFR 51.166 as amended November 7, 2003, except those provisions noticed as stayed in 69 FR 40274.

(b) For the purposes of this Rule the definitions contained in 40 CFR 51.166(b) and 40 CFR 51.301 shall apply except the definitions of “baseline actual emissions” and “pollution control projects.”

(1) “Baseline actual emissions” means the rate of emissions, in tons per year, of a regulated new source review (NSR) pollutant, as determined in accordance with Parts (A) through (C) of this Subparagraph.

(A) For an existing emissions unit, baseline actual emissions means the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 5-year period immediately preceding the date that a complete permit application is received by the Division for a permit required under this Rule. The Director shall allow a different time period, not to exceed 10 years immediately preceding the date that a complete permit application is received by the Division, if the owner or operator demonstrates that it is more representative of normal source operation.

(i) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.

(ii) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period.

(iii) For an existing emission unit (other than an electric utility steam generating unit), the average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply. However, if the State has taken credit in an attainment demonstration or maintenance plan consistent with the requirements of 40 CFR 51.165(a)(3)(ii)(G) for an emission limitation that is part of a maximum achievable control technology standard that the Administrator proposed or

- promulgated under part 63 of the Code of Federal Regulations, the baseline actual emissions shall be adjusted to account for such emission reductions.
- (iv) For an electric utility steam generating unit, the average rate shall be adjusted downward to reflect any emissions reductions under G. S. 143-215.107D and for which cost recovery is sought pursuant to G. S. 62-133.6.
 - (v) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period shall be used to determine the baseline actual emissions for all the emissions units being changed. A different consecutive 24-month period for each regulated NSR pollutant can be used for each regulated NSR pollutant.
 - (vi) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by Subparts (ii) and (iii) of this Part.
- (B) For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to emit.
 - (C) For a plantwide applicability limit (PAL) for a stationary source, the baseline actual emissions shall be calculated for existing emissions units in accordance with the procedures contained in Part (A) of this Subparagraph, and for a new emissions unit in accordance with the procedures contained in Part (B) of this Subparagraph.
- (2) “Pollution control project” (PCP) means, at an existing emissions unit, any activity, set of work practices, or project (including pollution prevention as defined under 40 CFR 51.166(b)(38)), the purpose of which is to reduce emissions of air pollutants from such unit. Such qualifying activities or projects may include the replacement or upgrade of an existing emissions control technology with a more effective unit. Other changes that may occur at the source are not considered part of the PCP if they are not necessary to reduce emissions through the PCP. Projects listed in Parts (A) through (F) of this Subparagraph carry the rebuttable presumption

during the permitting process that they are environmentally beneficial pursuant to 40 CFR 51.166(v)(2)(i), and, using the criteria in 40 CFR 51.166(v)(2), the Director may rebut such presumption and determine that the project is not environmentally beneficial and the project does not qualify as a PCP. Projects not listed in Parts (A) through (F) of this Subparagraph may qualify for a case specific PCP exclusion pursuant to the requirements of 40 CFR 51.166(v)(2) and (v)(5). The following are the rebuttable presumption pollution control projects described above:

- (A) Conventional or advanced flue gas desulfurization or sorbent injection for control of SO₂.
- (B) Electrostatic precipitators, baghouses, high efficiency multiclones, or scrubbers for control of particulate matter or other pollutants.
- (C) Flue gas recirculation, low-NO_x burners or combustors, selective non-catalytic reduction, selective catalytic reduction, low emission combustion (for internal combustion engines), and oxidation-absorption catalyst for control of NO_x.
- (D) Regenerative thermal oxidizers, catalytic oxidizers, condensers, thermal incinerators, hydrocarbon combustion flares, biofiltration, absorbers and adsorbers, and floating roofs for storage vessels for control of volatile organic compounds or hazardous air pollutants. For the purpose of this Section, “hydrocarbon combustion flare” means either a flare used to comply with an applicable NSPS or MACT standard (including uses of flares during startup, shutdown, or malfunction permitted under such a standard), or a flare that serves to control emissions of waste streams comprised predominately of hydrocarbons and containing no more than 230 mg/dscm hydrogen sulfide.
- (E) Activities or projects undertaken to accommodate switching (or partially switching) to an inherently less polluting fuel, to be limited to the following fuel switches:
 - (i) Switching from a heavier grade of fuel oil to a lighter fuel oil, or any grade of oil to 0.05 percent sulfur diesel (i.e., from a higher sulfur content #2 fuel or from #6 fuel, to CA 0.05 percent sulfur diesel);
 - (ii) Switching from coal, wood, oil, or any other solid fuel to natural gas, propane, gasified coal, or gasified wood;
 - (iii) Switching from coal to wood, excluding construction or demolition waste, chemical or pesticide treated

- wood, and other forms of “unclean” wood;
 - (iv) Switching from coal to #2 fuel oil (0.5 percent maximum sulfur content); and
 - (v) Switching from high sulfur coal to low sulfur coal (maximum 1.2 percent sulfur content).
 - (F) Activities or projects undertaken to accommodate switching from the use of one ozone depleting substance (ODS) to the use of a substance with a lower or zero ozone depletion potential (ODP,) including changes to equipment needed to accommodate the activity or project, that meet the following requirements:
 - (i) The productive capacity of the equipment is not increased as a result of the activity or project.
 - (ii) The projected usage of the new substance is lower, on an ODP-weighted basis, than the baseline usage of the replaced ODS. To make this determination, the following procedure shall be used:
 - (I) Determine the ODP of the substances by consulting 40 CFR part 82, Subpart A, appendices A and B.
 - (II) Calculate the replaced ODP-weighted amount by multiplying the baseline actual usage (using the annualized average of any 24 consecutive months of usage within the past 10 years) by the ODP of the replaced ODS.
 - (III) Calculate the projected ODP-weighted amount by multiplying the projected actual usage of the new substance by its ODP.
 - (IV) If the value calculated in Sub-Subpart (II) of this Subpart is more than the value calculated in Sub-Subpart (III) of this Subpart, then the projected use of the new substance is lower, on an ODP-weighted basis, than the baseline usage of the replaced ODS.
- (3) In the definition of “net emissions increase,” the reasonable period specified in 40 CFR 51.166(b)(3)(ii) shall be seven years.
- (4) The limitation specified in 40 CFR 51.166(b)(15)(ii) shall not apply.
- (c) All areas of the State shall be classified as Class II except that the following areas are Class I:
 - (1) Great Smoky Mountains National Park;
 - (2) Joyce Kilmer Slickrock National Wilderness Area;
 - (3) Linville Gorge National Wilderness Area;
 - (4) Shining Rock National Wilderness Area;

(5) Swanquarter National Wilderness Area.

(d) Redesignations of areas to Class I or II may be submitted as state proposals to the Administrator of the Environmental Protection Agency (EPA), if the requirements of 40 CFR 51.166(g)(2) are met. Areas may be proposed to be redesignated as Class III, if the requirements of 40 CFR 51.166(g)(3) are met. Redesignations may not, however, be proposed which would violate the restrictions of 40 CFR 51.166(e). Lands within the boundaries of Indian Reservations may be redesignated only by the appropriate Indian Governing Body.

(e) In areas designated as Class I, II, or III, increases in pollutant concentration over the baseline concentration shall be limited to the values set forth in 40 CFR 51.166(c). However, concentration of the pollutant shall not exceed standards set forth in 40 CFR 51.166(d).

(f) Concentrations attributable to the conditions described in 40 CFR 51.166(f)(1) shall be excluded in determining compliance with a maximum allowable increase. However, the exclusions referred to in 40 CFR 51.166(f)(1)(i) or (ii) shall be limited to five years as described in 40 CFR 51.166(f)(2).

(g) Major stationary sources and major modifications shall comply with the requirements contained in 40 CFR 51.166(i) and (a)(7) and by extension in 40 CFR 51.166(j) through . (o), (r), (v), and (w). The transition provisions allowed by 40 CFR 52.21 (i)(11)(i) and (ii) and (m)(1)(vii) and (viii) are hereby adopted under this Rule. The minimum requirements described in the portions of 40 CFR 51.166 referenced in this Paragraph are hereby adopted as the requirements to be used under this Rule, except as otherwise provided in this Rule. Wherever the language of the portions of 40 CFR 51.166 referenced in this Paragraph speaks of the "plan," the requirements described therein shall apply to the source to which they pertain, except as otherwise provided in this Rule. Whenever the portions of 40 CFR 51.166 referenced in this Paragraph provide that the State plan may exempt or not apply certain requirements in certain circumstances, those exemptions and provisions of nonapplicability are also hereby adopted under this Rule. However, this provision shall not be interpreted so as to limit information that may be requested from the owner or operator by the Director as specified in 40 CFR 51.166(n)(2).

(h) New natural gas-fired electrical utility generating units shall install best available control technology for NO_x and SO₂.

(i) 40 CFR 51.166(w)(10)(iv)(a) is changed to read: "If the emissions level calculated in accordance with Paragraph (w)(6) of this Section is equal to or greater than 80 percent of the PAL [plant wide applicability limit] level, the Director shall renew the PAL at the same level." 40 CFR 51.166(w)(10)(iv)(b) is not incorporated by reference.

(j) The owner or operator of a major stationary source that meets the requirements for using the clean unit provisions in 40 CFR 51.166(t) may use the provisions in 40 CFR 51.166(t) by following the procedures in 40 CFR 51.166(t).

The Director shall modify the source's permit according to the provisions in 40 CFR 51.166(t).

(k) If a source does not qualify as a clean unit under 40 CFR 51.166(t), but does qualify to use the provisions in 40 CFR 51.166(u), the owner or operator of the source may use the provisions in 40 CFR 51.155(u) by following the procedures in 40 CFR 51.166(u). The Director shall modify the source's permit according to the provisions in 40 CFR 51.166(u).

(l) 15A NCAC 2Q .0102 and .0302 are not applicable to any source to which this Rule applies. The owner or operator of the sources to which this Rule applies shall apply for and receive a permit as required in 15A NCAC 2Q .0300 or .0500.

(m) When a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was 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.

(n) Volatile organic compounds exempted from coverage in 40 CFR 51.100(s) shall also be exempted when calculating source applicability and control requirements under this Rule.

(o) The degree of emission limitation required for control of any air pollutant under this Rule shall not be affected in any manner by:

- (1) that amount of a stack height, not in existence before December 31, 1970, that exceeds good engineering practice; or
- (2) any other dispersion technique not implemented before then.

(p) A substitution or modification of a model as provided for in 40 CFR 51.166(l) shall be subject to public comment procedures in accordance with the requirements of 40 CFR 51.102.

(q) Permits may be issued on the basis of innovative control technology as set forth in 40 CFR 51.166(s)(1) if the requirements of 40 CFR 51.166(s)(2) have been met, subject to the condition of 40 CFR 51.166(s)(3), and with the allowance set forth in 40 CFR 51.166(s)(4).

(r) If a source to which this Rule applies impacts an area designated Class I by requirements of 40 CFR 51.166(e), notice to EPA will be provided as set forth in 40 CFR 51.166(p)(1). If the Federal Land Manager presents a demonstration described in 40 CFR 51.166(p)(3) during the public comment period or public hearing to the Director and if the Director concurs with this demonstration, the permit application shall be denied. Permits may be issued on the basis that the requirements for variances as set forth in 40 CFR 51.166(p)(4), (p)(5) and (p)(7), or (p)(6) and (p)(7) have been satisfied.

(s) A permit application subject to this Rule shall be processed in accordance with the procedures and requirements of 40 CFR 51.166(q). Within 30 days of receipt of the application, applicants shall be notified if the application is

complete as to initial information submitted. Commencement of construction before full prevention of significant deterioration approval is obtained constitutes a violation of this Rule.

(t) Approval of an application with regard to the requirements of this Rule shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of other rules of this Subchapter or Subchapter 2Q of this Title and any other requirements under local, state, or federal law.

(u) When a source or modification subject to this Rule may affect the visibility of a Class I area named in Paragraph (c) of this Rule, the following procedures shall apply:

- (1) The Director shall provide written notification to all affected Federal Land Managers within 30 days of receiving the permit application or within 30 days of receiving advance notification of an application. The notification shall be at least 30 days prior to the publication of notice for public comment on the application. The notification shall include a copy of all information relevant to the permit application including an analysis provided by the source of the potential impact of the proposed source on visibility.
- (2) The Director shall consider any analysis concerning visibility impairment performed by the Federal Land Manager if the analysis is received within 30 days of notification. If the Director finds that the analysis of the Federal Land Manager fails to demonstrate to his satisfaction that an adverse impact on visibility will result in the Class I area, the Director shall provide in the notice of public hearing on the application, an explanation of his decision or notice as to where the explanation can be obtained.
- (3) The Director may require monitoring of visibility in or around any Class I area by the proposed new source or modification when the visibility impact analysis indicates possible visibility impairment.

(v) If the owner or operator of a source is using projected actual emissions to avoid applicability of prevention of significant deterioration requirements, the owner or operator shall notify the director of the modification. The notification shall include:

- (1) a description of the project,
- (2) identification of sources whose emissions could be affected by the project,
- (3) the calculated projected actual emissions and an explanation of how the projected actual emissions were calculated,
- (4) the calculated baseline emissions and an explanation of how the baseline emissions were calculated, and
- (5) any netting calculations if applicable.

If upon reviewing the notification, the Director finds that it will cause a prevention of significant deterioration evaluation, then the Director shall notify

the owner or operator of his findings. The owner or operator shall not make the modification until it has received a permit issued pursuant to this Rule. If a permit revision is not required pursuant to this rule, the owner or operator shall maintain records of emissions related to the modifications for 10 years if the project involves increasing the emissions unit's design capacity or its potential to emit the regulated NSR pollutant by a significant amount, as defined at 40 CFR 51.166(b)(23)(i), when compared to the pre-modification potential to emit; otherwise these records shall be maintained for five years.

(w) The reference to the Code of Federal Regulations (CFR) in this Rule are incorporated by reference unless a specific reference states otherwise. The version of the Code of Federal Regulations incorporated in this Rule is that as of November 7, 2003, except those provisions noticed as stayed in 69 FR 40274, and does not include any subsequent amendments or editions to the referenced material.

History Note: *Filed as a Temporary Amendment Eff. March 8, 1994, for a period of 180 days or until the permanent rule is effective, whichever is sooner;*
Authority G.S. 143-215.3(a)(1); 143-215.107(a)(3); 143-215.107(a)(5); 143-215.107(a)(7); 143-215.108(b); 150B-21.6;
Eff. June 1, 1981;
Amended Eff. July 28, 2006; July 1, 1997; February 1, 1995; July 1, 1994; December 1, 1992; August 1, 1991.

15A NCAC 02D .0531 SOURCES IN NONATTAINMENT AREAS

(a) For the purpose of this Rule the definitions contained in 40 CFR 51.165(a)(1) and 40 CFR 51.301 shall apply except the definition of “baseline actual emissions” and “pollution control project.”

(1) “Baseline actual emissions” means the rate of emissions, in tons per year, of a regulated new source review (NSR) pollutant, as determined in accordance with Parts (A) through (C) of this Subparagraph.

(A) For an existing emissions unit, baseline actual emissions means the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 5-year period immediately preceding the date that a complete permit application is received by the Division for a permit required under this Rule. The Director shall allow a different time period, not to exceed 10 years immediately preceding the date that a complete permit application is received by the Division, if the owner or

operator demonstrates that it is more representative of normal source operation.

- (i) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.
- (ii) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period.
- (iii) For an existing emission unit (other than an electric utility steam generating unit), the average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply. However, if the State has taken credit in an attainment demonstration or maintenance plan consistent with the requirements of 40 CFR 51.165(a)(3)(ii)(G) for an emission limitation that is part of a maximum achievable control technology standard that the Administrator proposed or promulgated under part 63 of the Code of Federal Regulations, the baseline actual emissions shall be adjusted to account for such emission reductions.
- (iv) For an electric utility steam generating unit, the average rate shall be adjusted downward to reflect any emissions reductions under G. S. 143-215.107D and for which cost recovery is sought pursuant to G. S. 62-133.6.
- (v) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period shall be used to determine the baseline actual emissions for all the emissions units being changed. A different consecutive 24-month period for each regulated NSR pollutant.
- (vi) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by Subparts (ii) and (iii) of this Part.

- (B) For a new emissions unit, the baseline actual emissions for

purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to emit.

- (C) For a plantwide applicability limit (PAL) for a stationary source, the baseline actual emissions shall be calculated for existing emissions units in accordance with the procedures contained in Part (A) of this Subparagraph, and for a new emissions unit in accordance with the procedures contained in Part (B) of this Subparagraph.
- (2) “Pollution control project” (PCP) means, at an existing emissions unit, any activity, set of work practices, or project (including pollution prevention as defined under 40 CFR 51.165(a)(1)(xxvi)), the purpose of which is to reduce emissions of air pollutants from such unit. Such qualifying activities or projects may include the replacement or upgrade of an existing emissions control technology with a more effective unit. Other changes that may occur at the source are not considered part of the PCP if they are not necessary to reduce emissions through the PCP. Projects listed in Parts (A) through (F) of this Subparagraph carry the rebuttable presumption during the permitting process that they are environmentally beneficial pursuant to 40 CFR 51.165(e)(2)(i), and, using the criteria in 40 CFR 51.165(e)(2), the Director may rebut such presumption and determine that the project is not environmentally beneficial and the project does not qualify as a PCP. Projects not listed in Parts (A) through (F) of this Subparagraph may qualify for a case specific PCP exclusion pursuant to the requirements of 40 CFR 51.165(e)(2) and (e)(5). The following are the rebuttable presumption pollution control projects described above:
 - (A) Conventional or advanced flue gas desulfurization or sorbent injection for control of SO₂.
 - (B) Electrostatic precipitators, baghouses, high efficiency multiclones, or scrubbers for control of particulate matter or other pollutants.
 - (C) Flue gas recirculation, low-NO_x burners or combustors, selective non-catalytic reduction, selective catalytic reduction, low emission combustion (for internal combustion engines), and oxidation-absorption catalyst for control of NO_x.
 - (D) Regenerative thermal oxidizers, catalytic oxidizers, condensers, thermal incinerators, hydrocarbon combustion flares, biofiltration, absorbers and adsorbers, and floating roofs for storage vessels for control of volatile organic

compounds or hazardous air pollutants. For the purpose of this Section, “hydrocarbon combustion flare” means either a flare used to comply with an applicable NSPS or MACT standard (including uses of flares during startup, shutdown, or malfunction permitted under such a standard), or a flare that serves to control emissions of waste streams comprised predominately of hydrocarbons and containing no more than 230 mg/dscm hydrogen sulfide.

- (E) Activities or projects undertaken to accommodate switching (or partially switching) to an inherently less polluting fuel, to be limited to the following fuel switches:
 - (i) Switching from a heavier grade of fuel oil to a lighter fuel oil, or any grade of oil to 0.05 percent sulfur diesel (i.e., from a higher sulfur content #2 fuel or from #6 fuel, to CA 0.05 percent sulfur diesel);
 - (ii) Switching from coal, wood, oil, or any other solid fuel to natural gas, propane, gasified coal, or gasified wood;
 - (iii) Switching from coal to wood, excluding construction or demolition waste, chemical or pesticide treated wood, and other forms of “unclean” wood;
 - (iv) Switching from coal to #2 fuel oil (0.5 percent maximum sulfur content); and
 - (v) Switching from high sulfur coal to low sulfur coal (maximum 1.2 percent sulfur content).
- (F) Activities or projects undertaken to accommodate switching from the use of one ozone depleting substance (ODS) to the use of a substance with a lower or zero ozone depletion potential (ODP,) including changes to equipment needed to accommodate the activity or project, that meet the following requirements:
 - (i) The productive capacity of the equipment is not increased as a result of the activity or project.
 - (ii) The projected usage of the new substance is lower, on an ODP-weighted basis, than the baseline usage of the replaced ODS. To make this determination, the following procedure shall be used:
 - (I) Determine the ODP of the substances by consulting 40 CFR Part 82, Subpart A, Appendices A and B.
 - (II) Calculate the replaced ODP-weighted amount by multiplying the baseline actual usage (using the annualized average of any 24 consecutive

- months of usage within the past 10 years) by the ODP of the replaced ODS.
- (III) Calculate the projected ODP-weighted amount by multiplying the projected actual usage of the new substance by its ODP.
 - (IV) If the value calculated in Sub-Subpart (II) of this Subpart is more than the value calculated in Sub-Subpart (III) of this Subpart, then the projected use of the new substance is lower, on an ODP-weighted basis, than the baseline usage of the replaced ODS.
- (3) In the definition of “net emissions increase,” the reasonable period specified in 40 CFR 51.165(a)(1)(vi)(C)(1) shall be seven years.
- (b) Redesignation to Attainment. If any county or part of a county to which this Rule applies is later designated in 40 CFR 81.334 as attainment for ozone or carbon monoxide, all sources in that county subject to this Rule before the redesignation date shall continue to comply with this Rule.
- (c) Applicability. This Rule applies to the following areas:
- (1) Ozone Nonattainment Areas, to major stationary sources and major modifications of sources of volatile organic compounds or nitrogen oxides for which construction commences after the area in which the source is located is designated according to Part (A) or (B) of this Subparagraph:
 - (A) areas designated in 40 CFR 81.334 as nonattainment for ozone, or
 - (B) any of the following areas and in that area only when the Director notices in the North Carolina Register that the area is in violation of the ambient air quality standard for ozone:
 - (i) Charlotte/Gastonia, consisting of Mecklenburg and Gaston Counties; with the exception allowed under Paragraph (l) of this Rule;
 - (ii) Greensboro/Winston-Salem/High Point, consisting of Davidson, Forsyth, and Guilford Counties and that part of Davie County bounded by the Yadkin River, Dutchmans Creek, North Carolina Highway 801, Fulton Creek and back to Yadkin River; or
 - (iii) Raleigh/Durham, consisting of Durham and Wake Counties and Dutchville Township in Granville County.
- Violations of the ambient air quality standard for ozone shall be determined according to 40 CFR 50.9.
- (2) Carbon Monoxide Nonattainment Areas. This Rule applies to major stationary sources and major modifications of sources of carbon

monoxide located in areas designated in 40 CFR 81.334 as nonattainment for carbon monoxide and for which construction commences after the area in which the source is located is listed in 40 CFR 81.334 as nonattainment for carbon monoxide.

(d) This Rule is not applicable to:

- (1) complex sources of air pollution regulated only under Section .0800 of this Subchapter and not under any other rule in this Subchapter;
- (2) emission of pollutants at the new major stationary source or major modification located in the nonattainment area that are pollutants other than the pollutant or pollutants for which the area is nonattainment. (A major stationary source or major modification that is major for volatile organic compounds or nitrogen oxides is also major for ozone.);
- (3) emission of pollutants for which the source or modification is not major;
- (4) a new source or modification that qualifies for exemption under the provision of 40 CFR 51.165(a)(4); or
- (5) emission of compounds listed under 40 CFR 51.100(s) as having been determined to have negligible photochemical reactivity except carbon monoxide.

(e) 15A NCAC 2Q .0102 and .0302 are 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 2Q .0300 or .0500.

(f) To issue a permit to a source to which this Rule applies, the Director shall determine that the source meets the following requirements:

- (1) The new major stationary source or major modification 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 major stationary source or major modification 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 that is federally enforceable or contained in a court decree, with all applicable emission limitations and standards of this Subchapter that EPA has authority to approve as elements of the North Carolina State Implementation Plan for Air Quality;
- (3) The owner or operator of the proposed new major stationary source or major modification will obtain sufficient emission reductions of the nonattainment pollutant from other sources in the nonattainment area so that the emissions from the new major source and associated new minor sources will be less than the

emissions reductions by a ratio of at least 1.00 to 1.15 for volatile organic compounds and nitrogen oxides and by a ratio of less than one to one for carbon monoxide. The baseline for this emission offset shall be the actual emissions of the source from which offset credit is obtained. Emission reductions shall not include any reductions resulting from compliance (or scheduled compliance) with applicable rules in effect before the application. The

difference between the emissions from the new major source and associated new minor sources of carbon monoxide and the emission reductions shall be sufficient to represent reasonable further progress toward attaining the Ambient Air Quality Standards. The emissions reduction credits shall also conform to the provisions of 40 CFR 51.165(a)(3)(ii)(A) through (J); and

- (4) The North Carolina State Implementation Plan for Air Quality is being carried out for the nonattainment area in which the proposed source is located.

(g) New natural gas-fired electrical utility generating units shall install lowest achievable emission rate technology for NO_x and SO₂.

(h) 40 CFR 51.165(f)(10)(iv)(A) is changed to read: "If the emissions level calculated in accordance with Paragraph (f)(6) of this Section is equal to or greater than 80 percent of the PAL level, the Director shall renew the PAL at the same level." 40 CFR 51.165(f)(10)(iv)(B) is not incorporated by reference.

(i) The owner or operator of a major stationary source that meets the requirements for using the clean unit provisions in 40 CFR 51.165(c) may use the provisions in 40 CFR 51.165(c) by following the procedures in 40 CFR 51.165(c). The Director shall modify the source's permit according to the provisions in 40 CFR 51.165(c).

(j) If a source does not qualify as a clean unit under 40 CFR 51.165(c), but does qualify to use the provisions in 40 CFR 51.165(d), the owner or operator of the source may use the provisions in 40 CFR 51.155(d) by following the procedures in 40 CFR 51.165(d). The Director shall modify the source's permit according to the provisions in 40 CFR 51.165(d).

(k) When 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.

(l) To issue a permit to a source of a nonattainment pollutant, the Director shall determine, in addition to the other requirements of this Rule, that an analysis (produced by the permit applicant) of alternative sites, sizes, production processes, and environmental control techniques for source demonstrates that the benefits of the source significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification.

(m) Approval of an application regarding the requirements of this Rule shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of other rules of this Chapter and any other requirements under local, state, or federal law.

(n) When a source or modification subject to this Rule may affect the visibility of a Class I area named in Paragraph (c) of Rule .0530 of this Section, the following

procedures shall be followed:

- (1) The owner or operator of the source shall provide an analysis of the impairment to visibility that would occur because of the source or modification and general commercial, industrial and other growth associated with the source or modification;
- (2) The Director shall provide written notification to all affected Federal Land Managers within 30 days of receiving the permit application or within 30 days of receiving advance notification of an application. The notification shall be at least 30 days before the publication of the notice for public comment on the application. The notification shall include a copy of all information relevant to the permit application including an analysis provided by the source of the potential impact of the proposed source on visibility;
- (3) The Director shall consider any analysis concerning visibility impairment performed by the Federal Land Manager if the analysis is received within 30 days of notification. If the Director finds that the analysis of the Federal Land Manager fails to demonstrate to his satisfaction that an adverse impact on visibility will result in the Class I area, the Director shall provide in the notice of public hearing on the application, an explanation of his decision or notice where the explanation can be obtained;
- (4) The Director shall issue permits only to those sources whose emissions will be consistent with making reasonable progress toward the national goal of preventing any future, and remedying any existing, impairment of visibility in mandatory Class I areas when the impairment results from manmade air pollution. In making the decision to issue a permit, the Director shall consider the cost of compliance, the time necessary for compliance, the energy and nonair quality environmental impacts of compliance, and the useful life of the source; and
- (5) The Director may require monitoring of visibility in or around any Class I area by the proposed new source or modification when the visibility impact analysis indicates possible visibility impairment.

The requirements of this Paragraph shall not apply to nonprofit health or nonprofit educational institutions.

(o) Paragraphs ((f) and (l) of this Rule shall not apply to a new major stationary source or a major modification of a source of volatile organic compounds or nitrogen oxides for which construction commences after the area in which the source is located has been designated according to Part (c)(1)(B) of this Rule and before the area is designated in 40 CFR 81.334 as nonattainment for ozone if the owner or operator of the source demonstrates, using the Urban Airshed Model (UAM), that the new source or modification will not contribute to or cause a violation. The model used shall be that maintained by the Division. The Division

shall run the model only after the permit application has been submitted. The permit application shall be incomplete until the modeling analysis is completed. The owner or operator of the source shall apply such degree of control and obtain such offsets necessary to demonstrate the new source or modified source will not cause or contribute to a violation.

(p) If the owner or operator of a source is using projected actual emissions to avoid applicability of prevention of significant deterioration requirements, the owner or operator shall notify the director of the modification. The notification shall include:

- (1) a description of the project,
- (2) identification of sources whose emissions could be affected by the project,
- (3) the calculated projected actual emissions and an explanation of how the projected actual emissions were calculated,
- (4) the calculated baseline emissions and an explanation of how the baseline emissions were calculated, and
- (5) any netting calculations if applicable.

If upon reviewing the notification, the Director finds that it will cause a prevention of significant deterioration evaluation, then the Director shall notify the owner or operator of his findings. The owner or operator shall not make the modification until it has received a permit issued pursuant to this Rule. If a permit revision is not required pursuant to this Rule, the owner or operator shall maintain records of emissions related to the modifications for 10 years if the project involves increasing the emissions unit's design capacity or its potential to emit the regulated NSR pollutant by a significant amount, as defined at 40 CFR 51.165(a)(1)(x), when compared to the pre-modification potential to emit; otherwise these records shall be maintained for five years.

(q) The version of the Code of Federal Regulations incorporated in this Rule is that as of November 7, 2003, except those provisions noticed as stayed in 69 FR 40274, and does not include any subsequent amendments or editions to the referenced material.

History Note: Filed as a Temporary Amendment Eff. March 8, 1994 for a period of 180 days or until the permanent rule is effective, whichever is sooner;
Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); 143-215.108(b);
Eff. June 1, 1981;
Amended Eff. May 1, 2005; July 1, 1998; July 1, 1996; July 1, 1995;
July 1, 1994; December 1, 1993; December 1, 1992.

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

(a) This Rule applies to new major stationary sources and major modifications which are located in an area which is designated by the U.S. Environmental Protection Agency (EPA) to be an attainment or unclassifiable area as of May 1, 1983, 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) complex sources of air pollution that are regulated only under Section .0800 of this Subchapter and not under any other rule of this Subchapter;
- (2) emission of pollutants for which the area in which the new or modified source is located is designated as nonattainment;
- (3) emission of pollutants for which the source or modification is not major;
- (4) emission of pollutants other than sulfur dioxide, total suspended particulates, nitrogen oxides, and carbon monoxide;
- (5) a new or modified source whose impact will increase not more than:
 - (A) 1.0 ug/m³ of SO₂ on an annual basis,
 - (B) 5 ug/m³ of SO₂ on a 24-hour basis,
 - (C) 25 ug/m³ of SO₂ on a 3-hour basis,
 - (D) 1.0 ug/m³ of total suspended particulates on an annual basis,
 - (E) 5 ug/m³ of total suspended particulates on a 24-hour basis,
 - (F) 1.0 ug/m³ of NO₂ on an annual basis,
 - (G) 0.5 mg/m³ of carbon monoxide on an 8-hour basis,
 - (H) 2 mg/m³ of carbon monoxide on a one-hour basis,
 - (I) 1.0 ug/m³ of PM₁₀ on an annual basis, or
 - (J) 5 ug/m³ of PM₁₀ on a 24-hour basis,at any locality that does not meet a national ambient air quality standard;
- (6) sources which are not major unless secondary emissions are included in calculating the potential to emit;
- (7) sources which are exempted by the provision in Section II.F. of Appendix S of 40 CFR Part 51;
- (8) temporary emission sources which will be relocated within two years; and
- (9) emissions resulting from the construction phase of the source.

(d) 15A NCAC 2Q .0102 and .0302 are 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 2Q .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 which 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.
 - (3) The source will satisfy one of the following conditions:
 - (A) The source will comply with Part (e)(3) of Rule .0531 of this Section 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 January 1, 1989, and does not include any subsequent amendments or editions to the referenced material.

History Note: *Filed as a Temporary Amendment Eff. March 8, 1994 for a period of 180 days or until the permanent rule becomes effective, whichever is sooner;*
Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); 143-215.108(b); 150B-21.6;
Eff. June 1, 1981;
Amended Eff. July 1, 1994; December 1, 1992; August 1, 1991;
October 1, 1989; July 1, 1988; October 1, 1987; January 1, 1985;
February 1, 1983.

1 **15A NCAC 02D .0902 APPLICABILITY**

2 (a) The rules in this Section do not apply except as specifically set out in this Rule.

3 (b) Regardless of any other statement of applicability of this Section, this Section does not apply to:

- 4 (1) sources whose emissions of volatile organic compounds are not more than 15 pounds
5 per day, except that this Section does apply to the manufacture and use of cutback
6 asphalt and to gasoline service stations or gasoline dispensing facilities regardless of
7 levels of emissions of volatile organic compounds;
- 8 (2) sources whose emissions do not exceed 800 pounds of volatile organic compounds per
9 calendar month and that are:
- 10 (A) bench-scale, on-site equipment used exclusively for chemical or physical
11 analysis for quality control purposes, staff instruction, water or wastewater
12 analyses, or non-production environmental compliance assessments;
- 13 (B) bench-scale experimentation, chemical or physical analyses, training or
14 instruction from not-for-profit, non-production educational laboratories;
- 15 (C) bench-scale experimentation, chemical or physical analyses, training or
16 instruction from hospitals or health laboratories pursuant to the determination or
17 diagnoses of illness; or
- 18 (D) research and development laboratory activities provided the activity produces no
19 commercial product or feedstock material; or
- 20 (3) emissions of volatile organic compounds during startup or shutdown operations from
21 sources which use incineration or other types of combustion to control emissions of
22 volatile organic compounds whenever the off-gas contains an explosive mixture during
23 the startup or shutdown operation if the exemption is approved by the Director as
24 meeting the requirements of this Subparagraph.

25 (c) The following rules of this Section apply statewide:

- 26 (1) .0925, Petroleum Liquid Storage in Fixed Roof Tanks, for fixed roof tanks at gasoline bulk
27 plants and gasoline bulk terminals;
- 28 (2) .0926, Bulk Gasoline Plants;
- 29 (3) .0927, Bulk Gasoline Terminals;
- 30 (4) .0928, Gasoline Service Stations Stage I;
- 31 (5) .0932, Gasoline Truck Tanks and Vapor Collection Systems;
- 32 (6) .0933, Petroleum Liquid Storage in External Floating Roof Tanks, for external floating
33 roof tanks at bulk gasoline plants and bulk gasoline terminals;
- 34 (7) .0948, VOC Emissions from Transfer Operations;
- 35 (8) .0949, Storage of Miscellaneous Volatile Organic Compounds; and
- 36 (9) .0958, Work Practices for Sources of Volatile Organic Compounds.

(d) Rule .0953, Vapor Return Piping for Stage II Vapor Recovery, of this Section applies in Davidson, Durham, Forsyth, Guilford, Wake, Dutchville Township in Granville County, and that part of Davie County bounded by the Yadkin River, Dutchmans Creek, North Carolina Highway 801, Fulton Creek and back to Yadkin River in accordance with provisions set out in that Rule.

(e) All sources located in Mecklenburg County that were required to comply with any of the Rules in Subparagraphs (e)(1) or (2) of this Rule before July 5, 1995 shall continue to comply with these Rules:

(1) .0917 through .0937 of this Section, or

(2) .0943 through .0945 of this Section.

(f) The Rules in this Section apply to sources with the potential to emit 100 tons or more volatile organic compounds per year in the following areas:

(1) Cabarrus County

(2) Gaston County

(3) Lincoln County

(4) Mecklenburg County

(5) Rowan County

(6) Union County

(7) Davidson Township and Coddle Creek Township in Iredell County.

(g) If a violation of the ambient air quality standard for ozone is measured in accordance with 40 CFR 50.9 in Davidson, Forsyth, or Guilford County or that part of Davie County bounded by the Yadkin River, Dutchmans Creek, North Carolina Highway 801, Fulton Creek and back to Yadkin River, the Director shall initiate analysis to determine the control measures needed to attain and maintain the ambient air quality standard for ozone. By the following May 1, the Director shall implement the specific stationary source control measures contained in this Section that are required as part of the control strategy necessary to bring the area into compliance and to maintain compliance with the ambient air quality standard for ozone. The Director shall implement the rules in this Section identified as being necessary by the analysis by notice in the North Carolina Register. The notice shall identify the rules that are to be implemented and shall identify whether the rules implemented are to apply in Davidson, Forsyth, or Guilford County or that part of Davie County bounded by the Yadkin River, Dutchmans Creek, North Carolina Highway 801, Fulton Creek and back to Yadkin River or any combination thereof. At least one week before the scheduled publication date of the North Carolina Register containing the Director's notice implementing rules in this Section, the Director shall send written notification to all permitted facilities within the county in which the rules are being implemented that are or may be subject to the requirements of this Section informing them that they are or may be subject to the requirements of this Section. (For Forsyth County, "Director" means for the purpose of notifying permitted facilities in Forsyth County, the Director of the Forsyth County local air pollution control program.) Compliance shall be in accordance with Rule .0909 of this Section.

(h) If a violation of the ambient air quality standard for ozone is measured in accordance with 40 CFR 50.9 in Durham or Wake County or Dutchville Township in Granville County, the Director shall initiate analysis to determine the control measures needed to attain and maintain the ambient air quality standard for ozone. By the following May 1, the Director shall implement the specific stationary source control measures contained in this Section that are required as part of the control strategy necessary to bring the area into compliance and to maintain compliance with the ambient air quality standard for ozone. The Director shall implement the rules in this Section identified as being necessary by the analysis by notice in the North Carolina Register. The notice shall identify the rules that are to be implemented and shall identify whether the rules implemented are to apply in Durham or Wake County or Dutchville Township in Granville County or any combination thereof. At least one week before the scheduled publication date of the North Carolina Register containing the Director's notice implementing rules in this Section, the Director shall send written notification to all permitted facilities within the county in which the rules are being implemented that are or may be subject to the requirements of this Section informing them that they are or may be subject to the requirements of this Section. Compliance shall be in accordance with Rule .0909 of this Section.

(i) Sources whose emissions of volatile organic compounds are not subject to limitation under this Section may still be subject to emission limits on volatile organic compounds in Rules, .0524, .1110, or .1111 of this Subchapter.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1979;
Amended Eff. March 1, 2007; August 1, 2004; July 1, 2000; April 1, 1997; July 1, 1996;
July 1, 1995; May 1, 1995; July 1, 1994.

15A NCAC 02D .0909 COMPLIANCE SCHEDULES FOR SOURCES IN NONATTAINMENT AREAS

(a) Applicability. With the exceptions in Paragraph (b) of this Rule, this Rule applies to all sources covered by Paragraph (f), (g), or (h) of Rule .0902 of this Section.

(b) Exceptions. This Rule does not apply to:

- (1) sources in Mecklenburg County required to comply with the requirements of this Section under Rule .0902(e) of this Section;
- (2) sources covered under Rule .0953 or .0954 of this Section; or
- (3) sources required to comply with the requirements of this Section under Rule .0902(c) of this Section.

(c) Maintenance areas. The owner or operator of any source subject to this Rule because of the application of Paragraph (g), or (h) of Rule .0902 of this Section shall adhere to the following increments of progress and schedules:

- 1 (1) if compliance is to be achieved by installing emission control equipment, replacing
2 process equipment, or modifying existing process equipment:
- 3 (A) The owner or operator shall submit a permit application and a compliance
4 schedule within six months after the Director notices the implementation of rules
5 in the North Carolina Register that resolves a violation of the ambient air quality
6 standard for ozone;
- 7 (B) The compliance schedule shall contain the following increments of progress:
- 8 (i) a date by which contracts for the emission control system and process
9 equipment shall be awarded or orders shall be issued for purchase of
10 component parts;
- 11 (ii) a date by which on-site construction or installation of the emission control
12 and process equipment shall begin; and
- 13 (iii) a date by which on-site construction or installation of the emission control
14 and process equipment shall be completed;
- 15 (C) Final compliance shall be achieved within three years after the Director notices
16 the implementation of rules in the North Carolina Register that resolves a
17 violation of the ambient air quality standard for ozone.
- 18 (2) if compliance is to be achieved by using low solvent content coating technology:
- 19 (A) The owner or operator shall submit a permit application and a compliance
20 schedule within six months after the Director notices the implementation of rules
21 in the North Carolina Register that resolves a violation of the ambient air quality
22 standard for ozone;
- 23 (B) The compliance schedule shall contain the following increments:
- 24 (i) a date by which research and development of low solvent content
25 coating shall be completed if the Director determines that low solvent
26 content coating technology has not been sufficiently researched and
27 developed;
- 28 (ii) a date by which evaluation of product quality and commercial
29 acceptance shall be completed;
- 30 (iii) a date by which purchase orders shall be issued for low solvent content
31 coatings and process modifications;
- 32 (iv) a date by which process modifications shall be initiated; and
- 33 (v) a date by which process modifications shall be completed and use of low
34 solvent content coatings shall begin;
- 35 (C) Final compliance shall be achieved within three years after the Director notices
36 the implementation of rules in the North Carolina Register that resolves a
37 violation of the ambient air quality standard for ozone.

- 1 (3) The owner or operator shall certify to the Director within five days after each increment
2 deadline of progress in this Paragraph, whether the required increment of progress has
3 been met.
- 4 (d) Nonattainment areas. The owner or operator of any source subject to this Rule because of the
5 application of Paragraphs (f) of Rule .0902 of this Section shall adhere to the following increments of
6 progress and schedules:
- 7 (1) if compliance is to be achieved by installing emission control equipment, replacing
8 process equipment, or modifying existing process equipment:
- 9 (A) The owner or operator shall submit a permit application and a compliance
10 schedule by August 1, 2007
- 11 (B) The compliance schedule shall contain the following increments of progress:
- 12 (i) a date by which contracts for the emission control system and process
13 equipment shall be awarded or orders shall be issued for purchase of
14 component parts;
- 15 (ii) a date by which on-site construction or installation of the emission control
16 and process equipment shall begin; and
- 17 (iii) a date by which on-site construction or installation of the emission control
18 and process equipment shall be completed;
- 19 (C) Final compliance shall be achieved no later than April 1, 2009.
- 20 (2) if compliance is to be achieved by using low solvent content coating technology:
- 21 (A) The owner or operator shall submit a permit application and a compliance
22 schedule by August 1, 2007.
- 23 (B) The compliance schedule shall contain the following increments:
- 24 (i) a date by which research and development of low solvent content
25 coating shall be completed if the Director determines that low solvent
26 content coating technology has not been sufficiently researched and
27 developed;
- 28 (ii) a date by which evaluation of product quality and commercial
29 acceptance shall be completed;
- 30 (iii) a date by which purchase orders shall be issued for low solvent content
31 coatings and process modifications;
- 32 (iv) a date by which process modifications shall be initiated; and
- 33 (v) a date by which process modifications shall be completed and use of low
34 solvent content coatings shall begin;
- 35 (C) Final compliance shall be achieved no later than April 1, 2009.

- 1 (3) The owner or operator shall certify to the Director within five days after the deadline, for
2 each increment of progress in this Paragraph, whether the required increment of
3 progress has been met.
- 4 (e) If the Director requires a test to demonstrate that compliance has been achieved, the owner or
5 operator of sources subject to this Rule shall conduct a test and submit a final test report within six
6 months after the stated date of final compliance.
- 7 (f) Sources already in compliance.
- 8 (1) Maintenance Areas. Paragraph (c) of this Rule shall not apply to sources that are in
9 compliance with applicable rules of this Section when the Director notices the
10 implementation of rules in the North Carolina Register that resolves a violation of the
11 ambient air quality standard for ozone and that have determined and certified compliance
12 to the satisfaction of the Director within six months after the Director notices the
13 implementation of rules in the North Carolina Register that resolves a violation of the
14 ambient air quality standard for ozone.
- 15 (2) Nonattainment areas. Paragraphs (d) of this Rule shall not apply to sources in an area
16 named in Paragraph (f) of Rule .0902 of this Section that are in compliance with
17 applicable rules of this Section on March 1, 2007.
- 18 (g) New sources.
- 19 (1) Maintenance areas. The owner or operator of any new source of volatile organic
20 compounds not in existence or under construction before the date that the Director
21 notices in the North Carolina Register in accordance with Paragraph (g) or (h) of Rule
22 .0902 of this Section the implementation of rules in the North Carolina Register that
23 resolves a violation of the ambient air quality standard for ozone, shall comply with all
24 applicable rules in this Section upon start-up of the source.
- 25 (2) Nonattainment areas. The owner or operator of any new source of volatile organic
26 compounds not in existence or under construction before March 1, 2007 in an area
27 identified in Paragraph (f) of Rule .0902 shall comply with all applicable rules in this
28 Section upon start-up of the source.
- 29
- 30 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
31 *Eff. July 1, 1979;*
32 *Amended Eff. March 1, 2007; July 1, 2000; April 1, 1997; July 1, 1995; July 1, 1994; July*
33 *1, 1988; January 1, 1985.*
34
35
- 36 **15A NCAC 02D .1402 APPLICABILITY**
- 37 (a) The rules in this Section do not apply except as specifically set out in this Rule.

1 (b) The requirements of this Section shall apply to all sources May 1 through September 30 of each year.

2 (c) Rules .1409(b) and .1416 through .1423 of this Section apply statewide.

3 (d) The Rules .1407 through .1409 and .1413 of this Section apply to sources with the potential to emit
4 100 ton or more nitrogen oxides per year in the following areas:

5 (1) Cabarrus County

6 (2) Gaston County

7 (3) Lincoln County

8 (4) Mecklenburg County

9 (5) Rowan County

10 (6) Union County

11 (7) Davidson Township and Coddle Creek Township in Iredell County

12 (e) If a violation of the ambient air quality standard for ozone is measured according to 40 CFR 50.9 in
13 Davidson, Forsyth, or Guilford County or that part of Davie County bounded by the Yadkin River,
14 Dutchmans Creek, North Carolina Highway 801, Fulton Creek and back to Yadkin River, the Director shall
15 initiate analysis to determine the control measures needed to attain and maintain the ambient air quality
16 standard for ozone. By the following May 1, the Director shall implement the specific stationary source
17 control measures contained in this Section that are required as part of the control strategy necessary to
18 bring the area into compliance and to maintain compliance with the ambient air quality standard for
19 ozone. The Director shall implement the rules in this Section identified as necessary by the analysis by
20 notice in the North Carolina Register. The notice shall identify the rules that are to be implemented and
21 shall identify whether the rules implemented are to apply in Davidson, Forsyth, or Guilford County or that
22 part of Davie County bounded by the Yadkin River, Dutchmans Creek, North Carolina Highway 801,
23 Fulton Creek and back to Yadkin River or any combination thereof. At least one week before the
24 scheduled publication date of the North Carolina Register containing the Director's notice implementing
25 rules in this Section, the Director shall send written notification to all permitted facilities within the county
26 in which the rules are being implemented that are or may be subject to the requirements of this Section
27 informing them that they are or may be subject to the requirements of this Section. (For Forsyth County,
28 "Director" means for the purpose of notifying permitted facilities in Forsyth County, the Director of the
29 Forsyth County local air pollution control program.) Compliance shall be according to Rule .1403 of this
30 Section.

31 (f) If a violation of the ambient air quality standard for ozone is measured according to 40 CFR 50.9 in
32 Durham or Wake County or Dutchville Township in Granville County, the Director shall initiate analysis to
33 determine the control measures needed to attain and maintain the ambient air quality standard for ozone.
34 By the following May 1, the Director shall implement the specific stationary source control measures
35 contained in this Section that are required as part of the control strategy necessary to bring the area into
36 compliance and to maintain compliance with the ambient air quality standard for ozone. The Director shall
37 implement the rules in this Section identified as necessary by the analysis by notice in the North Carolina

1 Register. The notice shall identify the rules that are to be implemented and shall identify whether the rules
2 implemented are to apply in Durham or Wake County or Dutchville Township in Granville County or any
3 combination thereof. At least one week before the scheduled publication date of the North Carolina
4 Register containing the Director's notice implementing rules in this Section, the Director shall send written
5 notification to all permitted facilities within the county in which the rules are being implemented that are or
6 may be subject to the requirements of this Section informing them that they are or may be subject to the
7 requirements of this Section. Compliance shall be in according to Rule .1403 of this Section.

8 (g) Regardless of any other statement of applicability of this Section, this Section does not apply to any:

- 9 (1) source not required to obtain an air permit under 15A NCAC 02Q .0102 or is an
10 insignificant activity as defined at 15A NCAC 02Q .0103(19);
11 (2) incinerator or thermal or catalytic oxidizer used primarily for the control of air pollution;
12 (3) emergency generator;
13 (4) emergency use internal combustion engine;
14 (5) source that is not covered under Rules .1416, .1417, or .1418, and that is at a facility with
15 a federally enforceable potential to emit nitrogen oxides of:
16 (A) less than 100 tons per year; and
17 (B) less than 560 pounds per calendar day beginning May 1 through September 30
18 of any year.
19 (6) stationary internal combustion engine less than 2400 brake horsepower that operates no
20 more than the following hours between May 1 and September 30:
21 (A) for diesel engines:
22 $t = 833,333 / ES$
23 (B) for natural gas-fired engines:
24 $t = 700,280 / ES$

25 where t equals time in hours and ES equals engine size in horsepower.

26 This exemption shall not apply to any of the sources listed in Rules .1417(a)(1) or (2) or .1417(b)
27 of this Section except that it shall apply to:

- 28 (7) stationary combustion turbine constructed before January 1, 1979, that has a federally
29 enforceable permit that restricts:
30 (A) its potential emissions of nitrogen oxides to no more than 25 tons between May 1
31 and September 30;
32 (B) it to burning only natural gas or oil; and
33 (C) its hours of operation as described in 40 CFR 96.4 (b) (1)(ii) and (iii).

34
35 *History Note:* Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5), (7), (10);

36 *Eff. April 1, 1995;*

37 *Amended Eff. April 1, 1997; July 1, 1995; April 1, 1995;*

1 *Temporary Amendment Eff. November 1, 2000;*
2 *Amended Eff. April 1, 2001;*
3 *Temporary Amendment Eff. August 1, 2001;*
4 *Amended Eff. March 1, 2007; July 18, 2002.*
5
6

7 **15A NCAC 02D .1403 COMPLIANCE SCHEDULES**

8 (a) Applicability. This Rule applies to sources covered by Paragraph (d), (e), or (f) of Rule .1402 of this
9 Section.

10 (b) Maintenance areas. The owner or operator of a source subject to this Rule because of the
11 applicability of Paragraph (e) or (f) of Rule .1402 of this Section, shall adhere to the following increments
12 of progress and schedules:

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

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

18 (B) The owner or operator shall perform any required testing, according to Rule
19 .1415 of this Section, within 12 months after the Director's notice in the North
20 Carolina Register to demonstrate compliance with the applicable limitation; and

21 (C) The owner or operator shall implement any required recordkeeping and reporting
22 requirements, according to Rule .1404 of this Section, within 12 months after the
23 Director's notice in the North Carolina Register to demonstrate compliance with
24 the applicable limitation.

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

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

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

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

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

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

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

- 1 (C) Final compliance shall be achieved within three years after the Director's notice
2 in the North Carolina Register unless the owner or operator of the source
3 petitions the Director for an alternative limitation according to Rule .1412 of this
4 Section. If such a petition is made, final compliance shall be achieved within four
5 years after the Director's notice in the North Carolina Register.
- 6 (3) If compliance with this Section is to be achieved through the implementation of an
7 emissions averaging plan as provided for in Rule .1410 of this Section:
- 8 (A) The owner or operator shall abide by the applicable requirements of
9 Subparagraphs (b)(1) or (b)(2) of this Rule for certification or modification of each
10 source to be included under the averaging plan;
- 11 (B) The owner or operator shall submit a plan to implement an emissions averaging
12 plan according to Rule .1410 of this Section within six months after the Director's
13 notice in the North Carolina Register.
- 14 (C) Final compliance shall be achieved within one year after the Director's notice in
15 the North Carolina Register unless implementation of the emissions averaging
16 plan requires the modification of one or more of the averaging sources. If
17 modification of one or more of the averaging sources is required, final
18 compliance shall be achieved within three years.
- 19 (4) If compliance with this Section is to be achieved through the implementation of a
20 seasonal fuel switching program as provided for in Rule .1411 of this Section:
- 21 (A) The owner or operator shall make all necessary modifications according to
22 Subparagraph (b)(2) of this Rule.
- 23 (B) The owner or operator shall include a plan for complying with the requirements of
24 Rule .1411 of this Section with the permit application required under Part (A) of
25 this Subparagraph.
- 26 (C) Final compliance shall be achieved within three years after the Director's notice
27 in the North Carolina Register.
- 28 (5) Increments of progress certification. The owner or operator shall certify to the Director,
29 within five days after each increment deadline of progress in this Paragraph, whether the
30 required increment of progress has been met.
- 31 (c) Nonattainment areas. The owner or operator of a source subject to this Rule because of the
32 applicability of Paragraph (d) of Rule .1402 of this Section, shall adhere to the following:
- 33 (1) If compliance with this Section is to be achieved through a demonstration to certify
34 compliance without source modification:
- 35 (A) The owner or operator shall notify the Director in writing by August 1, 2007;
- 36 (B) The owner or operator shall perform any required testing, according to Rule
37 .1415 of this Section, by January 1, 2008 and

- 1 (C) The owner or operator shall implement any required recordkeeping and reporting
2 requirements, according to Rule .1404 of this Section, by January 1, 2008.
- 3 (2) If compliance with this Section is to be achieved through the installation of combustion
4 modification technology or other source modification:
- 5 (A) The owner or operator shall submit a permit application and a compliance
6 schedule by August 1, 2007.
- 7 (B) The compliance schedule shall contain a date by which contracts for
8 installation of the modification shall be awarded or orders shall be issued
9 for purchase of component parts.
- 10 (C) The compliance schedule shall contain a date by which installation of the
11 modification shall begin.
- 12 (D) The compliance schedule shall contain a date by which installation of the
13 modification shall be completed.
- 14 (E) If the source is subject to a limitation, the compliance schedule shall contain,
15 a date by which compliance testing shall be completed.
- 16 (F) Final compliance shall be achieved no later than April 1, 2009.
- 17 (3) If compliance with this Section is to be achieved through the implementation of an
18 emissions averaging plan as provided for in Rule .1410 of this Section:
- 19 (A) The owner or operator shall abide by the applicable requirements of
20 Subparagraph (c)(1) or (c)(2) of this Rule for certification or modification of each
21 source to be included under the averaging plan;
- 22 (B) The owner or operator shall submit a plan to implement an emissions averaging
23 plan according to Rule .1410 of this Section by August 1, 2007.
- 24 (C) Final compliance shall be achieved within one year no later than January 1,
25 2008.
- 26 (4) If compliance with this Section is to be achieved through the implementation of a
27 seasonal fuel switching program as provided for in Rule .1411 of this Section:
- 28 (A) The owner or operator shall make all necessary modifications according to
29 Subparagraph (c)(2) of this Rule.
- 30 (B) The owner or operator shall include a plan for complying with the requirements of
31 Rule .1411 of this Section with the permit application required under Part (A) of
32 this Subparagraph.
- 33 (C) Final compliance shall be achieved no later than April 1, 2009.
- 34 (5) Increments of progress certification. The owner or operator shall certify to the Director,
35 within five days after the deadline for each increment of progress in this Paragraph,
36 whether the required increment of progress has been met.
- 37 (d) Sources already in compliance.

- 1 (1) Maintenance Areas. Paragraph (b) of this Rule shall not apply to sources that are in
2 compliance with applicable rules of this Section when the Director notices the
3 implementation of rules in the North Carolina Register that resolves a violation of the
4 ambient air quality standard for ozone and that have determined and certified compliance
5 to the satisfaction of the Director within six months after the Director notices the
6 implementation of rules in the North Carolina Register that resolves a violation of the
7 ambient air quality standard for ozone.
- 8 (2) Nonattainment areas. Paragraph (c) of this Rule shall not apply to sources in an area
9 named in Paragraph (d) of Rule .1402 of this Section that are in compliance with
10 applicable rules of this Section on March 1, 2007.
- 11 (e) New sources.
- 12 (1) Maintenance areas. The owner or operator of any new source of nitrogen oxides not
13 permitted before the date the Director notices in the North Carolina Register according to
14 Paragraph (e), (f), or (g) of Rule .1402 of this Section, shall comply with all applicable
15 rules in this Section upon start-up of the source. The owner or operator of any new
16 source covered under Rules .1407, .1408, .1409, .1413, or .1418 of this Section shall
17 comply with all applicable rules in this Section upon start-up of the source.
- 18 (2) Nonattainment areas. The owner or operator of any new source of nitrogen oxides not permitted
19 before March 1, 2008 in an area identified in Paragraph (d) of Rule .1402 of thisSection, shall comply with
20 all applicable rules in this Section upon start-up of the source.
- 21 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.107(a)(5), (7), (10);*
22 *Eff. April 1, 1995;*
23 *Amended Eff. April 1, 1997;*
24 *Temporary Amendment Eff. November 1, 2000;*
25 *Amended Eff. April 1, 2001;*
26 *Temporary Amendment Eff. August 1, 2001;*
27 *Amended Eff. March 1, 2007; July 18, 2002.*

SECTION .0900 - VOLATILE ORGANIC COMPOUNDS**.0901 DEFINITIONS**

For the purpose of this Section, the following definitions apply:

- (1) "Coating" means a functional, protective, or decorative film applied in a thin layer to a surface.
- (2) "Coating applicator" means an apparatus used to apply a surface coating.
- (3) "Coating line" means one or more apparatus or operations in a single line wherein a surface coating is applied, dried, or cured and which include a coating applicator and flashoff area and may include an oven or associated control devices.
- (4) "Continuous vapor control system" means a vapor control system which treats vapors displaced from tanks during filling on a demand basis without intermediate accumulation.
- (5) "Delivered to the applicator" means the condition of coating after dilution by the user just before application to the substrate.
- (6) "Flashoff area" means the space between the application area and the oven.
- (7) "High solids coating" means a coating which contains a higher percentage of solids and a lower percentage of volatile organic compounds and water than conventional organic solvent borne coatings.
- (8) "Hydrocarbon" means any organic compound of carbon and hydrogen only.
- (9) "Incinerator" means a combustion apparatus designed for high temperature operation in which solid, semisolid, liquid, or gaseous combustible wastes are ignited and burned efficiently and from which the solid and gaseous residues contain little or no combustible material.
- (10) "Intermittent vapor control system" means a vapor control system which employs an intermediate vapor holder to accumulate vapors displaced from tanks during filling. The control device treats the accumulated vapors only during automatically controlled cycles.
- (11) "Loading rack" means an aggregation or combination of loading equipment arranged so that all loading outlets in the combination can be connected to a tank truck or trailer parked in a specified loading space.
- (12) "Low solvent coating" means a coating which contains a substantially lower amount of volatile organic compound than conventional organic solvent borne coatings; it usually falls into one of three major groups of high solids, waterborne, or powder coatings.

- (13) "Organic material" means a chemical compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate.
- (14) "Oven" means a chamber within which heat is used to bake, cure, polymerize, or dry a surface coating.
- (15) "Potential emissions" means the quantity of a pollutant which would be emitted at the maximum capacity of a stationary source to emit the pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is described or contained as a condition in the federally enforceable permit. Secondary emissions do not count in determining potential emissions of a stationary source. Fugitive emissions count, to the extent quantifiable, in determining the potential emissions only in these cases:
 - (a) petroleum refineries;
 - (b) chemical process plants; and
 - (c) petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels.
- (16) "Prime coat" means the first film of coating applied to a surface to protect it or to prepare it to receive subsequent coatings.
- (17) "Reasonably available control technology" (also denoted as RACT) means the lowest emission limit which a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility. It may require technology which has been applied to similar, but not necessarily identical, source categories.
- (18) "Reid vapor pressure" means the absolute vapor pressure of volatile crude oil and volatile nonviscous petroleum liquids except liquefied petroleum gases as determined by American Society for Testing and Materials, Part 17, 1973, D-323-72 (reapproved 1977).
- (19) "Shutdown" means the cessation of operation of a source or a part thereof or emission control equipment.
- (20) "Solvent" means organic materials which are liquid at standard conditions and which are used as solvers, viscosity reducers, or cleaning agents.
- (21) "Standard conditions" means a temperature of 68°F and pressure of 29.92 inches of mercury.
- (22) "Startup" means the setting in operation of a source or emission control equipment.
- (23) "Substrate" means the surface to which a coating is applied.

- (24) "Topcoat" means the final films of coating applied in a multiple or single coat operation.
- (25) "True vapor pressure" means the equilibrium partial pressure exerted by a petroleum liquid as determined in accordance with methods described in American Petroleum Institute Bulletin 2517, "Evaporation Loss from Floating Roof Tanks," 1962.
- (26) "Vapor collection system" means a vapor transport system which uses direct displacement by the liquid loaded to force vapors from the tank into a vapor control system.
- (27) **A**vapor control system means a system which prevents releases to the atmosphere of at least 90 percent by weight of organic compounds in the vapors displaced from a tank during the transfer of gasoline.
- (28) "Volatile organic compound" (also denoted as VOC) means any compound of carbon whose volatile content can be determined by the procedure described in Rules .0913 or .0939 of this Section excluding any compound that is listed under 40 CFR 51.100(s) as having been determined to have negligible photochemical reactivity.

History Note: Authority G.S. 143-215.3(a)(1);
 Eff. July 1, 1979;
 Amended Eff. July 1, 1996; December 1, 1993; July 1, 1991; March 1, 1991.

15A NCAC 2D .0902 APPLICABILITY

- (a) The rules in this Section do not apply except as specifically set out in this Rule.
- (b) Regardless of any other statement of applicability of this Section, this Section does not apply to:
 - (1) sources whose emissions of volatile organic compounds are not more than 15 pounds per day, except that this Section does apply to the manufacture and use of cutback asphalt and to gasoline service stations or gasoline dispensing facilities regardless of levels of emissions of volatile organic compounds;
 - (2) sources whose emissions do not exceed 800 pounds of volatile organic compounds per calendar month and that are:
 - (A) bench-scale, on-site equipment used exclusively for chemical or physical analysis for quality control purposes, staff instruction, water or wastewater analyses, or non-production environmental compliance assessments;
 - (B) bench-scale experimentation, chemical or physical analyses, training or instruction from not-for-profit, non-production educational laboratories
 - (C) bench-scale experimentation, chemical or physical analyses, training or instruction from hospitals or health laboratories

- (D) pursuant to the determination or diagnoses of illness; or research and development laboratory activities provided the activity produces no commercial product or feedstock material; or
- (3) emissions of volatile organic compounds during startup or shutdown operations from sources which use incineration or other types of combustion to control emissions of volatile organic compounds whenever the off-gas contains an explosive mixture during the startup or shutdown operation if the exemption is approved by the Director as meeting the requirements of this Subparagraph.
- (c) The following Rules of this Section apply statewide:
- (1) .0925, Petroleum Liquid Storage in Fixed Roof Tanks, for fixed roof tanks at gasoline bulk plants and gasoline bulk terminals;
 - (2) .0926, Bulk Gasoline Plants;
 - (3) .0927, Bulk Gasoline Terminals;
 - (4) .0928, Gasoline Service Stations Stage I;
 - (5) .0932, Gasoline Truck Tanks and Vapor Collection Systems;
 - (6) .0933, Petroleum Liquid Storage in External Floating Roof Tanks, for external floating roof tanks at bulk gasoline plants and bulk gasoline terminal;
 - (7) .0948, VOC Emissions from Transfer Operations;
 - (8) .0949, Storage of Miscellaneous Volatile Organic Compounds; and
 - (9) .0958, Work Practices for Sources of Volatile Organic Compounds.
- (d) Rule .0953, Vapor Return Piping for Stage II Vapor Recovery, of this Section applies in Davidson, Durham, Forsyth, Gaston, Guilford, Mecklenburg, Wake, Dutchville Township in Granville County, and that part of Davie County bounded by the Yadkin River, Dutchmans Creek, North Carolina Highway 801, Fulton Creek and back to Yadkin River in accordance with provisions set out in that Rule.
- (e) All sources located in Mecklenburg County that were required to comply with any of these Rules:
- (1) .0917 through .0937 of this Section, or
 - (2) .0943 through .0945 of this Section,
- before July 5, 1995, shall continue to comply with those Rules.
- (f) If a violation of the ambient air quality standard for ozone is measured in accordance with 40 CFR 50.9 in Cabarrus, Gaston, Iredell, Lincoln, Mecklenburg, Rowan, or Union County, North Carolina or York County, South Carolina, the Director shall initiate analysis to determine the control measures needed to attain and maintain the ambient air quality standard for ozone. By the following May 1, the Director shall implement the specific stationary source control measures contained in this Section that are required as part of the control strategy necessary to bring the area into compliance and to maintain compliance with the ambient air quality standard for ozone. The Director shall implement the rules in this Section identified as being necessary by the analysis by notice in the North Carolina Register. The

notice shall identify the rules that are to be implemented and shall identify whether the rules implemented are to apply in Gaston or Mecklenburg County or in both counties. At least one week before the scheduled publication date of the North Carolina Register containing the Director's notice implementing rules in this Section, the Director shall send written notification to all permitted facilities within the county in which the rules are being implemented that are or may be subject to the requirements of this Section informing them that they are or may be subject to the requirements of this Section. (For Mecklenburg County, "Director" means for the purpose of notifying permitted facilities in Mecklenburg County, the Director of the Mecklenburg County local air pollution control program.) Compliance shall be in accordance with Rule .0909 of this Section.

(g) If a violation of the ambient air quality standard for ozone is measured in accordance with 40 CFR 50.9 in Davidson, Forsyth, or Guilford County or that part of Davie County bounded by the Yadkin River, Dutchmans Creek, North Carolina Highway 801, Fulton Creek and back to Yadkin River, the Director shall initiate analysis to determine the control measures needed to attain and maintain the ambient air quality standard for ozone. By the following May 1, the Director shall implement the specific stationary source control measures contained in this Section that are required as part of the control strategy necessary to bring the area into compliance and to maintain compliance with the ambient air quality standard for ozone. The Director shall implement the rules in this Section identified as being necessary by the analysis by notice in the North Carolina Register. The notice shall identify the rules that are to be implemented and shall identify whether the rules implemented are to apply in Davidson, Forsyth, or Guilford County or that part of Davie County bounded by the Yadkin River, Dutchmans Creek, North Carolina Highway 801, Fulton Creek and back to Yadkin River or any combination thereof. At least one week before the scheduled publication date of the North Carolina Register containing the Director's notice implementing rules in this Section, the Director shall send written notification to all permitted facilities within the county in which the rules are being implemented informing them that they are or may be subject to the requirements of this Section. (For Forsyth County, "Director" means for the purpose of notifying permitted facilities in Forsyth County, the Director of the Forsyth County local air pollution control program.) Compliance shall be in accordance with Rule .0909 of this Section.

(h) If a violation of the ambient air quality standard for ozone is measured in accordance with 40 CFR 50.9 in Durham or Wake County or Dutchville Township in Granville County, the Director shall initiate analysis to determine the control measures needed to attain and maintain the ambient air quality standard for ozone. By the following May 1, the Director shall implement the specific stationary source control measures contained in this Section that are required as part of the control strategy necessary to bring the area into compliance and to maintain compliance with the ambient air quality standard for ozone. The Director shall implement the rules in this Section identified as being necessary by the analysis by notice in the

North Carolina Register. The notice shall identify the rules that are to be implemented and shall identify whether the rules implemented are to apply in Durham or Wake County or Dutchville Township in Granville County or any combination thereof. At least one week before the scheduled publication date of the North Carolina Register containing the Director's notice implementing rules in this Section, the Director shall send written notification to all permitted facilities within the county in which the rules are being implemented informing them that they are or may be subject to the requirements of this Section. Compliance shall be in accordance with Rule .0909 of this Section.

(i) Sources whose emissions of volatile organic compounds are not subject to limitation under this Section may still be subject to emission limits on volatile organic compounds in Rules .0524, .1110, or .1111 of this Subchapter.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1979;
Amended Eff. August 1, 2004; July 1, 2000; April 1, 1997; July 1, 1996;
July 1, 1995; May 1, 1995; July 1, 1994.

.0903 RECORDKEEPING: REPORTING: MONITORING

(a) The owner or operator of any volatile organic compound emission source or control equipment shall:

- (1) install, operate, and maintain process and control equipment monitoring instruments or procedures as necessary to comply with the requirements of this Section; and
- (2) maintain, in writing, data and reports relating to monitoring instruments or procedures which will, upon review, document the compliance status of the volatile organic compound emission source or control equipment; such data and reports shall, as a minimum, be maintained daily.

(b) The owner or operator of any volatile organic compound emission source or control equipment subject to the requirements of this Section shall comply with the monitoring, recordkeeping, and reporting requirements in Section .0600 of this Subchapter.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1979;
Amended Eff. April 1, 1999; July 1, 1993; July 1, 1991; December 1, 1989; January 1, 1985.

.0904 MALFUNCTIONS: BREAKDOWNS: UPSETS

History Note: Authority G.S. 143-215.3(a)(1); 143-215.68; 143-215.107(a)(5);
Eff. July 1, 1979;

Repealed Eff. March 1, 1983.

.0905 PETITION FOR ALTERNATIVE CONTROLS

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1979;
Amended Eff. January 1, 1985; July 1, 1980;
Repealed Eff. July 1, 1988.

.0906 CIRCUMVENTION

(a) An owner or operator subject to this Section shall not build, erect, install, or use any article, machine, equipment, process, or method, the use of which conceals an emission which would otherwise constitute a violation of an applicable regulation.

(b) Paragraph (a) of this Regulation includes, but is not limited to, the use of gaseous dilutants to achieve compliance and the piecemeal carrying out of an operation to avoid coverage by a regulation that applies only to operations larger than a specified size.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1979;
Amended Eff. January 1, 1985.

.0907 COMPLIANCE SCHEDULES FOR SOURCES IN NONATTAINMENT AREAS (REPEAL)

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1979;
Amended Eff. May 1, 1995; July 1, 1994; January 1, 1985; July 1, 1980;
Repealed Eff. April 1, 1997.

.0908 EQUIPMENT MODIFICATION COMPLIANCE SCHEDULES

History Note: Authority G.S. 143-215.3(a)(1); 143-215.68; 143-215.107(a)(5);
Eff. July 1, 1979;
Amended Eff. January 1, 1985; July 1, 1980;
Repealed Eff. July 1, 1988.

.0909 COMPLIANCE SCHEDULES FOR SOURCES IN NEW NONATTAINMENT AREAS

(a) With the exceptions in Paragraph (b) of this Rule, this Rule applies to all sources covered by Paragraphs (e), (f), or (g) of Rule .0902 of this Section.

(b) This Rule does not apply to:

- (1) sources in Mecklenburg County required to comply with the requirements of this Section under Rule .0902(c) of this Section;
 - (2) sources covered under Rule .0953 or .0954 of this Section; or
 - (3) sources required to comply with the requirements of this Section under Rule .0902(a) of this Section.
- (c) The owner or operator of any source subject to this Rule because of the application of Paragraphs (e), (f), or (g) of Rule .0902 of this Section shall adhere to the following increments of progress and schedules:
- (1) if compliance is to be achieved by installing emission control equipment, replacing process equipment, or modifying existing process equipment:
 - (A) A permit application and a compliance schedule shall be submitted within six months after the Director notices in the North Carolina Register that an area is in violation of the ambient air quality standard for ozone;
 - (B) The compliance schedule shall contain the following increments of progress:
 - (i) a date by which contracts for the emission control system and process equipment shall be awarded or orders shall be issued for purchase of component parts;
 - (ii) a date by which on-site construction or installation of the emission control and process equipment shall begin; and
 - (iii) a date by which on-site construction or installation of the emission control and process equipment shall be completed;
 - (C) Final compliance shall be achieved within three years after the Director notices in the North Carolina Register that the area is in violation of the ambient air quality standard for ozone.
 - (2) if compliance is to be achieved by using low solvent content coating technology:
 - (A) A permit application and a compliance schedule shall be submitted within six months after the Director notices in the North Carolina Register that an area is in violation of the ambient air quality standard for ozone;
 - (B) The compliance schedule shall contain the following increments:
 - (i) a date by which research and development of low solvent content coating shall be completed if the Director determines that low solvent content coating technology has not been sufficiently researched and developed;

- (ii) a date by which evaluation of product quality and commercial acceptance shall be completed;
 - (iii) a date by which purchase orders shall be issued for low solvent content coatings and process modifications;
 - (iv) a date by which process modifications shall be initiated; and
 - (v) a date by which process modifications shall be completed and use of low solvent content coatings shall begin;
- (C) Final compliance shall be achieved within three years after the Director notices in the North Carolina Register that the area is in violation of the ambient air quality standard for ozone.
- (d) The owner or operator shall certify to the Director within five days after the deadline, for each increment of progress in Paragraph (c) of this Rule, whether the required increment of progress has been met.
- (e) If the Director requires a test to demonstrate that compliance has been achieved the owner or operator of sources subject to this Rule shall conduct a test and submit a final test report within six months after the stated date of final compliance.
- (f) The owner or operator of any new source of volatile organic compounds not in existence or under construction as of the date that the Director notices in the North Carolina Register in accordance with Paragraphs (e), (f), or (g) of Rule .0902 of this Section that the area is in violation of the ambient air quality standard for ozone, shall comply with all applicable rules in this Section upon start-up of the source.
- (g) Paragraphs (c) and (d) of this Rule shall not apply to sources that are in compliance with all applicable rules of this Section when the Director notices in the North Carolina Register that the area is in violation of the ambient air quality standard for ozone and that have determined and certified compliance to the satisfaction of the Director within six months after the Director notices in the North Carolina Register that the area is in violation.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1979;
Amended Eff. July 1, 2000; April 1, 1997; July 1, 1995; July 1, 1994;
July 1, 1988; January 1, 1985.

.0910 ALTERNATIVE COMPLIANCE SCHEDULES (REPEAL)

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1979;
Amended Eff. May 1, 1995; July 1, 1994; July 1, 1988; January 1,
1985;
Repealed Eff. April 1, 1997.

.0911 EXCEPTION FROM COMPLIANCE SCHEDULES (REPEAL)

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
 Eff. July 1, 1979;
 Amended Eff. May 1, 1995; July 1, 1994; July 1, 1980;
 Repealed Eff. April 1, 1997.

15A NCAC 2D .0912 GENERAL PROVISIONS ON TEST METHODS AND PROCEDURES

(a) The owner or operator of any volatile organic compound source required to comply with rules in this Section shall, at his own expense, demonstrate compliance by the methods described in Rules .0912 through .0916 and .0939 through .0942 of this Section. The owner or operator of a volatile organic compound source shall demonstrate compliance when the Director requests such demonstration. The Director shall explain to the owner or operator the basis for requesting a demonstration of compliance and shall allow reasonable time for testing to be performed. (b) Volatile organic compound emissions compliance testing shall be allowed and the results shall be accepted, only if the Director has been notified as required by Paragraph (c) of this Rule and if the Director has granted approval. The Director shall grant approval if all the information required under Paragraph (c) of this Rule is included in the notification and if the correct testing procedures are used.

(c) Any person proposing to conduct a volatile organic compound emissions test shall notify the Director at least 21 days before beginning the test so that the Director may at his option observe the test. Any person notifying the Director of a proposed volatile organic compound emissions test shall include as part of notification the following minimum information:

- (1) a statement indicating the purpose of the proposed test;
- (2) a detailed description of the facility to be tested;
- (3) a detailed description of the test procedures, equipment, and sampling sites; and
- (4) a timetable, setting forth the dates on which:
 - (A) The testing will be conducted;
 - (B) Preliminary test results will be reported (not later than 30 days after sample collection); and
 - (C) The final test report will be submitted (not later than 60 days after completion of on-site sampling).

(d) If the volatile organic compound emissions test shows noncompliance, the owner or operator of the volatile organic source shall submit along with the final test report proposed corrective action.

(e) For compliance determination, the owner or operator of any volatile organic compound emissions source shall be responsible for providing:

- (1) sampling ports, pipes, lines, or appurtenances for the collection of samples and data required by the test procedure;
- (2) safe access to the sample and data collection locations; and
- (3) light, electricity, and other utilities required for sample and data collection.

(f) Compliance shall be determined on a line-by-line basis using the more stringent of the following two:

- (1) Compliance shall be determined on a daily basis for each coating line using a weighted average, that is, dividing the sum of the mass (pounds) of volatile organic compounds in coatings consumed on that coating line, as received, and the mass (pounds) of volatile organic compound solvents added to the coatings on that coating line by the volume (gallons) of coating solids consumed during that day on that coating line; or
- (2) Compliance shall be determined as follows:
 - (A) When low solvent or high solids coatings are used to reduce emissions of volatile organic compounds, compliance shall be determined instantaneously.
 - (B) When add on control devices, e.g., solvent recovery systems or incinerators, are used to reduce emissions of volatile organic compounds, compliance shall be determined by averaging emissions over a one-hour period.

(g) The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Section to determine the compliance status of that source or to verify any test data submitted about that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in this Section shall have precedence over all other tests. The United States Environmental Protection Agency (EPA) may verify any test submitted by the owner or operator of a source, and any test conducted by EPA using the appropriate testing procedures described in this Section shall have precedence over tests conducted by the owner or operator of the source.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); Eff. July 1, 1979; Amended Eff. April 1, 2003; July 1, 1993; July 1, 1991; March 1, 1991; December 1, 1989; January 1, 1985; July 1, 1980.

15A NCAC 2D .0913 DETERMINATION OF VOLATILE CONTENT OF SURFACE COATINGS

(a) In accordance with Regulation .0912 of this Section, the volatile matter content, water content, density, volume of solids and weight of solids of surface coatings shall be determined by the procedures set forth in Method 24 of Appendix A of 40 CFR Part 60. Compounds exempted under Paragraph (28) of Regulation .0901 of this Section shall be treated

as water. The results of the tests shall be expressed in the same units as the emission limits given in the regulation for which compliance is being determined.

(b) In accordance with Regulation .0912 of this Section, the volatile matter and density of printing inks and related coatings shall be determined by the procedures set forth in Method 24A of Appendix A of 40 CFR Part 60. The results of the tests shall be expressed in the same units as the emission limits given in the regulation for which compliance is being determined.

(c) The Code of Federal Regulations adopted by reference in this Rule shall automatically include any later amendments thereto as allowed by G.S. 150B-14(c).

*History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); 150B-14(c);
Eff. July 1, 1979;
Amended Eff. March 1, 1991; December 1, 1989; July 1, 1988;
January 1, 1985.*

15A NCAC 2D .0914 DETERMINATION OF VOC EMISSION CONTROL SYSTEM EFFICIENCY

(a) The provisions of this Rule are applicable, in accordance with Rule .0912 of this Section, to any test method employed to determine the collection or control efficiency of any device or system designed, installed, and operated for the purpose of reducing volatile organic compound emissions.

(b) The following procedures shall be used to determine efficiency:

- (1) The volatile organic compound containing material shall be sampled and analyzed using the procedures contained in this Subchapter such that the quantity of emissions that could result from the use of the material can be quantified.
- (2) Samples of the gas stream containing volatile organic compounds shall be taken simultaneously at the inlet and outlet of the emissions control device.
- (3) The total combustible carbon content of the samples shall be determined by a method described in Rule .0939 of this Section.
- (4) The efficiency of the control device shall be expressed as the fraction of total combustible carbon content reduction achieved.
- (5) The volatile organic compound mass emission rate shall be the sum of emissions from the control device and emissions not collected by the capture system.

(c) Capture efficiency performance of volatile organic compound emission control systems shall be determined using the EPA recommended capture efficiency protocols and test methods as described in the EPA document, EMTIC GD-035, "Guidelines for Determining Capture Efficiency".

(d) The EPA document, EMTIC GD-035, "Guidelines for Determining Capture Efficiency" cited in this Rule is hereby incorporated by reference including any subsequent amendments or editions. A copy of this document is available for inspection at the Regional Offices of the North Carolina Department of Environment and Natural Resources (Addresses are given in Rule .0103 of this Subchapter). Copies of this document may be obtained by downloading a text file from the EPA TTN 2000 home page through the EMTIC (Emission Measurement Technical Information) technical information area at <http://ttnwww.rtpnc.epa.gov/html/emtic/guidlnd.htm>.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.68; 143-215.107(a)(5);
Eff. July 1, 1979;
Amended Eff. July 1, 1998; January 1, 1985.

15A NCAC 2D .0915 DETERMINATION OF SOLVENT METAL CLEANING VOC EMISSIONS

(a) This method is used to determine volatile organic compound emissions from solvent metal cleaning equipment.

(b) The purpose of this method is to quantify, by material balance, the amount of solvent input into a degreaser over a sufficiently long period of time so that an average emission rate can be computed.

(c) The following procedure shall be followed to perform a material balance test:

- (1) clean the degreaser sump before testing;
- (2) record the amount of solvent added to the tank with a flow meter;
- (3) record the weight and type of work load degreased each day;
- (4) at the end of the test run, pump out the used solvent and measure the amount with a flow meter; also, estimate the volume of metal chips and other material remaining in the emptied sump, if significant;
- (5) bottle a sample of the used solvent and analyze it to find the percent that is oil and other contaminants; the oil and solvent proportions can be estimated by weighing samples of used solvent before and after boiling off the solvent. Compute the volume of oils in the used solvent. The volume of solvent displaced by this oil along with the volume of

make-up solvent added during operations is equal to the solvent emissions.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.68;
143-215.107(a)(5);
Eff. July 1, 1979;
Amended Eff. January 1, 1985.

**15A NCAC 2D .0916 DETERMINATION: VOC EMISSIONS
FROM BULK GASOLINE TERMINALS**

In accordance with Regulation .0912 of this Section, the emissions of volatile organic compounds from bulk gasoline terminals shall be determined by the procedures set forth in 40 CFR 60.503.

History Note: Authority G.S. 143-215.3(a) (1); 143-215.107(a) (5);
Eff. July 1, 1979;
Amended Eff. July 1, 1988; April 1, 1986; January 1, 1985.

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.0917 AUTOMOBILE AND LIGHT-DUTY TRUCK MANUFACTURING

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

- (1) "Application area" means the area where the coating is applied by dipping or spraying.
- (2) "Manufacturing plant" means a facility where auto body parts are manufactured or finished for eventual inclusion into a finished product ready for sale to vehicle dealers. Customizers, body shops and other repainters are not part of this definition.
- (3) "Automobile" means all passenger cars or passenger car derivatives capable of seating 12 or fewer passengers.
- (4) "Light-duty trucks" means any motor vehicles rated at 8,500 pounds gross weight or less which are designed primarily for purpose of transportation or are derivatives of such vehicles except automobiles.

(b) This Rule applies to the application area(s), flashoff area(s), and oven(s), of automotive and light-duty truck manufacturing plants involved in prime, topcoat and final repair coating operations.

(c) With the exception stated in Paragraph (d) of this Rule, emissions of volatile organic compounds from any automotive or light-duty truck manufacturing plant coating line subject to this Rule shall not exceed:

- (1) 1.4 pounds of volatile organic compounds per gallon of solids delivered to the applicator from prime application, flashoff area, and oven operations;
- (2) 4.5 pounds of volatile organic compounds per gallon of solids delivered to the applicator from topcoat and surface application, flashoff area, and oven operation;
- (3) 13.8 pounds of volatile organic compounds per gallon of solids delivered to the applicator from final repair application, flashoff area, and oven operation.

(d) Any source which has chosen to control emissions of volatile organic compounds under Rule .0518(e) of this Subchapter and which 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 automotive or light-duty truck manufacturing plant coating line subject to this Rule shall not exceed:

- (1) 1.2 pounds of volatile organic compounds per gallon of coating, excluding water and exempt compounds, delivered to the applicator from prime application, flashoff area, and oven operations;

- (2) 2.8 pounds of volatile organic compounds per gallon of coating, daily weighted average, excluding water and exempt compounds, delivered to the applicator from topcoat and surface application, flashoff area, and oven operation;
- (3) 4.8 pounds of volatile organic compounds per gallon of coating, excluding water and exempt compounds, delivered to the applicator from final repair application, flashoff area, and oven operation.

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;
April 1, 1986.

.0918 CAN COATING

- (a) For the purpose of this Rule, the following definitions apply:
 - (1) "End sealing compound" means a synthetic rubber compound which is coated onto can ends and which 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 coating applicator(s) and oven(s) of sheet, can, or end coating lines involved in sheet basecoat (exterior and interior) and overvarnish;

two-piece can interior body spray; two-piece can exterior end (spray or roll coat); three-piece can side-seam spray and end sealing compound operations.

(c) With the exception stated in Paragraph (d) of this Rule, 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 basecoat (exterior and interior) 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 can exterior end (spray or roll coat) 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;
- (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 which has chosen to control emissions of volatile organic compounds under Rule .0518(e) of this Subchapter and which 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 basecoat (exterior and interior) 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 exterior end (spray or roll coat) 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;

- (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.

.0919 COIL COATING

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

- (1) "Coil coating" means the coating of any flat metal sheet or strip that comes in rolls or coils.
- (2) "Quench area" means a chamber where the hot metal exiting the oven is cooled by either a spray of water or a blast of air followed by water cooling.

(b) This Rule applies to the coating applicator(s), oven(s), and quench area(s) of coil coating lines involved in prime and top coat or single coat operations.

(c) With the exception stated in Paragraph (d) of this Rule, emissions of volatile organic compounds from any coil coating line subject to this Rule shall not exceed 4.0 pounds of volatile organic compounds per gallon of solids delivered to the coating applicator from prime and topcoat or single coat operations.

(d) Any source which has chosen to control emissions of volatile organic compounds under Rule .0518(e) of this Subchapter and which 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 coil coating line subject to this Rule shall not exceed 2.6 pounds of volatile organic compounds per gallon of coating, excluding water and exempt compounds, delivered to the coating applicator from prime and topcoat or single coat 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.

.0920 PAPER COATING

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

- (1) "Knife coating" means the application of a coating material to a substrate by means of drawing the substrate beneath a knife that spreads the coating evenly over the full width of the substrate.
- (2) "Paper coating" means decorative, protective, or functional coatings put on paper and pressure sensitive tapes regardless of substrate. The coatings shall be distributed uniformly across the web. Related web coating processes on plastic film and decorative coatings on metal foil are included in this definition. Saturation operations are included in this definition.
- (3) "Roll coating" means the application of a coating material to a substrate by means of hard rubber or steel rolls.
- (4) "Rotogravure coating" means the application of a coating material to a substrate by means of a roll coating technique in which the substance to be applied is temporarily retained in etchings on the coating roll. The coating material is picked up in these recessed areas and is transferred to the substrate.

(b) This Rule applies to roll, knife or rotogravure coater(s) and drying oven(s) of paper coating lines.

(c) With the exception stated in Paragraph (d) of this Rule, emissions of volatile organic compounds from any paper coating line subject to this Rule shall not exceed 4.8 pounds of volatile organic compounds per gallon of solids delivered to the coating applicator from a paper coating line.

(d) Any source which has chosen to control emissions of volatile organic compounds under Rule .0518 (e) of this Subchapter and which 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 paper coating line subject to this Rule shall not exceed 2.9 pounds of volatile organic compounds per gallon of coating, excluding water and exempt compounds, delivered to the coating applicator from a paper coating line.

*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.*

.0921 FABRIC AND VINYL COATING

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

- (1) "Fabric coating" means applying protective or functional coatings to a textile substance with a knife, roll, rotogravure, rotary screen, or flat screen coater to impart properties that are not initially present, such as strength, stability, water or acid repellency, or appearance. Printing on textile fabric for decorative or other purposes is not part of this definition. Saturation operations are included in this definition.
- (2) "Knife coating" means the application of a coating material to a substrate by means of drawing the substrate beneath a knife which spreads the coating evenly over the full width of the substrate.
- (3) "Roll coating" means the application of a coating material to a substrate by means of hard rubber or steel rolls.
- (4) "Rotogravure coating" means the application of a coating material to a substrate by means of a roll coating technique in which the pattern to be applied is etched on the coating roll. The coating material is picked up in these recessed areas and is transferred to the substrate.
- (5) "Vinyl coating" means applying a functional, decorative, or protective topcoat, or printing on vinyl coated fabric or vinyl sheets.
- (6) "Rotary screen or flat screen coating" means the application of a coating material to a substrate by means of masking the surface and applying a color or finish using a screen either in flat form or rotary form.

(b) This Rule applies to roll, knife, rotogravure, rotary screen, or flat screen coater(s) and drying oven(s) of fabric and vinyl coating lines.

(c) With the exception stated in Paragraph (d) of this Rule, emissions of volatile organic compounds from any fabric coating line or vinyl coating line subject to this Rule shall not exceed:

- (1) 4.8 pounds of volatile organic compounds per gallon of solids delivered to the coating applicator from a fabric coating line;
- (2) 7.9 pounds of volatile organic compounds per gallon of solids delivered to the coating applicator from a vinyl coating line.

(d) Any source which has chosen to control emissions of volatile organic compounds under Rule .0518(e) of this Subchapter and which 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 fabric coating line or vinyl coating line subject to this Rule shall not exceed:

- (1) 2.9 pounds of volatile organic compounds per gallon of coating, excluding water and exempt compounds, delivered to the coating applicator from a fabric coating line;
- (2) 3.8 pounds of volatile organic compounds per gallon of coating, excluding water and exempt compounds, delivered to the coating applicator from a vinyl coating line.

*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.*

.0922 METAL FURNITURE COATING

- (a) For the purpose of this Rule, the following definitions apply:
 - (1) "Application area" means the area where the coating is applied by spraying, dipping, or flowcoating techniques.
 - (2) "Metal furniture coating" means the surface coating of any furniture made of metal or any metal part which will be assembled with other metal, wood, fabric, plastic, or glass parts to form a furniture piece.
- (b) This Rule applies to the application area(s), flashoff area(s), and oven(s) of metal furniture coating lines involved in prime and topcoat or single coating operations.
- (c) With the exception stated in Paragraph (d) of this Rule, emissions of volatile organic compounds from any metal furniture coating line subject to this Rule shall not exceed 5.1 pounds of volatile organic compounds per gallon of solids delivered to the coating applicator from prime and topcoat or single coat operations.
- (d) Any source which has chosen to control emissions of volatile organic compounds under Rule .0518(e) of this Subchapter and which 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 metal furniture coating line subject to this Rule shall not exceed 3.0 pounds of volatile organic compounds per gallon of coating, excluding water and exempt compounds, delivered to the coating applicator from prime and topcoat or single coat 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.

.0923 SURFACE COATING OF LARGE APPLIANCES

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

- (1) "Application area" means the area where the coating is applied by spraying, dipping, or flowcoating techniques.
- (2) "Single coat" means a single film of coating applied directly to the metal substrate omitting the primer application.
- (3) "Large appliances" means doors, cases, lids, panels, and interior support parts of residential and commercial washers, dryers, ranges, refrigerators, freezers, water heaters, dishwashers, trash compactors, air conditioners, and other similar products.

(b) This Rule applies to application area(s), flashoff area(s), and oven(s) of large appliance coating lines involved in prime, single, or topcoat coating operations.

(c) This Rule does not apply to the use of quick-drying lacquers for repair of scratches and nicks which occur during assembly, if the volume of coating does not exceed one quart in any eight-hour period.

(d) With the exception stated in Paragraph (e) of this Rule, emissions of volatile organic compounds from any large appliance coating line subject to this Rule shall not exceed 4.5 pounds of volatile organic compounds per gallon of solids delivered to the coating applicator from prime, single, or topcoat coating operations.

(e) Any source which has chosen to control emissions of volatile organic compounds under Rule .0518 (e) of this Subchapter and which 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 (d).of this Rule. Emissions of volatile organic compounds from any large appliance coating line subject to this Rule shall not exceed 2.8 pounds of volatile organic compounds per gallon of coating, excluding water and exempt compounds, delivered to the coating applicator from prime, single, or topcoat coating 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.*

.0924 MAGNET WIRE COATING

(a) For the purpose of this Rule, "magnet wire coating" means the process of applying a coating of electrically insulating varnish or enamel to aluminum or copper wire for use in electrical machinery.

(b) This Rule applies to the oven(s) of magnet wire coating operations.

(c) With the exception stated in Paragraph (d) of this Rule, emissions of volatile organic compounds from any magnet wire coating oven subject to this Rule shall not exceed 2.2 pounds of volatile organic compounds per gallon of solids delivered to the coating applicator from magnet wire coating operations.

(d) Any source which has chosen to control emissions of volatile organic compounds under Rule .0518(e) of this Subchapter and which 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 magnet wire coating oven subject to this Rule shall not exceed 1.7 pounds of volatile organic compounds per gallon of coating, excluding water and exempt compounds, delivered to the coating applicator from magnet wire coating 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.*

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15A NCAC 02D .0925 PETROLEUM LIQUID STORAGE IN FIXED ROOF TANKS

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

- (1) "Condensate" means hydrocarbon liquid separated from natural gas which condenses due to changes in the temperature and/or pressure and remains liquid at standard conditions.
- (2) "Crude oil" means a naturally occurring mixture which consists of hydrocarbons and/or sulfur, nitrogen and/or oxygen derivatives of hydrocarbons and which is a liquid at standard conditions.
- (3) "Custody transfer" means the transfer of produced crude oil and/or condensate, after processing and/or treating in the producing operations, from storage tanks or automatic transfer facilities to pipeline or any other forms of transportation.
- (4) "External floating roof" means a storage vessel cover in an open top tank consisting of a double deck or pontoon single deck which rests upon and is supported by the petroleum liquid being contained and is equipped with a closure seal or seals to close the space between the roof edge and tank shell.
- (5) "Internal floating roof" means a cover or roof in a fixed roof tank which rests upon or is floated upon the petroleum liquid being contained, and is equipped with a closure seal or seals to close the space between the roof edge and tank shell.
- (6) "Petroleum liquids" means crude oil, condensate, and any finished or intermediate products manufactured or extracted in a petroleum refinery.
- (7) "Petroleum refinery" means any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation of crude oils, or through redistillation, cracking, extraction, or reforming of unfinished petroleum derivatives.

(b) This Regulation applies to all fixed roof storage vessels with capacities greater than 39,000 gallons containing volatile petroleum liquids whose true vapor pressure is greater than 1.52 psia.

(c) This Regulation does not apply to volatile petroleum liquid storage vessels:

- (1) equipped with external floating roofs, or
- (2) having capacities less than 416,000 gallons used to store produced crude oil and condensate prior to lease custody transfer.

(d) With the exceptions stated in Paragraph (c) of this Regulation, the owner or operator of any fixed roof storage vessel subject to this Regulation shall not use the storage vessel unless:

- (1) The storage vessel has been retrofitted with an internal floating roof equipped with a closure seal, or seals, to close the space between the roof edge and tank wall;

- (2) The storage vessel is maintained such that there are no visible holes, tears, or other openings in the seal or any seal fabric or materials;
- (3) All openings, except stub drains are equipped with covers, lids, or seals such that:
 - (A) The cover, lid, or seal is in the closed position at all times except when in actual use;
 - (B) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports;
 - (C) Rim vents, if provided, are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting;
- (4) Routine visual inspections are conducted through roof hatches once per month;
- (5) A complete inspection of cover and seal is conducted whenever the tank is emptied for maintenance, shell inspection, cleaning, or for other nonoperational reasons or whenever excessive vapor leakage is observed; and
- (6) Records are maintained in accordance with Regulation .0903 of this Section and shall include:
 - (A) reports of the results of inspections conducted under Parts (d)(4) and (d)(5) of this Regulation,
 - (B) a record of the average monthly storage temperature, and true vapor pressures of petroleum liquids stored, and
 - (C) records of the throughput quantities and types of petroleum liquids for each storage vessel.

*History Note: Authority G.S. 143-215.3(a)(1);143-215.107(a)(5);
Eff. July 1, 1979;
Amended Eff. March 1, 1991; December 1, 1989; January 1, 1985.*

15A NCAC 02D .0926 BULK GASOLINE PLANTS

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

- (1) "Average daily throughput" means annual throughput of gasoline divided by 312 days per year.
- (2) "Bottom filling" means the filling of a tank truck or stationary storage tank through an opening that is flush with the tank bottom.
- (3) "Bulk gasoline plant" means a gasoline storage and distribution facility which has an average daily throughput of less than 20,000 gallons of gasoline and which usually receives gasoline from bulk terminals by trailer transport, stores it in tanks, and subsequently dispenses it via account trucks to local farms, businesses, and service stations.

- (4) "Bulk gasoline terminal" means a gasoline storage facility which usually receives gasoline from refineries primarily by pipeline, ship, or barge; and delivers gasoline to bulk gasoline plants or to commercial or retail accounts primarily by tank truck; and has an average daily throughput of more than 20,000 gallons of gasoline.
- (5) "Gasoline" means any petroleum distillate having a Reid vapor pressure of four psia or greater.
- (6) "Incoming vapor balance system" means a combination of pipes or hoses which create a closed system between the vapor spaces of an unloading tank truck or trailer and a receiving stationary storage tank such that vapors displaced from the receiving stationary storage tank are transferred to the tank truck or trailer being unloaded.
- (7) "Outgoing vapor balance system" means a combination of pipes or hoses which create a closed system between the vapor spaces of an unloading stationary storage tank and a receiving tank truck or trailer such that vapors displaced from the receiving tank truck or trailer are transferred to the stationary storage tank being unloaded.
- (8) "Splash filling" means the filling of a tank truck or stationary storage tank through a pipe or hose whose discharge opening is above the surface level of the liquid in the tank being filled.
- (9) "Submerged filling" means the filling of a tank truck or stationary tank through a pipe or hose whose discharge opening is entirely submerged when the pipe normally used to withdraw liquid from the tank can no longer withdraw any liquid, or whose discharge opening is entirely submerged when the liquid level is six inches above the bottom of the tank.

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

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

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

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

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

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

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

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

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

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

- (1) a vapor space connection on the stationary storage tank equipped with fittings which are vapor tight and will be automatically and immediately closed upon disconnection so as to prevent release of organic material;
 - (2) a connecting pipe or hose equipped with fittings which are vapor tight and will be automatically and immediately closed upon disconnection so as to prevent release of organic material; and
 - (3) a vapor space connection on the tank truck or trailer equipped with fittings which are vapor tight and will be automatically and immediately closed upon disconnection so as to prevent release of organic material.
- (j) The owner or operator of a bulk gasoline plant shall paint all tanks used for gasoline storage white or silver at the next scheduled painting or before November 1, 2002, whichever is sooner.
- (k) The pressure relief valves on tank trucks or trailers loading or unloading at bulk gasoline plants shall be set to release at the highest possible pressure (in accordance with state or local fire codes or the National Fire Prevention Association guidelines). The pressure relief valves on stationary storage tanks shall be set at 0.5 psi for storage tanks placed in service on or after November 1, 1992, and 0.25 psi for storage tanks existing before November 1, 1992.
- (l) No owner or operator of a bulk gasoline plant may permit gasoline to be spilled, discarded in sewers, stored in open containers, or handled in any other manner that would result in evaporation.
- (m) The owner or operator of a bulk gasoline plant shall observe loading and unloading operations and shall discontinue the transfer of gasoline:
- (1) if any liquid leaks are observed, or
 - (2) if any vapor leaks are observed where a vapor balance system is required under Paragraphs (c), (d), or (e) of this Rule.
- (n) The owner or operator of a bulk gasoline plant shall not load, or allow to be loaded, gasoline into any truck tank or trailer unless the truck tank or trailer has been certified leak tight in accordance with Rule .0932 of this Section within the last 12 months where the bulk gasoline plant is required to use an outgoing vapor balance system.

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

15A NCAC 02D .0927 BULK GASOLINE TERMINALS

- (a) For the purpose of this Rule, the following definitions apply:
- (1) "Bulk gasoline terminal" means:

- (A) breakout tanks of an interstate oil pipeline facility; or
 - (B) a gasoline storage facility that usually receives gasoline from refineries primarily by pipeline, ship, or barge; delivers gasoline to bulk gasoline plants or to commercial or retail accounts primarily by tank truck; and has an average daily throughput of more than 20,000 gallons of gasoline.
- (2) "Breakout tank" means a tank 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.
- (3) "Gasoline" means a petroleum distillate having a Reid vapor pressure of four psia or greater.
- (4) "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.
- (5) "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.
- (6) "Leak" means a crack or hole that lets petroleum product vapor or liquid escape that can be identified through the use of 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 Rule .0940 of this Section.
- (7) "Liquid balancing" means a process used to degas floating roof gasoline storage tanks with a liquid whose vapor pressure is below 1.52 psia. 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 psia.
- (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 psia.
- (b) This Rule applies to bulk gasoline terminals and the appurtenant equipment necessary to load the tank truck or trailer compartments.
- (c) Gasoline shall not be loaded into any tank trucks or trailers 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 his 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 Paragraph (b) of 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 tank truck or trailer pressure relief settings.
- (e) The owner or operator of a bulk gasoline terminal shall paint all tanks used for gasoline storage white or silver at the next scheduled painting or by December 1, 2002, whichever occurs first.
- (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, at the next time that the tank is taken out of service or by December 1, 2002, whichever occurs first.
- (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 has received an air permit before December 1, 1992, to emit toxic air pollutants under 15A NCAC 02Q .0700 to comply with Section .1100 of this Subchapter 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 Section .1100 of this Subchapter 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 truck tank or trailer unless the truck tank or trailer has been certified leak tight according to Rule .0932 of this Section within the last 12 months.

(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 Rule .0932 of this Section for each gasoline tank truck 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 Rule .0903 of this Section, 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 tank truck or trailer 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 tank truck or trailer 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 (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 tank truck or trailer shall be repaired or replaced before another tank truck or trailer is loaded at that rack after a leak has been detected originating with the terminal's equipment rather than from the gasoline tank truck or trailer.
- (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.

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

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

- (1) "Gasoline" means a petroleum distillate having a Reid vapor pressure of four psia or greater.

- (2) "Delivery vessel" means tank trucks or trailers equipped with a storage tank and used for the transport of gasoline from sources or supply to stationary storage tanks of gasoline dispensing facilities.
- (3) "Submerged fill pipe" means any fill pipe with a discharge opening which is entirely submerged when the pipe normally used to withdraw liquid from the tank can no longer withdraw any liquid, or which 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.

- (4) "Owner" means any person who has legal or equitable title to the gasoline storage tank at a facility.
- (5) "Operator" means any person who leases, operates, controls, or supervises a facility at which gasoline is dispensed.
- (6) "Gasoline dispensing facility" means any site where gasoline is dispensed to motor vehicle gasoline tanks from stationary storage tanks.
- (7) "Gasoline service station" means any gasoline dispensing facility where gasoline is sold to the motoring public from stationary storage tanks.
- (8) "Throughput" means the amount of gasoline dispensed at a facility during a calendar month after November 15, 1990.
- (9) "Line" means any pipe suitable for transferring gasoline.
- (10) "Dual point system" means the delivery of the product to the stationary storage tank and the recovery of vapors from the stationary storage tank occurs through two separate openings in the storage tank and two separate hoses between the tank truck and the stationary storage tank.
- (11) "Coaxial system" means the delivery of the product and recovery of vapors occur through a single coaxial fill tube, which is a tube within a tube. Product is delivered through the inner tube, and vapor is recovered through the annular space between the walls of the inner tube and outer tube.
- (12) "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.
- (13) "Stationary storage tank" means a gasoline storage container which is a permanent fixture.

(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 which 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 which 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 2000 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 except that 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;
- (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) Gauges, meters, or other specified testing devices are maintained in proper working order;
- (5) The delivery vessel and vapor collection system complies with Rule .0932 of this Section; and
- (6) The following records, as a minimum, are kept in accordance with Rule .0903 of this Section:
 - (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, poppeted vapor recovery adaptor; or
- (2) a refrigeration-condensation system or equivalent designed to recover at least 90 percent by weight of the 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 1/2 inches and smaller. If the manifold vapor lines are 3 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 regulations of the Department of Transportation; and
- (2) if it is refilled in North Carolina, shall be refilled only at:
 - (A) bulk gasoline plants complying with Rule .0926 of this Section, or
 - (B) bulk gasoline terminals complying with Rule .0927 of this Section or Rule .0524 of this Subchapter.

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.

15A NCAC 02D .0929 PETROLEUM REFINERY SOURCES (REPEALED)

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1979;
Amended Eff. March 1, 1991; December 1, 1989; January 1, 1985;
Repealed Eff. July 1, 1996.

15A NCAC 02D .0930 SOLVENT METAL CLEANING

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

- (1) “Cold cleaning” means the batch process of cleaning and removing soils from metal surfaces by spraying, brushing, flushing, or immersion while maintaining the solvent below its boiling point. Wipe cleaning is not included in this definition.
- (2) “Conveyorized degreasing” means the continuous process of cleaning and removing soils from metal surfaces by operating with either cold or vaporized solvents.
- (3) “Freeboard height” means for vapor degreasers the distance from the top of the vapor zone to the top of the degreaser tank. For cold cleaners, freeboard height means the distance from liquid solvent level in the degreaser tank to the top of the tank.
- (4) “Freeboard ratio” means the freeboard height divided by the width of the degreaser.
- (5) “Open top vapor degreasing” means the batch process of cleaning and removing soils from metal surfaces by condensing hot solvent vapor on the colder metal parts.
- (6) “Solvent metal cleaning” means the process of cleaning soils from metal surfaces by cold cleaning or open top vapor degreasing or conveyorized degreasing.

(b) This Regulation applies to cold cleaning, open top vapor degreasing, and conveyorized degreasing operations.

(c) The provisions of this Regulation shall apply with the following exceptions:

- (1) Open top vapor degreasers with an open area smaller than 10.8 square feet shall be exempt from Subparagraph (e)(3) of this Regulation; and
- (2) Conveyorized degreasers with an air/vapor interface smaller than 21.6 square feet shall be exempt from Subparagraph (f)(2) of this Regulation.

(d) The owner or operator of a cold cleaning facility shall:

- (1) equip the cleaner with a cover and the cover shall be designed so that it can be easily operated with one hand, if:
 - (A) The solvent volatility is greater than 15 millimeters of mercury or 0.3 pounds per square inch measured at 100° F;
 - (B) The solvent is agitated; or
 - (C) The solvent is heated;
- (2) equip the cleaner with a facility for draining cleaned parts. The drainage facility shall be constructed internally so that parts are enclosed under the cover while draining if the solvent volatility is greater than 32 millimeters of mercury or 0.6 pounds per square inch measured at 100° F. However, the drainage facility may be

- external for applications where an internal type cannot fit into the cleaning system;
 - (3) install one of the following control devices if the solvent volatility is greater than 33 millimeters of mercury or 0.6 pounds per square inch measured at 100° F, or if the solvent is heated above 120° F:
 - (A) freeboard which gives a freeboard ratio greater than or equal to 0.7;
 - (B) water cover if the solvent is insoluble in and heavier than water; or
 - (C) other systems of equivalent control, such as refrigerated chiller or carbon adsorption, approved by the Director;
 - (4) provide a permanent, conspicuous label, summarizing the operating requirements;
 - (5) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, such that greater than 20 percent of the waste solvent (by weight) can evaporate into the atmosphere;
 - (6) close the cover whenever parts are not being handled in the cleaner;
 - (7) drain the cleaned parts for at least 15 seconds or until dripping ceases; and
 - (8) if used, supply a solvent spray which is a solid fluid stream (not a fine, atomized, or shower type spray) at a pressure which does not cause excessive splashing.
- (e) With the exception stated in Paragraph (c) of this Regulation, the owner or operator of an open top vapor degreaser shall:
- (1) equip the vapor degreaser with a cover which can be opened and closed easily without disturbing the vapor zone;
 - (2) provide the following safety switches or devices:
 - (A) a condenser flow switch and thermostat or other device which prevents heat input if the condenser coolant is either not circulating or too warm,
 - (B) a spray safety switch or other device which shuts off the spray pump if the vapor level drops more than 10 inches, and
 - (C) a vapor level control thermostat or other device which prevents heat input when the vapor level rises too high;
 - (3) install one of the following control devices:
 - (A) freeboard ratio greater than or equal to 0.75. If the degreaser opening is greater than 10.8 square feet, the cover must be powered;
 - (B) refrigerated chiller;
 - (C) enclosed design (The cover or door opens only when the dry part is actually entering or exiting the degreaser.); or

- (D) carbon adsorption system, with ventilation greater than or equal to 50 cubic feet per minute per square foot of air/vapor area (when cover is open), and exhausting less than 25 parts per million of solvent averaged over one complete adsorption cycle.
 - (4) keep the cover closed at all times except when processing workloads through the degreaser; and
 - (5) minimize solvent carryout by:
 - (A) racking parts to allow complete drainage,
 - (B) moving parts in and out of the degreaser at less than 11 feet per minute,
 - (C) holding the parts in the vapor zone at least 30 seconds or until condensation ceases,
 - (D) tipping out any pools of solvent on the cleaned parts before removal from the vapor zone, and
 - (E) allowing parts to dry within the degreaser for at least 15 seconds or until visually dry;
 - (6) not degrease porous or absorbent materials, such as cloth, leather, wood, or rope;
 - (7) not occupy more than half of the degreaser's open top area with a workload;
 - (8) not load the degreaser to the point where the vapor level would drop more than 10 inches when the workload is removed from the vapor zone;
 - (9) always spray below the vapor level;
 - (10) repair solvent leaks immediately or shutdown the degreaser;
 - (11) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, such that greater than 20 percent of the waste solvent (by weight) can evaporate into the atmosphere;
 - (12) not operate the cleaner so as to allow water to be visually detectable in solvent exiting the water separator;
 - (13) not use ventilation fans near the degreaser opening, nor provide exhaust ventilation exceeding 65 cubic feet per minute per square foot of degreaser open area, unless necessary to meet OSHA requirements (OSHA is the U.S. Occupational Safety and Health Administration; in North Carolina the N.C. Labor Department has delegation of OSHA programs.); and
 - (14) provide a permanent, conspicuous label, summarizing the operating procedures of Subparagraphs (4) through (12) of this Paragraph.
- (f) With the exception stated in Paragraph (c) of this Regulation, the owner or operator of a conveyORIZED degreaser shall:

- (1) not use workplace fans near the degreaser opening, nor provide exhaust ventilation exceeding 65 cubic feet per minute per square foot of degreaser opening, unless necessary to meet OSHA requirements;
- (2) install one of the following control devices:
 - (A) refrigerated chiller or
 - (B) carbon adsorption system, with ventilation greater than or equal to 50 cubic feet per minute per square foot of air/vapor area (when downtime covers are open), and exhausting less than 25 parts per million of solvent by volume averaged over a complete adsorption cycle;
- (3) equip the cleaner with equipment, such as a drying tunnel or rotating (tumbling) basket, sufficient to prevent cleaned parts from carrying out solvent liquid or vapor;
- (4) provide the following safety switches or devices:
 - (A) a condenser flow switch and thermostat or other device which prevents heat input if the condenser coolant is either not circulating or too warm,
 - (B) a spray safety switch or other device which shuts off the spray pump or the conveyor if the vapor level drops more than 10 inches, and
 - (C) a vapor level control thermostat or other device which prevents heat input when the vapor level rises too high;
- (5) minimize openings during operation so that entrances and exits will silhouette workloads with an average clearance between the parts and the edge of the degreaser opening of less than four inches or less than 10 percent of the width of the opening;
- (6) provide downtime covers for closing off the entrance and exit during shutdown hours;
- (7) minimize carryout emissions by:
 - (A) racking parts for best drainage; and
 - (B) maintaining the vertical conveyor speed at less than 11 feet per minute;
- (8) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, such that greater than 20 percent of the waste solvent (by weight) can evaporate into the atmosphere;
- (9) repair solvent leaks immediately, or shut down the degreaser;
- (10) not operate the cleaner so as to allow water to be visually detectable in solvent exiting the water separator; and
- (11) place downtime covers over entrances and exits or conveyORIZED degreasers immediately after the conveyors and exhausts are shutdown and not remove them until just before start-up.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1979;
Amended Eff. March 1, 1991; December 1, 1989; January 1, 1985.

15A NCAC 02D.0931 CUTBACK ASPHALT

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

- (1) "Asphalt" means a dark-brown to black cementitious material (solid, semisolid, or liquid in consistency) in which the predominating constituents are bitumens which occur in nature as such or which are obtained as residue in refining petroleum.
- (2) "Cutback asphalt" means asphalt cement which has been liquefied by blending with petroleum solvents (diluent). Upon exposure to atmospheric conditions, the diluents evaporate, leaving the asphalt cement to perform its function.
- (3) "Emulsified asphalt" means an emulsion of asphalt cement and water which contains a small amount of an emulsifying agent; a heterogeneous system containing two normally immiscible phases (asphalt and water) in which the water forms the continuous phase of the emulsion, and minute globules of asphalt form the discontinuous phase.
- (4) "Penetrating prime coat" means an application of low-viscosity liquid asphalt to an absorbent surface. It is used to prepare an untreated base for an asphalt surface. The prime penetrates the base and plugs the voids, hardens the top, and helps bind it to the overlying asphalt course. It also reduces the necessity of maintaining an untreated base course prior to placing the asphalt pavement.

(b) This Regulation applies to the manufacture and use of cutback asphalts for the purpose of paving or maintaining roads, highways, streets, parking lots, driveways, curbs, sidewalks, airfields (runways, taxiways, and parking aprons), recreational facilities (tennis courts, playgrounds, and trails), and other similar structures.

(c) Cutback asphalt shall not be manufactured, mixed, stored, used, or applied except where:

- (1) Long-life (one month or more) stockpile storage is necessary;
- (2) The use or application at ambient temperatures less than 50° F, as measured at the nearest National Weather Service Field Office or Federal Aviation Administration Station, is necessary;
- (3) The cutback asphalt is to be used solely as a penetrating prime coat;
or

- (4) The user can demonstrate to the Director that there are no volatile organic compound emissions under conditions of normal use.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1979;
Amended Eff. December 1, 1989; January 1, 1985; June 1, 1980.

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

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

- (1) "Bottom filling" means the filling of a tank truck or stationary storage tank through an opening that is flush with the tank bottom.
- (2) "Bulk gasoline plant" means a gasoline storage and distribution facility which has an average daily throughput of less than 20,000 gallons of gasoline and which usually receives gasoline from bulk terminals by trailer transport, stores it in tanks, and subsequently dispenses it via account trucks to local farms, businesses, and service stations.
- (3) "Bulk gasoline terminal" means:
 - (A) breakout tanks of an interstate oil pipeline facility; or
 - (B) a gasoline storage facility that usually receives gasoline from refineries primarily by pipeline, ship, or barge; delivers gasoline to bulk gasoline plants or to commercial or retail accounts primarily by tank truck; and has an average daily throughput of more than 20,000 gallons of gasoline.
- (4) "Certified facility" means any facility that has been certified under Rule .0960 of this Section to perform leak tightness tests on truck tanks.
- (5) "Gasoline" means any petroleum distillate having a Reid vapor pressure of 4.0 psia or greater.
- (6) "Gasoline dispensing facility" means any site where gasoline is dispensed to motor vehicle gasoline tanks from stationary storage tanks.
- (7) "Gasoline service station" means any gasoline dispensing facility where gasoline is sold to the motoring public from stationary storage tanks
- (8) "Truck tank" means the storage vessels of 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.
- (9) "Truck tank vapor collection equipment" means any piping, hoses, and devices on the truck 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.

- (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 truck tanks that are equipped for vapor collection and to vapor control systems at bulk gasoline terminals, bulk gasoline plants, equipped with vapor balance or vapor control systems.

(c) Gasoline Truck Tanks.

- (1) Gasoline truck tanks and their vapor collection systems shall be tested annually by a certified facility. The test procedure that shall be used is described in Rules .0940 and .0941 of this Section, and is according to Rule .0912 of this Section. The gasoline truck tank shall not be used if it sustains a pressure change greater than 1.0 inches of water in five minutes when pressurized to a gauge pressure of 18 inches of water or when evacuated to a gauge pressure of 6.0 inches of water.
- (2) Each gasoline truck tank that has been certified leak tight, according to Subparagraph (1) of this Paragraph shall display a sticker on the front tank shell.
- (3) There shall be no liquid leaks from any gasoline truck tank.
- (4) Any truck 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 Rule .0940 of this Section, shall not be used beyond 15 days after the leak has been discovered, unless the leak has been repaired and the tank has been certified to be leak tight according to Subparagraph (1) of this Paragraph.
- (5) The owner or operator of a gasoline truck tanks with a vapor collection system shall maintain records of all certification testing and repairs. The records shall identify the gasoline truck tank, the date of the test or repair; and, if applicable, the type of repair and the date of retest. The records of certification tests shall include:
 - (A) the gasoline truck tank identification number;
 - (B) the initial test pressure and the time of the reading;
 - (C) the final test pressure and the time of the reading;
 - (D) the initial test vacuum and the time of reading;
 - (E) the final test vacuum and the time of the reading,
 - (F) the date and location of the tests,

- (G) the NC sticker number issued, and
 - (H) the final change in pressure of the internal vapor value test.
- (6) A copy of the most recent certification report shall be kept with the truck tank. The owner or operator of the truck tank shall also file a copy of the most recent certification test with each bulk gasoline terminal that loads the truck 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) Bulk Gasoline Terminals, Bulk Gasoline Plants Equipped With Vapor Balance or Vapor Control Systems
 - (1) The vapor collection system and vapor control system shall be designed and operated to prevent gauge pressure in the truck 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 Rule .0940 of this Section; and
 - (B) no liquid leaks.
 - (3) If a leak is discovered that exceeds the limit in Subparagraph (2) of this Paragraph:
 - (A) For bulk gasoline plants, the vapor collection system or vapor control system (and therefore the source) 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;
 - (B) For bulk gasoline terminals, the vapor collection system or vapor control system shall be repaired following the procedures in Rule .0927 of this Section.
 - (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 .0912 and .0940 of this Section, the vapor collection system at least once per year. If after two complete annual checks no more than 10 leaks are found, the Director may allow less frequent monitoring. If more than 20 leaks are found, the Director may require that the frequency of monitoring be increased.
 - (5) The owner or operator of a 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 the 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. January 1, 2007; April 1, 2003; August 1, 2002; July 1, 1994; December 1, 1989; January 1, 1985.

15A NCAC 02D .0933 PETROLEUM LIQUID STORAGE IN EXTERNAL FLOATING ROOF TANKS

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

- (1) "Condensate" means hydrocarbon liquid separated from natural gas which condenses due to changes in the temperature or pressure and remains liquid at standard conditions.
- (2) "Crude oil" means a naturally occurring mixture consisting of hydrocarbons or sulfur, nitrogen or oxygen derivatives of hydrocarbons or mixtures thereof which is a liquid in the reservoir at standard conditions.
- (3) "Custody transfer" means the transfer of produced crude oil or condensate, after processing or treating in the producing operations, from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation.
- (4) "External floating roof" means a storage vessel cover in an open top tank consisting of a double deck or pontoon single deck which rests upon and is supported by the petroleum liquid being contained and is equipped with a closure seal or seals to close the space between the roof edge and tank shell.
- (5) "Internal floating roof" means a cover or roof in a fixed roof tank which rests upon or is floated upon the petroleum liquid being contained, and is equipped with a closure seal or seals to close the space between the roof edge and tank shell.
- (6) "Liquid-mounted seal" means a primary seal mounted so the bottom of the seal covers the liquid surface between the tank shell and the floating roof.
- (7) "Vapor-mounted seal" means a primary seal mounted so there is an annular vapor space underneath the seal. The annular vapor space is bounded by the bottom of the primary seal, the tank shell, the liquid surface, and the floating roof.
- (8) "Petroleum liquids" means crude oil, condensate, and any finished

or intermediate products manufactured or extracted in a petroleum refinery.

(b) This Rule applies to all external floating roof tanks with capacities greater than 950 barrels containing petroleum liquids whose true vapor pressure exceed 1.52 pounds per square inch absolute.

(c) This Rule does not apply to petroleum liquid storage vessels:

- (1) that have external floating roofs that have capacities less than 10,000 barrels and that are used to store produced crude oil and condensate prior to custody transfer;
- (2) that have external floating roofs and that store waxy, heavy-pour crudes;
- (3) that have external floating roofs, and that contain a petroleum liquid with a true vapor pressure less than 4.0 pounds per square inch absolute and:
 - (A) The tanks are of welded construction; and

- (B) The primary seal is a metallic-type shoe seal, a liquid-mounted foam seal, a liquid-mounted filled type seal, or any other closure device of demonstrated equivalence; or
- (4) that have fixed roofs with or without internal floating roofs.
- (d) With the exceptions stated in Paragraph (c) of this Rule, an external floating roof tank subject to this Rule shall not be used unless:
 - (1) The tank has:
 - (A) a continuous secondary seal extending from the floating roof to the tank wall (a rim-mounted secondary),
 - (B) a metallic-type shoe primary seal and a secondary seal from the top of the shoe seal to the tank wall (shoe-mounted secondary seal); or
 - (C) a closure or other control device demonstrated to have an efficiency equal to or greater than that required under Part (A) or (B) of this Subparagraph.
 - (2) The seal closure devices meet the following requirements:
 - (A) There shall be no visible holes, tears, or other openings in the seal or seal fabric;
 - (B) The seal shall be intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall; and
 - (C) For vapor mounted primary seals, the gap-area of gaps exceeding 0.125 inch in width between the secondary seal and the tank wall shall not exceed 1.0 square inch per foot of tank diameter;
 - (3) All openings in the external floating roof, except for automatic bleeder vents, rim space vents, and leg sleeves, are:
 - (A) provided with a projection below the liquid surface; and
 - (B) equipped with covers, seals, or lids that remain in a closed position at all times except when in actual use;
 - (4) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports;
 - (5) Rim vents are set to open only when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting;
 - (6) Any emergency roof drains are provided with slotted membrane fabric covers or equivalent covers that cover at least 90 percent of the area at the opening;
 - (7) Routine visual inspections are conducted once per month;
 - (8) For tanks equipped with a vapor-mounted primary seal, the secondary seal gap measurements are made annually in accordance with Paragraph (e) of this Rule; and
 - (9) Records are maintained in accordance with Rule .0903 of this Section and include:

- (A) reports of the results of inspections conducted under Subparagraph (7) and (8) of this Paragraph;
 - (B) a record of the average monthly storage temperature and the true vapor pressures or Reid vapor pressures of the petroleum liquids stored; and
 - (C) records of the throughput quantities and types of volatile petroleum liquids for each storage vessel.
- (e) The secondary seal gap area is determined by measuring the length and width of the gaps around the entire circumference of the secondary seal. Only gaps equal to or greater than 0.125 inch are used in computing the gap area. The area of the gaps are accumulated to determine compliance with Part (d)(2)(C) of this Rule.
- (f) Notwithstanding the definition of volatile organic compound found in Rule .0901(28) of this Section, the owner or operator of a petroleum liquid storage vessel with an external floating roof not equipped with a secondary seal or approved alternative, that contains a petroleum liquid with a true vapor pressure greater than 1.0 pound per square inch shall maintain records of the average monthly storage temperature, the type of liquid, throughput quantities, and the maximum true vapor pressure for all petroleum liquids with a true vapor pressure greater than 1.0 pound per square inch.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1980;
Amended Eff. June 1, 2004; July 1, 1994; March 1, 1991;
December 1, 1989; January 1, 1985

.0934 COATING OF MISCELLANEOUS METAL PARTS AND PRODUCTS

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

- (1) "Heat sensitive material" means materials that cannot be exposed to temperatures greater than 180°F to 200°F.
- (2) "Air dried coating" means coatings which are dried by the use of air or a forced air drier.
- (3) "Clear coat" means a coating which lacks color and opacity.
- (4) "Extreme performance coatings" means coatings designed for harsh exposure or extreme environmental conditions.
- (5) "Extreme environmental conditions" means exposure to:
 - (A) the weather at all times;
 - (B) temperatures consistently above 203°F;
 - (C) detergents, scouring, solvents, or corrosive atmospheres; or
 - (D) other similar environmental conditions.

(b) This Rule applies to application areas, flashoff areas, ovens and other processes that are used in the coating of metal parts and products of the following types of manufacturing plants:

- (1) large farm machinery including harvesting, fertilizing and planting machines, tractors, combines, and other similar machines;
- (2) small farm machinery including lawn and garden tractors, lawn mowers, rototillers, and other similar machines;
- (3) small appliances including fans, mixers, blenders, crock pots, dehumidifiers, vacuum cleaners, and other similar machines;
- (4) commercial machinery including computers and auxiliary equipment, typewriters, calculators, vending machines, and other similar machines;
- (5) industrial machinery including pumps, compressors, conveyor components, fans, blowers, transformers, and other similar machines;
- (6) fabricated metal products including metal covered doors, frames and other similar structures; and
- (7) any other manufacturing plant that coats metal parts or products.

(c) This Rule does not apply to:

- (1) sources covered by Rules .0917, .0918, .0919, .0922, .0923, and .0924 of this Section;
- (2) architectural and maintenance coating;
- (3) coating of airplane exterior;
- (4) automobile refinishing;
- (5) customized coating of automobiles and trucks; or

(6) exterior of marine vessels.

(d) With the exception stated in Paragraph (e) of this Rule, emissions of volatile organic compounds from any coating line subject to this Rule shall not exceed:

- (1) 10.3 pounds of volatile organic compounds per gallon of solids delivered to a coating applicator that applies clear coatings;
- (2) 6.7 pounds of volatile organic compounds per gallon of solids delivered to a coating applicator in a coating application system that utilized air or forced air driers;
- (3) 6.7 pounds of volatile organic compounds per gallon of solids delivered to a coating applicator that applies extreme performance coatings;
- (4) 5.1 pounds of volatile organic compounds per gallon of solids delivered to a coating applicator that applies coatings of five or more color changes or of five or more colors or applies the coating that is the first coat on untreated ferrous substrate; or
- (5) where there are less than five color changes and less than five colors are applied:
 - (A) 0.4 pounds of volatile organic compounds per gallon of solids delivered to a coating applicator that applies powder coatings; or
 - (B) 5.1 pounds of volatile organic compounds per gallon of solids delivered to a coating applicator for any other type of coating.

Whenever more than one of the aforementioned emission limitations may apply to a process, then the least stringent emission limitation shall apply to the process.

(e) Any source which has chosen to control emissions of volatile organic compounds under Rule .0518(e) of this Subchapter and which 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 (d) of this Rule. Emissions of volatile organic compounds from any coating line subject to this Rule shall not exceed:

- (1) 4.3 pounds of volatile organic compounds per gallon of coating, excluding water and exempt compounds, delivered to a coating applicator that applies clear coatings;
- (2) 3.5 pounds of volatile organic compounds per gallon of coating, excluding water and exempt compounds, delivered to a coating applicator in a coating application system that utilized air or forced air driers;
- (3) 3.5 pounds of volatile organic compounds per gallon of coating, excluding water and exempt compounds, delivered to a coating applicator that applies extreme performance coatings;

- (4) 3.0 pounds of volatile organic compounds per gallon of coating, excluding water and exempt compounds, delivered to a coating applicator that applies coatings of five or more color changes or of five or more colors or applies the coating that is the first coat on untreated ferrous substrate; or
- (5) where there are less than five color changes and less than five colors are applied:
 - (A) 0.4 pounds of volatile organic compounds per gallon of coating, excluding water and exempt compounds, delivered to a coating applicator that applies powder coatings; or
 - (B) 3.0 pounds of volatile organic compounds per gallon, excluding water and exempt solvents, delivered to a coating applicator for any other type of coating.

Whenever more than one of the aforementioned emission limitations may apply to a process, then the least stringent emission limitation shall apply to the process.

*History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1980;
Amended Eff. July 1, 1996; July 1, 1991; December 1, 1989;
January 1, 1985.*

.0935 FACTORY SURFACE COATING OF FLAT WOOD PANELING

- (a) For the purpose of this Rule, the following definitions apply:
 - (1) "Class II hardboard paneling finishes" means finishes which meet the specifications of Voluntary Product Standard PS-59-73 as approved by the American National Standards Institute.
 - (2) "Hardboard" is a panel manufactured primarily from inter-felted lignocellulosic fibers which are consolidated under heat and pressure in a hot-press.
 - (3) "Hardwood plywood" means plywood whose surface layer is a veneer of hardwood.
 - (4) "Natural finish hardwood plywood panel" means a panel whose original grain pattern is enhanced by essentially transparent finishes frequently supplemented by fillers and toners.
 - (5) "Particle board" means a manufactured board made of individual wood particles which have been coated with a binder and formed into flat sheets by pressure. Thin particleboard has a thickness of one-fourth inch or less.

- (6) "Printed panel" means a panel whose grain or natural surface is obscured by fillers and basecoats upon which a simulated grain or decorative pattern is printed.
- (7) "Tileboard" means paneling that has a colored waterproof surface coating.
- (b) This Rule applies to factory finishing of the following flat wood products:
 - (1) printed interior wall panels made of hardwood plywood and thin particleboard;
 - (2) natural finish hardwood plywood panels; and
 - (3) class II finishes of hardboard paneling.
- (c) This Rule does not apply to the following factory finished flat wood products:
 - (1) exterior siding,
 - (2) tileboard,
 - (3) particleboard used in cabinetry or furniture,
 - (4) insulation board, or
 - (5) softwood plywood.
- (d) Emissions of volatile organic compounds from any factory finished flat wood product operation subject to this Rule shall not exceed:
 - (1) 6.0 pounds of volatile organic compounds per 1,000 square feet of coated finished product of printed interior wall panels made of hardwood plywood and thin particle board, or
 - (2) 12.0 pounds of volatile organic compounds per 1,000 square feet of coated finished product of natural finish hardwood plywood panels, or
 - (3) 10.0 pounds of volatile organic compounds per 1,000 square feet of coated finished product of class II finishes on hardboard paneling.

*History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
 Eff. July 1, 1980;
 Amended Eff. July 1, 1996; December 1, 1989; January 1, 1985.*

.0936 GRAPHIC ARTS

- (a) For the purpose of this Rule, the following definitions apply:
 - (1) "Flexographic printing" means the application of words, designs and pictures to a substrate by means of a roll printing technique in which both the pattern to be applied is raised above the printing roll and the image carrier is made of rubber or other elastometric materials.

- (2) "Packaging rotogravure printing" means printing with a gravure press upon paper, paper board, metal foil, plastic film, and other substrates, which are, in subsequent operation, formed into containers and labels for articles to be sold.
- (3) "Printing" means the formation of words, designs and pictures, usually by a series of application rolls each with only partial coverage.
- (4) "Publication rotogravure printing" means printing upon paper which is subsequently formed into books, magazines, catalogues, brochures, directories, newspaper supplements, and other types of printed materials.
- (5) "Roll printing" means the application of words, designs and pictures to a substrate by means of hard rubber or steel rolls.
- (b) This Rule applies to:
 - (1) flexographic printing, packaging rotogravure printing and publication rotogravure printing operations; or
 - (2) machines that have both coating units and printing units.
- (c) This Rule does not apply to facilities where the potential emissions of volatile organic compounds is less than 100 tons per year.
- (d) Emissions of volatile organic compounds from any printing press or drying oven of a printing operation subject to this Rule shall not be discharged into the atmosphere unless:
 - (1) The captured volatile organic compound emissions are reduced by at least 90 percent by an incineration system or 95 percent by a carbon adsorption system or any other control system; and:
 - (A) For packaging rotogravure printing operations, at least 65 percent overall reduction of the volatile organic compound emissions is achieved;
 - (B) For publication rotogravure printing operations at least 75 percent overall reduction of the volatile organic compound emissions is achieved; and
 - (C) For flexographic printing operations, at least 60 percent overall reduction of the volatile organic compound emissions is achieved;
 - (2) The solvent portion of the ink, as it is applied on the substrate, consists of at least 75 percent water by volume and no more than 25 percent organic solvent by volume;
 - (3) The ink contains by volume at least 60 percent nonvolatile material;
 - (4) The printing system uses a combination of solvent-borne and water-borne ink such that at least a 70 percent by volume overall reduction in solvent usage is achieved when compared to all solvent-borne ink usage, or

- (5) The ink, including any solvents that may be added to it, contains no more than 0.5 pounds of volatile organic compounds per pound of solids in the ink; only flexographic printing and packaging rotogravure printing may use this option.
- (e) When a facility complies with this Rule using the provision of Subparagraph (d) (4) of this Rule, the permit shall contain a condition stating the maximum quantity of solvent-borne ink that each printing unit may use or that the facility as a whole may use.
- (f) Equivalency calculations for emissions trading, cross-line averaging, or determining compliance with add-on control equipment shall be performed in units of pounds of volatile organic compounds per gallon of solids.

*History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); Eff. July 1, 1980;
Amended Eff. December 1, 1993; December 1, 1989; January 1, 1985; June 1, 1981.*

.0937 MANUFACTURE OF PNEUMATIC RUBBER TIRES

- (a) For the purpose of this Rule, the following definitions apply:
 - (1) "Bead dipping" means the dipping of an assembled tire bead into a solvent based cement.
 - (2) "Green tires" means assembled tires before molding and curing have occurred.
 - (3) "Green tire spraying" means the spraying of green tires, both inside and outside, with release compounds which help remove air from the tire during molding and prevent the tire from sticking to the mold after curing.
 - (4) "Pneumatic rubber tire manufacture" means the production of passenger car tires, light and medium truck tires, and other tires manufactured on assembly lines.
 - (5) "Tread end cementing" means the application of a solvent based cement to the tire tread ends.
 - (6) "Undertread cementing" means the application of a solvent based cement to the underside of a tire tread.
- (b) This Rule applies to undertread cementing, tread end cementing, bead dipping, and green tire spraying operations of pneumatic rubber tire manufacturing.

(c) With the exception stated in Paragraph (d) of this Rule, emissions of volatile organic compounds from any pneumatic rubber tire manufacturing plant shall not exceed:

- (1) 25 grams of volatile organic compounds per tire from each undertread cementing operation,
- (2) 4.0 grams of volatile organic compounds per tire from each tread end cementing operation,
- (3) 1.9 grams of volatile organic compounds per tire from each bead dipping operation, or
- (4) 24 grams of volatile organic compounds per tire from each green tire spraying operation.

(d) If the total volatile organic compound emissions from all undertread cementing, tread end cementing, bead dipping, and green tire spraying operations at a pneumatic rubber tire manufacturing facility does not exceed 50 grams per tire, Paragraph (c) of this Rule shall not apply.

*History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1980;
Amended Eff. July 1, 1996; December 1, 1989; January 1, 1985.*

**.0938 PERCHLOROETHYLENE DRY CLEANING SYSTEM
(REPEALED)**

*History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1980;
Amended Eff. December 1, 1989; January 1, 1985;
Repealed Eff. July 1, 1998.*

[pages 56 thru 58 reserved]

.0939 DETERMINATION OF VOLATILE ORGANIC COMPOUND EMISSIONS

(a) Where the test methods are applicable, the owner or operator of a source of volatile organic compounds shall, in accordance with Regulation .0912 of this Section, use one of the following test methods to determine compliance with the regulations of this Section:

- (1) Method 25 of Appendix A of 40 CFR Part 60,
- (2) Method 25A of Appendix A of 40 CFR Part 60, or
- (3) Method 25B of Appendix A of 40 CFR Part 60.

The results of the tests shall be expressed in the same units as the emission limits given in the regulation for which compliance is being determined. Method 1 of Appendix A of 40 CFR Part 60 shall be used to determine sample and velocity traverses. Method 2 of Appendix A of 40 CFR Part 60 shall be used to determine stack gas velocity and volumetric flow rate.

(b) Method 21 of Appendix A of 40 CFR Part 60 shall be used, in accordance with Regulation .0912 of this Section, to determine leaks of volatile organic compounds from organic process equipment. These sources include valves, flanges and other connections, pumps and compressors, pressure relief devices, process drains, open-ended valves, pump and compressor seal system degassing vents, accumulator vessel vents, access door seals, and agitator seals.

History Note: Statutory Authority G.S. 143-215.3(a) (1); 143-215.107(a) (5);
Eff. July 1, 1980;
Amended Eff. July 1, 1988; May 1, 1985; December 1, 1984.

.0940 DETERMINATION OF LEAK TIGHTNESS AND VAPOR LEAKS

(a) In accordance with Regulation .0912 of this Section, one of the following test methods from the EPA document "Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection System," EPA-450/2-78-051, published by the U.S. Environmental Protection Agency, December 1978, shall be used to determine compliance with Regulation .0932 of this Section:

- (1) The gasoline vapor leak detection procedure by combustible gas detector described in Appendix B of EPA-450/2-78-051 shall be used to determine leakage from gasoline truck tanks and vapor control systems.
- (2) The leak detection procedure for bottom-loaded truck tanks by bag capture method described in Appendix C of EPA-450/2-78-051 shall be used to determine the leak tightness of truck tanks during bottom-loading.

The pressure-vacuum test procedures for leak tightness of truck tanks described in Method 27 of Appendix A of 40 CFR Part 60 shall be used to determine the leak tightness of gasoline truck tanks in use and equipped with vapor collection equipment. Techniques other than specified in Method 27 of Appendix A of 40 CFR Part 60 may be used for purging and pressurizing the truck tank, if the techniques are approved by the director.

(b) The test method described in Regulation .0941 of this Section may be used instead of the test methods described in Subparagraph (a) (2) of this Regulation or Method 27 of Appendix A of 40 CFR Part 60.

History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1980;
Amended Eff. July 1, 1988; January 1, 1985.

.0941 ALTERNATIVE METHOD FOR LEAK TIGHTNESS

(a) This test method may be used, in accordance with Regulation .0912 of this Section, as an alternative to the test method described in Regulation .0940 of this Section.

(b) Principle. Pressure and vacuum are applied to the compartment of gasoline truck tanks, and the change in pressure/vacuum is recorded after a specified period of time. Water is used instead of air to create the pressure and vacuum. The water test method does not require that the truck tank be gas-free.

(c) Applicability. This method is applicable to determine the leak tightness of gasoline truck tanks in use and equipped with vapor collection equipment.

(d) Apparatus. The following equipment is required to conduct the test:

- (1) a pressure/vacuum gauge (Dwyer Magnehelic pressure/vacuum gauge, Model No. 2030 or equivalent) calibrated in 0 to 30 inches of water or a water manometer capable of measuring at least 25 inches of water gauge;
- (2) a locally fabricated water hose coupler which mates with the A.P.I. bottom loading adaptor on the truck tank;
- (3) an appropriate length water hose with shutoff cock to connect to a water supply source;
- (4) a check valve to prevent water from flowing back into the water supply;

- (5) a mixture of soap and water and a two inch paint brush;
and
 - (6) a Son-Testor ultrasonic air leak detector, Model No. 110, or equivalent.
- (e) Test Preparation
- (1) The unit to be tested is properly parked and chocked.
The unit is parked as close as practical to the water supply locations.
 - (2) All compartments, discharge lines, and vapor return lines are visually inspected to ascertain that all are completely drained.
 - (3) All dome cover, inspection hatches, vapor recovery connections and bottom loading valves are visually inspected to ascertain that all are fully closed.
 - (4) At the rear of one of the overturn rails, the pipe plug is removed from the pipe coupling provided for degassing operations. The piping containing the pressure/vacuum gauge is installed into the coupling.
 - (5) The water supply hose with check valve is connected to any one compartment bottom loading adaptor.
 - (6) All compartment emergency valves and positive vents are opened in the normal manner. This condition permits all compartments to vent into the common vapor recovery system; therefore, only one test is required for the entire tank.
- (f) Pressure Test
- (1) The test is begun by flowing water into the compartment. The pressure gauge is monitored.
 - (2) When the pressure gauge indicates 18 inches of water in the tank, the water flow is shut off. When a water manometer is used, this reading is nine inches above and nine inches below the zero indicator.
 - (3) The gauge is monitored for five minutes. If the pressure gauge does not drop below an indicated 15 inches of water in these five minutes, the tank passes the pressure test. If the pressure does drop below an indicated 15 inches of water in five minutes, the tank does not pass the pressure test and the leak source must be determined. The soap and

water method and a sonic leak detector are to be used to locate the source of leak or leaks. After correcting the leaks, the pressure test must be rerun to certify compliance.

- (4) After compliance has been accomplished, one dome cover is carefully opened to depressurize the tank and is then re-closed.

(g) Vacuum Test

- (1) The water hose is removed, and water is drained from the compartment until a vacuum of six inches of water is registered on the gauge. The flow of water is stopped by closing the bottom loading valve.
- (2) The gauge is monitored for five minutes. If the vacuum does drop below an indicated three inches of water in the five minutes, the tank does not pass the vacuum test, and the leak source must be determined. The soap and water method and a sonic leak detector are to be used to locate the source of leak or leaks. After the leaks are corrected, the vacuum test must be rerun to certify compliance.
- (3) After compliance has been accomplished, the compartment dome cover is opened; and all water is drained from compartment, line, and bottom loading valve.

(h) Conclusion of Test

- (1) The test results are recorded and retained in the vehicle test file.
- (2) The pressure/vacuum gauge is removed, and the plug is re-installed in the rail. The water hose coupler is removed.
- (3) The tank unit is returned to service.

History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1980;
Amended Eff. December 1, 1989.

.0942 DETERMINATION OF SOLVENT IN FILTER WASTE

This Regulation applies, in accordance with Regulation .0912 of this Section, to the determination of the amount of solvent in filter materials (muck and distillation waste). To be derived is the quantity of volatile organic compounds per quantity of discarded filter muck. The procedure to be used in making this determination is the test method described by the American

National Standards Institute's "Standard Method of Test for Dilution of Gasoline-Engine Crankcase Oils" (ASTM 322-67 or IP 23/68) except that filter muck is to be used instead of crankcase oil.

History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.68; 143-215.107(a)(5);
Eff. July 1, 1980.

.0943 SYNTHETIC ORGANIC CHEMICAL AND POLYMER MANUFACTURING

- (a) For the purposes of this Regulation, the following definitions apply:
- (1) "Closed vent system" means a system which is not open to the atmosphere and which is composed of piping, connections, and if necessary, flow inducing devices that transport gas or vapor from a fugitive emission source to an enclosed combustion device or vapor recovery system.
 - (2) "Enclosed combustion device" means any combustion device which is not open to the atmosphere such as a process heater or furnace, but not a flare.
 - (3) "Fugitive emission source" means each pump, valve, safety/relief valve, open-ended valve, flange or other connector, compressor, or sampling system.
 - (4) "In gas vapor service" means that the fugitive emission source contains process fluid that is in the gaseous state at operating conditions.
 - (5) "In light liquid service" means that the fugitive emission source contains a liquid having:
 - (A) a vapor pressure of one or more of the components greater than 0.3 kilopascals at 20⁰ C, and
 - (B) a total concentration of the pure components having a vapor pressure greater than 0.3 kilopascals at 20⁰ C equal to or greater than 10 percent by weight, and the fluid is a liquid at operating conditions.
 - (6) "Open-ended valve" means any valve, except safety/relief valves, with one side of the valve seat in contact with process fluid and one side that is open to the atmosphere, either directly or through open piping.
 - (7) "Polymer manufacturing" means the industry that produces, as intermediates or final products, polyethylene, polypropylene, or polystyrene.
 - (8) "Process unit" means equipment assembled to produce, as intermediates or final products, polyethylene, polypropylene, polystyrene, or one or more of the chemicals listed in 40 CFR 60.489. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the final product.
 - (9) "Quarter" means a three month period. The first quarter concludes at the end of the last full month during the 180 days following initial start-up.

(10) "Synthetic organic chemical manufacturing" means the industry that produces, as intermediates or final products, one or more of the chemicals listed in 40 CFR 60.489.

(b) This regulation applies to synthetic organic chemicals manufacturing facilities and polymer manufacturing facilities.

(c) The owner or operator of a synthetic organic chemical manufacturing facility or a polymer manufacturing facility shall not cause, allow or permit:

- (1) any liquid leakage of volatile organic compounds or
- (2) any gaseous leakage of volatile organic compound of 10,000 ppm or greater from any fugitive emission source.

The owner or operator of these facilities shall control emissions of volatile organic compounds from open-ended valves as described in Paragraph (f) of this Regulation.

(d) The owner or operator shall visually inspect each week every pump in light liquid service. If there are indications of liquid leakage, the owner or operator shall repair the pump within 15 days after detection except as provided in Paragraph (k) of this Regulation.

(e) The owner or operator shall monitor each pump, valve, compressor and safety/relief valve in gas/vapor service or in light liquid service for gaseous leaks at least once each quarter. The owner or operator shall monitor safety/relief valves after each overpressure relief to ensure the valve has properly reseated. The monitoring procedure shall be in accordance with Regulation .0939 of this Section. If a volatile organic compound concentration of 10,000 ppm or greater is measured, the owner or operator shall repair the component within 15 days after detection except as provided in Paragraph (k) of this Regulation. Exceptions to the quarterly monitoring frequency are provided for in Paragraphs (h), (i) and (j) of this Regulation.

(f) The owner or operator shall install on each open-ended valve:

- (1) a cap,
- (2) a blind flange,
- (3) a plug, or
- (4) a second closed valve,

which shall remain attached to seal the open end at all times except during operations requiring process fluid flow through the opened line.

(g) If any fugitive emission source appears to be leaking on the basis of sight, smell, or sound, it shall be repaired within 15 days after detection except as provided in Paragraph (k) of this Regulation.

(h) If after four consecutive quarters of monitoring no more than two percent of the valves in gas/vapor service or in light liquid service are found leaking more

than 10,000 ppm of volatile organic compounds, then the owner or operator may monitor valves for gaseous leaks only every third quarter. If the number of these valves leaking more than 10,000 ppm of volatile organic compounds remains at or below two percent, these valves need only be monitored for gaseous leaks every third quarter. However, if more than two percent of these valves are found leaking more than 10,000 ppm of volatile organic compounds, they shall be monitored every quarter until four consecutive quarters are monitored which have no more than two percent of these valves leaking more than 10,000 ppm of volatile organic compounds.

(i) When a fugitive emission source is unsafe to monitor because of extreme temperatures, pressures, or other reasons, the owner or operator of the facility shall be required to monitor the fugitive emission source only when process conditions are such that the fugitive emission source is not operating under extreme conditions. The director may allow monitoring of these fugitive emission sources less frequently than each quarter, provided they are monitored at least once per year.

(j) Any fugitive emission source more than 12 feet above a permanent support surface may be monitored only once per year.

(k) The repair of a fugitive emission source may be delayed until the next turnaround if the repair is technically infeasible without a complete or partial shutdown of the process unit.

(l) The owner or operator of the facility shall maintain records in accordance with Regulation .0903 of this Section, which shall include:

- (1) identification of the source being inspected or monitored,
- (2) dates of inspection or monitoring,
- (3) results of inspection or monitoring,
- (4) action taken if a leak was detected,
- (5) type of repair made and when it was made, and
- (6) if the repair were delayed, an explanation as to why.

(m) The Code of Federal Regulations adopted by reference in this Rule shall automatically include any later amendments thereto as allowed by G.S. 150B-14(c).

History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); 150B-14(c);
Eff. May 1, 1985;
Amended Eff. March 1, 1991; December 1, 1989.

.0944 MANUFACTURE OF POLYETHYLENE, POLYPROPYLENE AND POLYSTYRENE

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

- (1) "By-product and diluent recovery operation" means the process that separates the diluent from the by-product (atactic) and purifies and dries the diluent for recycle.
- (2) "Continuous mixer" means the process that mixes polymer with anti-oxidants.
- (3) "Decanter" means the process that separates the diluent/crude product slurry from the alcohol-water solution by decantation.
- (4) "Ethylene recycle treater" means the process that removes water and other impurities from the recovered ethylene.
- (5) "High-density polyethylene plants using liquid phase slurry processes" means plants that produce high-density polyethylene in which the product, polyethylene, is carried as a slurry in a continuous stream of process diluent, usually pentane or isobutane.
- (6) "Neutralizer" means the process that removes catalyst residue from the diluent/crude product slurry.
- (7) "Polypropylene plants using liquid phase processes" means plants that produce polypropylene in which the product, polypropylene, is carried as a slurry in a continuous stream of process diluent, usually hexane.
- (8) "Polystyrene plants using continuous processes" means plants which produce polystyrene in which the product, polystyrene, is transferred in a continuous stream in a molten state.
- (9) "Product devolatilizer system" means the process that separates unreacted styrene monomer and by products from the polymer melt.
- (10) "Reactor" means the process in which the polymerization takes place.

(b) This Regulation applies to:

- (1) polypropylene plants using liquid phase processes,
- (2) high-density polyethylene plants using liquid phase slurry processes, and
- (3) polystyrene plants using continuous processes.

(c) For polypropylene plants subject to this regulation, the emissions of volatile organic compounds shall be reduced by 98 percent by weight or to 20 ppm, whichever is less stringent, from:

- (1) reactor vents,
- (2) decanter vents,
- (3) neutralizer vents,
- (4) by-product and diluent recovery operation vents,
- (5) dryer vents, and

(6) extrusion and pelletizing vents.

(d) For high-density polyethylene plants subject to this regulation, the emissions of volatile organic compounds shall be reduced by 98 percent by weight or to 20 ppm, whichever is less stringent, from:

- (1) ethylene recycle treater vents,
- (2) dryer vents, and
- (3) continuous mixer vents.

(e) For polystyrene plants subject to this regulation, the emissions of volatile organic compounds shall not exceed 0.24 pounds per ton of product from the product devolatilizer system.

(f) If flares are used to comply with this Regulation all of the following conditions shall be met:

- (1) Visible emissions shall not exceed five minutes in any two-hour period.
- (2) A flame shall be present.
- (3) If the flame is steam-assisted or air-assisted, the net heating value shall be at least 300 BTU per standard cubic foot. If the flame is non-assisted, the net heating value shall be at least 200 BTU per standard cubic foot.
- (4) If the flare is steam-assisted or non-assisted, the exit velocity shall be no more than 60 feet per second. If the flare is air-assisted, the exit velocity shall be no more than $(8.706 + 0.7084 \text{ HT})$ feet per second, where HT is the net heating value.

A flare that meets the conditions given in Subparagraphs (1) through (4) of this Paragraph are presumed to achieve 98 percent destruction of volatile organic compounds by weight. If the owner or operator of the source chooses to use a flare that fails to meet one or more of these conditions, he shall demonstrate to the director that the flare shall destroy at least 98 percent of the volatile organic compounds by weight. To determine if the specifications for the flare are being met, the owner or operator of a source using the flare to control volatile organic compound emissions shall install, operate, and maintain necessary monitoring instruments and shall keep necessary records as required by Regulation .0903 of this Section.

History Note Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); Eff. May 1, 1985.

.0945 PETROLEUM DRY CLEANING

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

- (1) "Cartridge filter" means perforated cannisters containing filtration paper and/or activated carbon that are used in a pressurized system to remove

- solid particles and fugitive dyes from soil-laden solvent, together with the piping and ductwork used in the installation of this device.
- (2) "Containers and conveyors of solvent" means piping, ductwork, pumps, storage tanks, and other ancillary equipment that are associated with the installation and operation of washers, dryers, filters, stills, and settling tanks.
 - (3) "Dry cleaning" means a process for the cleaning of textiles and fabric products in which articles are washed in a nonaqueous solution (solvent) and then dried by exposure to a heated air stream.
 - (4) "Dryer" means a machine used to remove petroleum solvent from articles of clothing or other textile or leather goods, after washing and removing of excess petroleum solvent, together with the piping and ductwork used in the installation of this device.
 - (5) "Perceptible leaks" means any petroleum solvent vapor or liquid leaks that are conspicuous from visual observation or that bubble after application of a soap solution, such as pools or droplets of liquid, open containers of solvent, or solvent laden waste standing open to the atmosphere.
 - (6) "Petroleum solvent" means organic material produced by petroleum distillation comprising a hydrocarbon range of eight to 12 carbon atoms per organic molecule that exists as a liquid under standard conditions.
 - (7) "Petroleum solvent dry cleaning" means a dry cleaning facility that uses petroleum solvent in a combination of washers, dryers, filters, stills, and settling tanks.
 - (8) "Settling tank" means a container which gravimetrically separates oils, grease, and dirt from petroleum solvent, together with the piping and ductwork used in the installation of the device.
 - (9) "Solvent filter" means a discrete solvent filter unit containing a porous medium which traps and removes contaminants from petroleum solvent, together with the piping and ductwork used in the installation of this device.
 - (10) "Solvent recovery dryer" means a class of dry cleaning dryers that employs a condenser to condense and recover solvent vapors evaporated in a closed-loop stream of heated air, together with the piping and ductwork used in the installation of this device.
 - (11) "Still" means a device used to volatilize, separate, and recover petroleum solvent from contaminated solvent, together with the piping and ductwork used in the installation of this device.

(12) "Washer" means a machine which agitates fabric articles in a petroleum solvent bath and spins the articles to remove the solvent, together with the piping and ductwork used in the installation of this device.

(b) This Regulation applies to petroleum solvent washers, dryers, solvent filters, settling tanks, stills, and other containers and conveyors of petroleum solvent that are used in petroleum solvent dry cleaning facilities that consume 32,500 gallons or more of petroleum solvent annually.

(c) The owner or operator of a petroleum solvent dry cleaning dryer subject to this Regulation shall:

- (1) limit emissions of volatile organic compounds to the atmosphere to an average of 3.5 pounds of volatile organic compounds per 100 pounds dry weight of articles dry cleaned, or
- (2) install and operate a solvent recovery dryer in a manner such that the dryer remains closed and the recovery phase continues until a final recovered solvent flow rate of 50 milliliters per minute is attained.

(d) The owner or operator of a petroleum solvent filter subject to this Regulation shall:

- (1) reduce the volatile organic compound content in all filter wastes to 1.0 pound or less per 100 pounds dry weight of articles dry cleaned, before disposal and exposure to the atmosphere, or
- (2) install and operate a cartridge filter and drain the filter cartridges in their sealed housings for 8 hours or more before their removal.

(e) The owner or operator of a petroleum solvent dry cleaning facility subject to this Regulation shall inspect the facility every 15 days and shall repair all perceptible leaks within 15 working days after identifying the sources of the leaks. If necessary repair parts are not on hand, the owner or operator shall order these parts within 15 working days and repair the leaks no later than 15 working days following the arrival of the necessary parts. The owner or operator shall maintain records, in accordance with Regulation .0903 of this Section, of when inspections were made, what was inspected, leaks found, repairs made and when repairs were made.

(f) To determine compliance with Subparagraph (c)(1) of this Regulation, the owner or operator shall use the test method in Regulation .0939(a)(2) of this Section and shall:

- (1) field calibrate the flame ionization analyzer with propane standards;
- (2) determine in a laboratory the ratio of the flame ionization analyzer response to a given parts per million by volume concentration of propane to the response to the same parts per million concentration of the volatile organic compounds to be measured;

- (3) determine the weight of volatile organic compounds vented to the atmosphere by:
 - (A) multiplying the ratio determined in Subparagraph (2) of this Paragraph by the measured concentration of volatile organic compound gas (as propane) as indicated by the flame ionization analyzer response output record,
 - (B) converting the parts per million by volume value calculated in Part (A) of this Subparagraph into a mass concentration value for the volatile organic compounds present, and
 - (C) multiplying the mass concentration value calculated in Part(B) of this Subparagraph by the exhaust flow rate; and
- (4) Calculate and record the dry weight of articles dry cleaned. The test shall be repeated for normal operating conditions that encompass at least 30 dryer loads that total not less than 4,000 pounds dry weight and that represent a normal range of variation in fabrics, solvents, load weights, temperatures, flow rates, and process deviations.

(g) To determine compliance with Subparagraph(c)(2) of this Regulation, the owner or operator shall verify that the flow rate of recovered solvent from the solvent recovery dryer at the termination of the recovery phase is no greater than 50 milliliters per minute. This one-time procedure shall be conducted for a duration of not less than two weeks during which not less than 50 percent of the dryer loads shall be monitored for their final recovered solvent flow rate. The suggested point for measuring the flow rate of recovered solvent is from the solvent-water separator. Near the end of the recovery cycle, the flow of recovered solvent is to be diverted to a graduated cylinder. The cycle continues until the minimum flow of solvent is 50 milliliters per minute. The type of articles cleaned and the total length of the cycle is then recorded.

History Note: Statutory Authority G.S. 143-215.3(a) (1); 143-215.107(a) (5);
Eff. May 1, 1985.

.0946 COMPLIANCE SCHEDULE: GASOLINE HANDLING

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. May 1, 1990;
Repealed Eff. April 1, 1997.

[pages 71 and 72 reserved]

15A NCAC 2D .0947 MANUFACTURE OF SYNTHESIZED PHARMACEUTICAL PRODUCTS

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

- (1) "Production equipment exhaust system" means a device for collecting and directing out of the work area fugitive emissions of volatile organic compounds from reactor openings, centrifuge openings, and other vessel openings for the purpose of protecting workers from excessive exposure to volatile organic compounds.
- (2) "Synthesized pharmaceutical manufacturing" means manufacture of pharmaceutical products by chemical synthesis.

(b) This Rule applies to synthesized pharmaceutical products manufacturing facilities.

(c) The owner or operator of a synthesized pharmaceutical products manufacturing facility shall control the emissions of volatile organic compounds from:

- (1) reactors, distillation operations, crystallizers, centrifuges, and vacuum dryers that have the potential to emit 15 pounds per day or more of volatile organic compounds with surface condensers that meet the requirements of Paragraph (e) of this Rule or equivalent controls;
- (2) air dryers and production equipment exhaust system by reducing emissions of volatile organic compounds:
 - (A) by 90 percent if they are 330 pounds per day or more; or
 - (B) to 33 pounds per day if they are less than 330 pounds per day.
- (3) storage tanks by:
 - (A) providing a vapor balance system or equivalent control that is at least 90 percent effective in reducing emissions from truck or railcar deliveries to storage tanks with capacities greater than 2,000 gallons that store volatile organic compounds with a vapor pressure greater than 4.1 pounds per square inch at 68°F; and
 - (B) installing pressure/vacuum conservation vents, which shall be set " 0.8 inches of water unless a more effective control system is used, on all storage tanks that store volatile organic compounds with a vapor pressure greater than 1.5 pounds per square inch at 68°F;
- (4) centrifuges containing volatile organic compounds, rotary

- vacuum filters processing liquid containing volatile organic compounds, and other filters having an exposed liquid surface where the liquid contains volatile organic compounds by enclosing those centrifuges and filters that contain or process volatile organic compounds with a vapor pressure of 0.5 pounds per square inch or more at 68°F; and
- (5) in-process tanks by installing covers, which shall remain closed except when production, sampling, maintenance, or inspection procedures require operator access.
- (d) The owner or operator of a synthesized pharmaceutical products manufacturing facility shall repair as expeditiously as possible all leaks from which liquid volatile organic compounds can be seen running or dripping. This repair must take place at least within 15 days after which said leak is discovered unless the leaking component cannot be repaired before the process is shutdown in which case the leaking component must be repaired before the process is restarted.
- (e) If surface condensers are used to comply with Subparagraph (c)(1) of this Rule, the condenser outlet temperature shall not exceed:
- (1) -13°F when condensing volatile organic compounds of vapor pressure greater than 5.8 psi at 68°F;
 - (2) 5°F when condensing volatile organic compounds of vapor pressure greater than 2.9 psi at 68°F;
 - (3) 32°F when condensing volatile organic compounds of vapor pressure greater than 1.5 psi at 68°F;
 - (4) 50°F when condensing volatile organic compounds of vapor pressure greater than 1.0 psi at 68°F; or
 - (5) 77°F when condensing volatile organic compounds of vapor pressure greater than 0.5 psi at 68°F.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1994.

15A NCAC 2D .0948 VOC EMISSIONS FROM TRANSFER OPERATIONS

- (a) This Rule applies to operations that transfer volatile organic compounds from a storage tank to tank-trucks, trailers, or railroad tank cars that are not covered by Rule .0926, .0927, or .0928 of this Section.
- (b) The owner or operator of a facility to which this Rule applies shall not load in any one day more than 20,000 gallons of volatile organic compounds with a vapor pressure of 1.5 pounds per square inch or greater under actual conditions into any tank-truck, trailer, or railroad tank car from any loading operation unless the loading operation uses submerged

loading through boom loaders that extend down into the compartment being loaded or by other methods that are at least as efficient based on source testing or engineering calculations.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1994;
Amended Eff. July 1, 2000.

**15A NCAC 2D .0949 STORAGE OF MISCELLANEOUS
VOLATILE ORGANIC COMPOUNDS**

(a) This Rule applies to the storage of volatile organic compounds in stationary tanks, reservoirs, or other containers with a capacity greater than 50,000 gallons that are not covered by Rule .0925 or .0933.

(b) The owner or operator of any source to which this Rule applies shall not place, store, or hold in any stationary tank, reservoir, or other container with a capacity greater than 50,000 gallons, any liquid volatile organic compound that has a vapor pressure of 1.5 pounds per square inch absolute or greater under actual storage conditions unless such tank, reservoir, or other container:

- (1) is a pressure tank capable of maintaining working pressures sufficient at all times to prevent vapor gas loss into the atmosphere; or
- (2) is designed and equipped with one of the following vapor loss control devices:
 - (A) a floating pontoon, double deck type floating roof or internal pan type floating roof equipped with closure seals to enclose any space between the cover's edge and compartment wall; this control equipment shall not be permitted for volatile organic compounds with a vapor pressure of 11.0 pounds per square inch absolute or greater under actual storage conditions; all tank gauging or sampling devices shall be gas-tight except when tank gauging or sampling is taking place;
 - (B) a vapor recovery system or other equipment or means of air pollution control that reduces the emission of organic materials into the atmosphere by at least 90 percent by weight; all tank gauging or sampling devices shall be gas-tight except when tank gauging or sampling is taking place.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1994;
Amended Eff. July 1, 2000.

15A NCAC 2D .0950 INTERIM STANDARDS FOR CERTAIN SOURCE CATEGORIES (REPEALED)

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1994;
Amended Eff. May 1, 1995;
Repealed Eff. July 1, 2000.

15A NCAC 2D .0951 MISCELLANEOUS VOLATILE ORGANIC COMPOUND EMISSIONS

(a) With the exceptions in Paragraph (b) of this Rule, this Rule applies to all facilities that use volatile organic compounds as solvents, carriers, material processing media, or industrial chemical reactants, or in other similar uses or that mix, blend, or manufacture volatile organic compounds for which there is no other applicable emissions control rule in this Section except Rule .0958 of this Section.

(b) This Rule does not apply to architectural or maintenance coating.

(c) The owner or operator of any facility to which this Rule applies shall:

- (1) install and operate reasonable available control technology;
or
- (2) limit emissions of volatile organic compounds from coating lines not covered by Rules .0917 through .0924, .0934, or .0935 to no more than 6.7 pounds of volatile organic compounds per gallon of solids delivered to the coating applicator.

(d) If the owner or operator of a facility chooses to install reasonable available control technology under Paragraph (c)(1) of this Rule, the owner or operator shall submit:

- (1) the name and location of the facility;
- (2) information identifying the source for which a reasonable available control technology limitation or standard is being proposed;
- (3) a demonstration that shows the proposed reasonable available control technology limitation or standard satisfies the requirements for reasonable available control technology; and
- (4) a proposal for demonstrating compliance with the proposed reasonable control technology limitation or standard.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1994;
Amended Eff. July 1, 2000; July 1, 1996.

15A NCAC 2D .0952 PETITION FOR ALTERNATIVE CONTROLS FOR RACT

(a) With the exceptions in Paragraph (b) of this Rule, this Rule applies to all sources covered under this Section.

(b) This Rule does not apply to:

- (1) sources in Mecklenburg County to which Rules .0917 through .0937 of this Section apply and which are located at a facility where the total potential emissions of volatile organic compounds from all stationary sources at the facility are 100 tons per year or more;
- (2) sources covered under Rule .0953 or .0954 of this Section.

(c) If the owner or operator of any source of volatile organic compounds subject to the requirements of this Section, can demonstrate that compliance with rules in this Section would be technologically or economically infeasible, he may petition the Director to allow the use of alternative operational or equipment controls for the reduction of volatile organic compound emissions. Petition shall be made for each source to the Director.

(d) The petition shall contain:

- (1) the name and address of the company and the name and telephone number of a company officer over whose signature the petition is submitted;
- (2) a description of all operations conducted at the location to which the petition applies and the purpose that the volatile organic compound emitting equipment serves within the operations;
- (3) reference to the specific operational and equipment controls under the rules of this Section for which alternative operational or equipment controls are proposed;
- (4) a detailed description of the proposed alternative operational or equipment controls, the magnitude of volatile organic compound emission reduction that will be achieved, and the quantity and composition of volatile organic compounds that will be emitted if the alternative operational or equipment controls are instituted;
- (5) a plan, which will be instituted in addition to the proposed alternative operational or equipment controls, to reduce, where technologically and economically feasible, volatile organic compound emissions from other source operations at the facility, further than that required under the rules of this Section, if these sources exist at the facility, such that aggregate volatile organic compound emissions from the

- facility will in no case be greater through application of the alternative control than would be allowed through conformance with the rules of this Section;
- (6) a schedule for the installation or institution of the alternative operational or equipment controls in conformance with Rule .0909 of this Section, as applicable; and
 - (7) certification that emissions of all other air contaminants from the subject source are in compliance with all applicable local, state and federal laws and regulations.

The petition may include a copy of the permit application and need not duplicate information in the permit application.

- (e) The Director shall approve a petition for alternative control if:
- (1) The petition is submitted in accordance with Paragraph (d) of this Rule;
 - (2) The Director determines that the petitioner cannot comply with the rules in question because of technological or economical infeasibility
 - (3) All other air contaminant emissions from the facility are in compliance with, or under a schedule for compliance as expeditiously as practicable with, all applicable local, state, and federal regulations; and
 - (4) The petition contains a schedule for achieving and maintaining reduction of volatile organic compound emissions to the maximum extent feasible and as expeditiously as practicable.
- (f) When controls different from those specified in the appropriate emission standards in this Section are approved by the Director, the permit shall contain a condition stating such controls.

*History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1994;
Amended Eff. April 1, 2003; July 1, 1995; May 1, 1995.*

[pages 80 to 82 reserved]

15A NCAC 2D .0953 VAPOR RETURN PIPING FOR STAGE II VAPOR RECOVERY

(a) Applicability. This Rule applies to any facility located in Davidson, Durham, Forsyth, Gaston, Guilford, Mecklenburg, or Wake counties or the Dutchville Township in Granville county or that portion of Davie County that is bounded by the Yadkin River, Dutchman's Creek, NC Highway 801, Fulton Creek and back to the Yadkin River:

- (1) that is built after June 30, 1994, or
- (2) whose tanks are replaced or removed for upgrades or repairs after June 30, 1994.

When a new tank is added, the new tank shall comply with this Rule.

(b) Exemptions. The burden of proof of eligibility for exemption from this Rule is on the owner or operator of the facility. Persons seeking an exemption from this Rule shall maintain records of throughput and shall furnish these records to the Director upon request. These records shall be maintained on file for three years. The following facilities are exempt from this Rule based upon the previous two years records:

- (1) any facility that dispenses less than 10,000 gallons of gasoline per calendar month;
- (2) any facility that dispenses less than 50,000 gallons of gasoline per calendar month and is an independent small business marketer of gasoline;
- (3) any facility that dispenses gasoline exclusively for refueling marine vehicles, aircraft, farm equipment, and emergency vehicles; or
- (4) any tanks used exclusively to test the fuel dispensing meters.

Any facility that ever exceeds the exemptions given in Subparagraphs (1), (2), (3), or (4) of this Paragraph shall be subject to all of the provisions of this Rule according to the schedule given in Paragraph (e) of this Rule, and shall remain subject to these provisions even if the facility's later operation meets the exemption requirements.

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

- (1) "Affected Facility" means any gasoline service station or gasoline dispensing facility subject to the requirements of this Rule.
- (2) "CARB" means the California Air Resources Board.
- (3) "Certified Stage II Vapor Recovery System" means any system certified by the California Air Resources Board as having a vapor recovery or removal efficiency of at least 95 percent by weight.
- (4) "Facility" means any gasoline service station or gasoline dispensing facility.

- (5) "ISBM" means independent small business marketer.
- (6) "Independent Small Business Marketer of Gasoline" means a facility that qualifies under Section 324 of the Federal Clean Air Act.
- (7) "Operator" means any person who leases, operates, controls, or supervises a facility at which gasoline is dispensed.
- (8) "Owner" means any person who has legal or equitable title to the gasoline storage tank at a facility.
- (9) "Stage II Vapor Recovery" means the control of gasoline vapor at the vehicle fill-pipe, where the vapors are captured and returned to a vapor-tight underground storage tank or are captured and destroyed.
- (10) "Throughput" means the amount of gasoline dispensed at a facility during any calendar month.
- (11) "Vapor Recovery Dispenser Riser" means piping rising from the vapor recovery piping to the dispenser.
- (12) "Vapor Recovery Piping" means vapor return piping connecting the storage tank(s) with the vapor recovery dispenser riser(s).

(d) Requirements. Affected facilities shall install the necessary piping for future installation of CARB certified Stage II vapor recovery system. The vapor piping shall extend from the tanks to the pumps. The vapor piping shall be installed in accordance with the following requirements:

- (1) Gasoline vapors shall be:
 - (A) transferred from each gasoline dispenser to the underground storage tank individually, or
 - (B) manifolded through a common header from which a single return line is connected through another manifold to all of the underground tanks.

Each vapor return pipe shall allow the transfer of gasoline vapors to the tank from which the liquid gasoline is being drawn;

- (2) Pipe diameter shall meet manufacturer's specifications. If the manufacturer does not specify diameters, the following minimum pipe diameters apply. If the manufacturer only specifies diameters for part of the system, the following diameters apply for the pipe(s) not specified. All fittings, connectors, and joints shall have an inside diameter equal to the inside diameter of the pipe to which it is attached. The following diameters are specified for the number of nozzles that may be operated at the same time;
 - (A) Vapor Recovery Dispenser Risers

- (i) Three-fourths of an inch for vapor recovery dispenser risers returning vapors from one nozzle; or
 - (ii) One inch for vapor recovery dispenser risers returning vapors from two nozzles;
 - (B) Vapor Recovery Piping
 - (i) At least two inches for six or fewer nozzles; or
 - (ii) At least three inches for more than six nozzles;
- (3) All piping and fittings shall be installed in accordance with manufacturer's instructions and specifications. Metal pipe shall be minimum schedule 40 welded or seamless steel per ASTM A-53, "Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated Welded and Seamless Pipe". Fittings shall be 150 pounds cold water screwed malleable iron. Pipe and fittings shall be galvanized and pipe threads shall be zinc-coated. Nonmetallic pipes and fittings shall be U/L listed under nonmetallic primary pipes and fittings for underground flammable liquids (gas and oil equipment directory);
- (4) Each vapor return pipe shall slope toward the storage tank with a minimum grade of 1/8 inches per foot. No low points or sags shall exist along the return piping;
- (5) All vapor return and vent piping shall be provided with flexible joints or swing joints at each tank connection and at the base of the vent pipe riser where it fastens to a building or other structure;
- (6) All vapor return pipe-trenching shall be compacted to 90 percent of the standard proctor according to ASTM D-698 "Laboratory Compaction Characteristics of Soil Using Standard Effort" of the area soil before the pipes are installed and back-filled with sand or other material approved by the pipe manufacturer at least six inches below and above the piping;
- (7) The pipes shall not be driven over or in any other way crushed before paving or surfacing;
- (8) The vapor return piping or manifolded piping on a vacuum assisted system shall enter a separate opening to the tank from that connected to the vent pipe or the Stage I piping;
- (9) All vapor return piping shall be tagged at the termination point recording the function of the piping. In addition, a record of the installation of the Stage II vapor return piping shall be kept in the facility;

- (10) Vent piping shall be constructed of materials in accordance with Subparagraph (3) of this Paragraph;
 - (11) All vent pipes shall be a minimum of two inches inside diameter or meet the local Fire Codes; and
 - (12) All vent pipes shall slope toward the underground storage tank with a grade of at least 1/8 inch per linear foot.
- (e) Compliance Schedule. Compliance under Paragraph (d) of this Rule by the affected facility shall coincide with the completion of the tank installation or repair. The owner or operator of a facility shall notify the Director within 60 days after the day the facility has exceeded the exemptions under Paragraph (b) of this Rule. Facilities that lose their exemption under Paragraph (b) of this Rule shall comply with this Rule within 18 months after the day the owner or operator of the facility has notified the Director that the facility has exceeded its exemption under Paragraph (b) of this Rule.
- (f) Testing Requirements.
- (1) Within 30 days after installation of the vapor return piping, the owner or operator of the facility shall submit reports of the following tests to be completed as described in EPA-450/3-91-022b:
 - (A) Bay Area Source Test Procedure ST-30, Leak Test Procedure, or San Diego Test Procedure TP-91-1, Pressure Decay/Leak Test Procedure, and
 - (B) Bay Area Source Test Procedure ST-27, Dynamic Back Pressure, or San Diego Test Procedure TP-91-2, Pressure Drop vs Flow/Liquid Blockage Test Procedure.
 - (2) Testing shall be in accordance with Rule .0912 of this Section.
 - (3) The owner or operator of the facility shall notify the Regional Office Supervisor by telephone at least five business days before back-filling the trenches and at least 10 business days before the tests given in Subparagraph (1) of this Paragraph are to be performed to allow inspection by the Division. The owner or operator may commence back-filling five days after notification has been given to the Division.
 - (4) The owner or operator of the facility and the test contractor shall report all test failures to the Regional Office Supervisor within 24 hours of the failure.
 - (5) The Director may require the owner or operator of the facility to perform any of the tests in Subparagraph (1) of this Paragraph if there are any modifications or repairs.

- (6) Where the Division conducts a test on the vapor control system, it shall be without compensating the owner or operator of the facility for any lost revenues incurred due to the testing procedure.
- (g) Referenced documents. EPA-450/3-91-022b, "Technical Guidance - Stage II Vapor Recovery Systems for Control of Vehicle Refueling Emissions at Gasoline Dispensing Facilities, Volume II: Appendices", November 1991, cited in this Rule is hereby incorporated by reference and does not include subsequent amendments or editions. A copy of this document is available for inspection at the Regional Offices of the North Carolina Department of Environment and Natural Resources (Addresses are given in Rule .0103 of this Subchapter). Copies of this document may be obtained through the Library Services Office (MD-35), U. S. Environmental Protection Agency, Research Triangle Park or National Technical Information Services (NTIS), 5285 Port Royal Road, Springfield VA 22161. The NTIS number for this document is PB-92132851, and the cost is fifty-two dollars (\$52.00).

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a); 150B-21.6; Eff. July 1, 1994; Amended Eff. July 1, 1998; July 1, 1996.

15A NCAC 2D .0954 STAGE II VAPOR RECOVERY

- (a) Applicability. In accordance with Paragraphs (e), (f), or (g) of Rule .0902 of this Section, this Rule applies to the control of gasoline vapors at the vehicle fill-pipe during refueling operations at a facility. The vapors shall be captured and returned to a vapor-tight underground storage tank or shall be captured and destroyed. These systems shall be installed at all facilities that dispense gasoline to motor vehicles unless exempted under Paragraph (b) of this Rule.
- (b) Exemptions. The following gasoline dispensing facilities are exempt from this Rule based upon the previous two years records:
- (1) any facility which dispenses less than 10,000 gallons of gasoline per calendar month;
 - (2) any facility which dispenses less than 50,000 gallons of gasoline per calendar month and is an independent small business marketer of gasoline;
 - (3) any facility which dispenses gasoline exclusively for refueling marine vehicles, aircraft, farm equipment, and emergency vehicles; or
 - (4) any tanks used exclusively to test the fuel dispensing meters.
- Any facility that ever exceeds the exemptions given in Subparagraphs (1), (2), (3) or (4) in this Paragraph shall be subject to all of the provisions of

this Rule in accordance with the schedule given in Subparagraph (f) of this Rule, and shall remain subject to these provisions even if the facility's later operation meets the exemption requirements.

(c) Proof of Eligibility. The burden of proof of eligibility for exemption from this Rule is on the owner or operator of the facility. Persons seeking an exemption from this Rule shall maintain the following:

- (1) chronologically arranged bills of lading for receipt of gasoline shipments from the last three years, and
- (2) daily inventory of each gasoline type for each day of operation or equivalent records as required; this shall be maintained for the last three years.

These records shall be furnished to the Director upon request.

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

- (1) "CARB" means the California Air Resources Board.
- (2) "Certified STAGE II Vapor Recovery System" means any system certified by the California Air Resources Board as having a vapor recovery or removal efficiency of at least 95 percent by weight.
- (3) "Defective equipment" means any absence, disconnection, or malfunction of a Stage II vapor recovery system component which is required by this Rule including the following:
 - (A) a vapor return line that is crimped, flattened or blocked or that has any hole or slit that allows vapors to leak out;
 - (B) a nozzle bellows that has any hole or tear large enough to allow a 1/4 inch diameter cylindrical rod to pass through it or any slit one inch or more in length;
 - (C) a nozzle face-plate or cone that is torn or missing over 25 percent of its surface;
 - (D) a nozzle with no automatic overfill control mechanism or an inoperable overfill control mechanism;
 - (E) an inoperable or malfunctioning vapor processing unit, vacuum generating device, pressure or vacuum relief valve, vapor check valve or any other equipment normally used to dispense gasoline, or that is required by this Rule; or
 - (F) a failure to meet the requirements of Paragraph (g) of this Rule.
- (4) "Facility" means any gasoline service station, gasoline dispensing facility, or gasoline cargo tanker.
- (5) "ISBM" means independent small business marketer.
- (6) "Independent Small Business Marketer of Gasoline" means a

facility that qualifies under Section 324 of the Federal Clean Air Act.

- (7) "Operator" means any person who leases, operates, controls, or supervises a facility at which gasoline is dispensed.
- (8) "Owner" means any person who has legal or equitable title to the gasoline storage tank at a facility.
- (9) "Pressure Balanced Stage II System" means one which is not vacuum-assisted. That is, the volume of vapor in the automobile's fuel tank displaced by the incoming liquid gasoline equals the space in the underground tank created by the gasoline leaving.
- (10) "Remote Vapor Check Valve" means a check valve in the vapor return line but not located in the nozzle.
- (11) "Stage II Vapor Recovery" means to the control of gasoline vapor at the vehicle fill-pipe, where the vapors are captured and returned to a vapor-tight storage tank or are captured and destroyed.
- (12) "Throughput" means the amount of gasoline dispensed at a facility during any calendar month after June 30, 1994.

(e) Stage II Requirements. No person shall transfer or permit the transfer of gasoline into the fuel tank of any motor vehicle at any applicable facility unless:

- (1) the transfer is made using a Certified Stage II vapor recovery system that meets the requirements of the inspections;
- (2) all installed Stage II vapor recovery systems use coaxial vapor recovery hoses; no dual-hose designs shall be used;
- (3) all installed Stage II vapor recovery systems used are certified by CARB except that the Stage I system need not be CARB certified. In addition, no Stage II system shall employ a remote vapor check valve. Pressure balanced Stage II systems may be used; and
- (4) the underground vapor return piping satisfies the requirements of Rule .0953 of this Subchapter.

In the event that CARB revokes certification of an installed system, the owner or operator of the facility shall have four years to modify his equipment to conform with re-certification requirements unless modifications involve only the replacement of dispenser check valves, hoses, or nozzles or appurtenances to these components in which case the allowed time period is three months. This time period is defined as the period from the day that the owner or operator of the facility has been officially notified by the Director.

(f) Compliance Schedule. If the gasoline service station or gasoline dispensing facility is subject to the requirements of this Rule in accordance

with Paragraphs (e), (f), or (g) of Rule .0902 of this Section, compliance shall be achieved no later than:

- (1) one year from the date that the Director notices in the North Carolina Register that an area is in violation of the ambient air quality standard for ozone, for facilities having any single monthly throughput of at least 100,000 gallons per month;
 - (2) two years from the date that the Director notices in the North Carolina Register that an area is in violation of the ambient air quality standard for ozone, for facilities having any single monthly throughput of greater than 10,000 gallons but less than 100,000 gallons;
 - (3) for affected facilities owned by a single ISBM:
 - (A) one year from the date that the Director notices in the North Carolina Register that an area is in violation of the ambient air quality standard for ozone, for 33 percent of affected facilities;
 - (B) two years from the date that the Director notices in the North Carolina Register that an area is in violation of the ambient air quality standard for ozone, for 66 percent of the affected facilities;
 - (C) three years from the date that the Director notices in the North Carolina Register that an area is in violation of the ambient air quality standard for ozone, for the remainder of the affected facilities;
 - (4) 18 months after the day the owner or operator of the facility has been notified by the Director that his exemption under Paragraph (b) of this Rule has been revoked; or
 - (5) before beginning operation for islands constructed after the Director notices in the North Carolina Register that an area is in violation of the ambient air quality standard for ozone.
- (g) Testing Requirements
- (1) Within 30 days after the commencement of operation of the Stage II system and every five years thereafter, the owner or operator of the facility shall submit reports of the following tests as described in EPA-450/3-91-022b:
 - (A) Bay Area Source Test Procedure ST-30, Leak Test Procedure, or San Diego Test Procedure TP-91-1, Pressure Decay/Leak Test Procedure every five years;
 - (B) Bay Area Source Test Procedure ST-27, Dynamic Back Pressure, or San Diego Test Procedure TP-91-2, Pressure Drop vs Flow/Liquid Blockage Test Procedure every five years; and
 - (C) Bay Area Source Test Procedure ST-37, Liquid

Removal Devices every five years.

If the tests have been performed within the last two years the owner or operator may submit a copy of those tests in lieu of retesting. Testing shall be in accordance with Rule .0912 of this Section.

- (2) The owner or operator shall perform daily testing and inspections as follows:
 - (A) daily tests to ensure proper functioning of nozzle automatic overfill control mechanisms and flow prohibiting mechanisms, and
 - (B) daily visual inspection of the nozzle bellows and face-plate.
 - (3) The owner or operator of the facility and the test contractor shall report all test failures to the Regional Office Supervisor within 24 hours of the failure.
 - (4) The Director may require the owner or operator of the facility to perform any of the tests in Subparagraph (1) of this Paragraph if there are any modifications or repairs.
 - (5) Where the Division of Air Quality conducts tests or upon requirement from the Director to test the vapor control system it shall be without compensating the owner or operator of the facility for any lost revenues incurred due to the testing procedure.
- (h) Operating Instructions and Posting
- (1) The owner or operator of the facility shall post operating instructions for the vapor recovery system on the top one-third of the front of each gasoline dispenser to include the following:
 - (A) a clear description of how to correctly dispense gasoline with the vapor recovery nozzles,
 - (B) a warning that repeated attempts to continue dispensing gasoline, after the system has indicated that the vehicle fuel tank is full (by automatically shutting off), may result in spillage or recirculation of gasoline,
 - (C) a telephone number to report problems experienced with the vapor recovery system to the owner or operator of the facility, and
 - (D) a telephone number to report problems experienced with the vapor recovery system to the Director.
 - (2) The owner or operator shall provide written instructions on site as detailed in EPA-450/3-91-022b to insure that employees of the facility have an accurate understanding of

the operation of the system and, in particular, when the system is malfunctioning and requires repair.

(i) Other General Requirements. The owner or operator of the facility shall conspicuously post "Out of Order" signs on any nozzle associated with any aboveground part of the vapor recovery system which is defective until the system has been repaired to bring it back into compliance with this Rule.

(j) Record-keeping and Reporting. Owners or operators of the facility shall maintain records in accordance with Rule .0903 of this Section on compliance and testing.

(k) Referenced document. EPA-450/3-91-022b, "Technical Guidance - Stage II Vapor Recovery Systems for Control of Vehicle Refueling Emissions at Gasoline Dispensing Facilities, Volume II: Appendices", November 1991, cited in this Rule is hereby incorporated by reference and does not include subsequent amendments or editions. A copy of this document is available for inspection at the Regional Offices of the North Carolina Department of Environment and Natural Resources (addresses are given in Rule .0103 of this Subchapter). Copies of this document may be obtained through the Library Services Office (MD-35), U. S. Environmental Protection Agency, Research Triangle Park or National Technical Information Services, 5285 Port Royal Road, Springfield VA 22161. The NTIS number for this document is PB-92132851 and the cost is fifty-two dollars (\$52.00).

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a); 150B-21.6;*
 Eff. May 1, 1995;
 Amended Eff. April 1, 2003; April 1, 1997; July 1, 1996;
 April 1, 1996; May 1, 1995.

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15A NCAC 2D .0955 THREAD BONDING MANUFACTURING

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

- (1) "Capture hoods" means any device designed to remove emissions from the solution bath tray areas during the manufacturing process.
- (2) "Curing" means exposing coated threads to high temperatures in an oven until the nylon solution mixture hardens (vaporizing the solvents) and bonds to the threads.
- (3) "Day tanks" means holding tanks that contain nylon solution mixture ready for use.
- (4) "Drying ovens" means any apparatus through which the coated threads are conveyed while curing.
- (5) "Enclose" means to construct an area within the plant that has a separate ventilation system and is maintained at a slightly negative pressure.
- (6) "Fugitive emissions" means emissions that cannot be collected and routed to a control system.
- (7) "Nylon thread coating process" means a process in which threads are coated with a nylon solution and oven cured.
- (8) "Permanent label" means a label that cannot be easily removed or defaced.
- (9) "Polyester solution mixture" means a mixture of polyester and solvents which is used for thread coating.
- (10) "Storing" means reserving material supply for future use.
- (11) "Thread bonding manufacturing" means coating single or multi-strand threads with plastic (nylon or polyester solution mixture) to impart properties such as additional strength and durability, water resistance, and moth repellency.
- (12) "Transporting" means moving material supply from one place to another.

(b) This Rule applies in accordance with Rule .0902 of this Section to any thread bonding manufacturing facility with total uncontrolled exhaust emissions from nylon thread coating process collection hoods and drying ovens of volatile organic compounds (VOC) equal to or greater than 100 tons per year.

(c) Annual VOC emissions from each nylon thread coating process shall be determined by multiplying the hourly amount of VOC consumed by the total scheduled operating hours per year.

(d) Emissions from each nylon thread coating process subject to this Rule shall be reduced:

- (1) by at least 95 percent by weight, or
- (2) by installing a thermal incinerator with a temperature of at least 1600° F and a residence time of at least 0.75 seconds.

(e) The owner or operator of any thread bonding manufacturing facility shall:

- (1) enclose the nylon thread coating process area of the plant to prevent fugitive emissions from entering other plant areas;
- (2) store all VOC containing materials in covered tanks or containers;
- (3) ensure that equipment used for transporting or storing VOC containing material does not leak and that all lids and seals used by such equipment are kept in the closed position at all times except when in actual use;
- (4) not cause or allow VOC containing material to be splashed, spilled, or discarded in sewers;
- (5) hold only enough nylon solution mixture in the day tanks to accommodate daily process times measured in hours; and
- (6) place permanent and conspicuous labels on all equipment affected by Subparagraphs (3) through (5) of this Paragraph summarizing handling procedures described in Subparagraphs (3) through (5) of this Paragraph for VOC contaminated materials at the nylon thread coating process.

(f) The owner or operator of a thread bonding manufacturing facility shall notify the Director within 30 days after the calculated annual emissions of VOC from nylon thread coating processes equal or exceed 100 tons per year. The owner or operator shall submit within six months after such calculation a permit application including a schedule to bring the facility into compliance with this Rule.

*History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a);
Eff. May 1, 1995.*

15A NCAC .0956 GLASS CHRISTMAS ORNAMENT MANUFACTURING

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

- (1) "Coating" means the application of a layer of material, either by dipping or spraying, in a relatively unbroken film onto glass Christmas ornaments.
- (2) "Curing ovens" means any apparatus through which the coated glass Christmas ornaments are conveyed while drying.
- (3) "Glass Christmas ornament" means any glass ornament that is coated with decorative exterior and is traditionally hung on Christmas trees.
- (4) "Glass Christmas ornament manufacturing facility"

means a facility that coats glass Christmas ornaments through the process of interior coating or exterior coating that uses either mechanical or hand-dipping methods, drying (curing), cutting, and packaging operations.

- (5) "Mechanical coating lines" means equipment that facilitates mechanized dipping or spraying of a coating onto glass Christmas ornaments in which the neck of each ornament is held mechanically during the coating operation.
- (6) "Solvent-borne coating" means a coating that uses organic solvents as an ingredient.

(b) This Rule applies in accordance with Rule .0902 of this Section to any curing ovens servicing the mechanical coating lines in the coating of glass Christmas ornaments at glass Christmas tree ornament manufacturing facilities with potential volatile organic compound (VOC) emissions of 100 tons per year or more.

(c) This Rule does not apply to glass Christmas ornament manufacturing facilities that do not use solvent-borne coating materials.

(d) Emissions of VOC from each curing oven shall be reduced by at least 90 percent by weight.

(e) If the owner or operator of a facility subject to this Rule chooses to use low VOC content, solvent-borne coatings to reduce emissions, the emission reduction from the use of these coatings shall be equivalent to that achieved using add-on controls.

(f) The owner or operator of a Christmas tree ornament manufacturing facility shall notify the Director within 30 days after the calculated annual emissions of VOC from facility equal or exceed 100 tons per year. The owner or operator shall submit within six months after such calculation a permit application including a schedule to bring the facility into compliance with this Rule.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a);
Eff. May 1, 1995.

15A NCAC 2D .0957 COMMERCIAL BAKERIES

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

- (1) "Baking Oven" means an oven used at any time for the purpose of baking yeast-leavened products, including bread and rolls.
- (2) "Commercial Bakery" means an establishment where bread and baked goods are produced.

(b) This Rule applies in accordance with Rule .0902 of this Section to any baking oven at a commercial bakery with potential volatile organic

compound (VOC) emissions of 100 tons per year or more. Daily volatile organic compound emissions shall be determined according to the calculation procedures in Paragraph (d) of this Rule.

(c) Emissions of VOC from baking ovens subject to this Rule shall be reduced by at least:

- (1) 90 percent by weight, or
- (2) 60 percent by weight, if biofiltration is used.

(d) Daily volatile organic compound emissions from each commercial baking oven shall be determined according to the following: $EtOH = 0.40425 + 0.444585[(Y \times T) + (S \times t)]$, where;

- (1) EtOH = pounds ethanol per ton of baked bread.
- (2) Y = baker's percent yeast in sponge to the nearest tenth of a percent.
- (3) T = total time of fermentation in hours to the nearest tenth of an hour.
- (4) S = baker's percent of yeast added to dough to the nearest tenth of a percent.
- (5) t = proof time + floor time in hours to the nearest tenth of an hour.

(e) The owner or operator of a commercial bakery shall notify the Director within 30 days after the calculated emissions of VOC from the bakery equal or exceed 100 tons per year. The owner or operator shall submit within six months after such calculation a permit application including a schedule to bring the facility into compliance with this Rule.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a);
Eff. May 1, 1995.

15A NCAC 2D .0958 WORK PRACTICES FOR SOURCES OF VOLATILE ORGANIC COMPOUNDS

(a) This Rule applies to all facilities that use volatile organic compounds as solvents, carriers, material processing media, or industrial chemical reactants, or in other similar uses or that mix, blend, or manufacture volatile organic compounds, or emit volatile organic compounds as a product of chemical reactions.

(b) This Rule does not apply to:

- (1) architectural or maintenance coating, or
- (2) sources subject to 40 CFR Part 63, Subpart JJ.

(c) The owner or operator of any facility subject to this Rule shall:

- (1) store all material, including waste material, containing volatile organic compounds in containers covered with a tightly fitting lid that is free of cracks, holes, or other defects, when not in use,

- (2) clean up spills as soon as possible following proper safety procedures,
 - (3) store wipe rags in closed containers,
 - (4) not clean sponges, fabric, wood, paper products, and other absorbent materials,
 - (5) drain solvents used to clean supply lines and other coating equipment into closable containers and close containers immediately after each use,
 - (6) clean mixing, blending, and manufacturing vats and containers by adding cleaning solvent, closing the vat or container before agitating the cleaning solvent. The spent cleaning solvent shall then be poured into a closed container.
- (d) When cleaning parts, the owner or operator of any facility subject to this Rule shall:
- (1) flush parts in the freeboard area,
 - (2) take precautions to reduce the pooling of solvent on and in the parts,
 - (3) tilt or rotate parts to drain solvent and allow a minimum of 15 seconds for drying or until all dripping has stopped, whichever is longer,
 - (4) not fill cleaning machines above the fill line,
 - (5) not agitate solvent to the point of causing splashing.
- (e) The owner or operator of a source on which a control device has been installed to comply with 15A NCAC 2D .0518(d) shall continue to maintain and operate the control device unless the Director determines that the removal of the control device shall not cause or contribute to a violation of the ozone ambient air quality standard (15A NCAC 2D .0405).
- (f) The owner or operator of a source that has complied with 15A NCAC 2D .0518 by complying with a Rule in this Section, shall continue to comply with that rule unless the Director determines that if the source ceases to comply with that rule, it shall not cause or contribute to a violation of the ozone ambient air quality standard (15A NCAC .0405).
- (g) All sources at a facility subject to this Rule shall be permitted unless they are exempted from permitting by 15A NCAC 2Q .0102, Activities Exempted From Permit Requirements.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); Eff. July 1, 2000.

.0959 PETITION FOR SUPERIOR ALTERNATIVE CONTROLS

- (a) This Rule applies to all sources covered under this Section.
- (b) If the owner or operator of any source of volatile organic compounds subject to the requirements of this Section, can demonstrate that an

alternative operational or equipment control is superior to the required control, he may petition the Director to allow the use of alternative operational or equipment controls for the reduction of volatile organic compound emissions. The petition shall be made for each source to the Director.

(c) The petition shall contain:

- (1) the name and address of the company and the name and telephone number of a company officer over whose signature the petition is submitted;
- (2) a description of all operations conducted at the location to which the petition applies and the purpose that the volatile organic compound emitting equipment serves within the operations;
- (3) reference to the specific operational and equipment controls under the rules of this Section for which alternative operational or equipment controls are proposed;
- (4) a detailed description of the proposed alternative operational or equipment controls, the magnitude of volatile organic compound emission reduction that will be achieved, and the quantity and composition of volatile organic compounds that will be emitted if the alternative operational or equipment controls are instituted; and
- (5) certification that emissions of all other air contaminants from the subject source are in compliance with all applicable local, state and federal laws and regulations.

The petition may include a copy of the permit application and need not duplicate information in the permit application.

(d) The Director shall approve a petition for alternative control if:

- (1) The petition is submitted in accordance with Paragraph (c) of this Rule;
- (2) The Director determines that the proposed alternative operational or equipment control is superior to the required controls;
- (3) All other air contaminant emissions from the facility are in compliance with, or under a schedule for compliance as expeditiously as practicable with, all applicable local, state, and federal regulations; and
- (4) The petition contains a schedule for achieving and maintaining reduction of volatile organic compound emissions to the maximum extent feasible and as expeditiously as practicable.

(e) When controls different from those specified in the appropriate emission standards in this Section are approved by the Director, the

permit shall contain a condition stating such controls.

*History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. April 1, 2003.*

15A NCAC 2D .0960 CERTIFICATION OF LEAK TIGHTNESS TESTER

(a) Purpose. The purpose of this Rule is to establish procedures for certifying facilities to perform leak tightness tests on truck tanks as defined under Rule .0932 of this Section. (b) Certification request. To request certification to perform leak tightness testing on truck tanks for the purposes of complying with Rule .0932 of this Section, a facility shall submit to the Director the following information:

- (1) the name and address of the facility requesting certification, including the primary contact and telephone number;
- (2) evidence that the facility is registered with the United States Department of Transportation to perform leak checks;
- (3) evidence that the facility has the equipment necessary to perform Method 27 of 40 CFR Part 60, Subpart A; and
- (4) evidence that the facility has the skills necessary to perform Method 27 of 40 CFR Part 60, Subpart A correctly;

(c) Approval. The Director shall certify a facility requesting certification to perform leak tightness testing if he finds that:

(1) All the information required under Paragraph (b) of this Rule has been submitted;

(2) The Division has observed the facility conducting one or more leak tightness tests and finds that:

- (A) The facility has the equipment necessary to perform Method 27 of 40 CFR Part 60, Subpart A; and
- (B) The facility has the skills necessary to perform Method 27 of 40 CFR Part 60, Subpart A correctly;

(d) Expiration. A certification to perform leak tightness testing under this Rule shall expire one year from the date of its issuance.

(e) Renewal. To have a certification renewed, the certified facility shall submit to the Director a request to have the certification renewed. Within 30 days after receipt of the request, the Division shall observe the certified facility conducting one or more leak tightness tests. If the Director finds that:

- (1) The certified facility has the equipment necessary to perform Method 27 of 40 CFR Part 60, Subpart A; and
- (2) The certified facility has the skills necessary to perform

Method 27 of 40 CFR Part 60, Subpart A correctly, he shall renew the certification. If the certified facility submits a request for renewal after the expiration of the last certification, the Director shall reject the renewal request, and the facility shall request a new certification under Paragraph (b) of this Rule.

(f) Interim certification. If the Division is unable to observe the performance of leak tightness testing required under Paragraphs (c) or (e) of this Rule, the Director shall issue an interim certification for up to 90 days to allow the certified facility to perform leak tightness tests. An interim certification shall not be renewed.

(g) Revocation of Certification. If the Director finds that a certified facility is not performing Method 27 of 40 CFR Part 60, Subpart A correctly or that the certified facility is certifying tanks as leak tight that have not passed the leak tightness test, the Director shall revoke the facility's certification or interim certification.

(h) Stickers. The Division shall provide serialized stickers at no cost, or the facility may choose to provide the stickers. If the facility provides the stickers, the stickers shall contain the same information that is on the stickers provide by the Division and shall have the same dimensions and a sample sticker shall accompany the application for certification. Once a facility is certified under this Rule to perform leak tightness tests, stickers are to be:

- (1) affixed to tanks that have passed the test under Rule .0932 of this Section, and
- (2) placed near the Department of Transportation Certification plate (DOT, 49 CFR 178.340-10b).

The certified facility performing the test shall maintain a log matching sticker serial numbers and tank identification numbers. The certified facility shall send this log shall be sent to the Director monthly.

(i) Certification report. The certified facility performing the test shall give a copy of the certification report to the truck tank owner and shall retain a copy of the certification report. The certification report shall contain the following information:

- (1) name, address, and telephone number of certified facility performing the test;
- (2) name and signature of the individual actually performing the test;
- (3) name and address of the owner of the tank;
- (4) serial number of the sticker and identification number of the tank;
- (5) the date that the sticker is issued and the date that the sticker expires, which shall be one year after the issuance date;
- (6) the pressure drops measured and vacuum drops measured;

- (7) list or description of problems with tank (if none are found, the report shall state that none were found).

The certified facility performing the test shall provide the Director each month a copy of each certification report produced for the previous month. After July 2005, the certified facility shall cease sending the Director copies of the certification reports.

(j) Record retention. The certified facility performing the test and the owner of the truck tank shall keep the certification report for at least two years. Certification reports shall be made available to the Division upon request.

(k) Verification of leak tightness. The Division may use Method 21 to verify the leak tightness of a tank.

History Note: Authority *G.S. 143-215.3(a)(1); 143-215.107(a)(5), (13);*

Eff. April 1, 2003.

SECTION .1400 – NITROGEN OXIDES**15A NCAC 02D .1401 DEFINITIONS**

(a) For the purpose of this Section, the definitions at N.C.G.S 143-212 and 143-213, and 15A NCAC 2D .0101 shall apply, and in addition the following definitions apply. If a term in this Rule is also defined at 15A NCAC 2D .0101, then the definition in this Rule controls.

- (1) “Acid rain program” means the federal program for the reduction of acid rain including 40 CFR Parts 72, 75, 76, and 77.
- (2) “Actual emissions” means for Rules .1416 through .1422 of this Section, emissions of nitrogen oxides as measured and calculated according to 40 CFR Part 75, Subpart H.
- (3) “Actual heat input” means for Rules .1416 through .1422 of this Section, heat input as measured and calculated according to 40 CFR Part 75, Subpart H.
- (4) “Averaging set of sources” means all the stationary sources included in an emissions averaging plan according to Rule .1410 of this Section.
- (5) “Averaging source” means a stationary source that is included in an emissions averaging plan in accordance to Rule .1410 of this Section.
- (6) “Boiler” means an enclosed fossil or other fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or other medium.
- (7) “Combined cycle system” means a system consisting of one or more combustion turbines, heat recovery steam generators, and steam turbines configured to improve overall efficiency of electricity generation or steam production.
- (8) “Combustion turbine” means an enclosed fossil or other fuel-fired device that is comprised of a compressor, a combustor, and a turbine, and in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine.
- (9) “Diesel engine” means a compression ignited two- or four-stroke engine in which liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition.
- (10) “Dual fuel engine” means a compression ignited stationary internal combustion engine that is burning liquid fuel and gaseous fuel simultaneously.
- (11) “Emergency generator” means a stationary internal combustion engine used to generate electricity only during:

- (A) the loss of primary power at the facility that is beyond the control of the owner or operator of the facility or
- (B) maintenance when maintenance is being performed on the power supply to equipment that is essential in protecting the environment or to such equipment itself.

An emergency generator may be operated periodically to ensure that it will operate.

- (12) “Emergency use internal combustion engines” means stationary internal combustion engines used to drive pumps, aerators, and other equipment only during:

- (A) the loss of primary power at the facility that is beyond the control of the owner or operator of the facility or
- (B) maintenance when maintenance is being performed on the power supply to equipment that is essential in protecting the environment or to such equipment itself.

An emergency use internal combustion engine may be operated periodically to ensure that it will operate.

- (13) “Excess emissions” means an emission rate that exceeds the applicable limitation or standard; for the purposes of this definition, nitrogen oxides emitted by a source covered under Rule .1416, .1417, or .1418 of this Section during the ozone season above its allocation, as may be adjusted under Rule .1419 of this Section, are not considered excess emissions.

- (14) “Fossil fuel fired” means

- (a) For sources that began operation before January 1, 1996, where fossil fuel actually combusted either alone or in combination with any other fuel, comprises more than 50 percent of the annual heat input on a Btu basis during 1995, or, if a source had no heat input in 1995, during the last year of operation of the unit before 1995;
- (b) For sources that began operation on or after January 1, 1996 and before January 1, 1997, where fossil fuel actually combusted either alone or in combination with any other fuel, comprises more than 50 percent of the annual heat input on a Btu basis during 1996; or
- (c) For sources that began operation on or after January 1, 1997:
 - (i) Where fossil fuel actually combusted either alone or in combination with any other fuel, comprises more than 50 percent of the annual heat input on a Btu basis during any year; or
 - (ii) Where fossil fuel combusted either alone or in combination with any other fuel, is projected to comprise more than 50 percent of the annual heat

input on a Btu basis during any year, provided that the unit shall be "fossil fuel-fired" as of the date, during such year, on which the source begins combusting fossil fuel.

- (15) "Indirect-fired process heater" means an enclosed device using controlled flame where the device's primary purpose is to transfer heat by indirect heat exchange to a process fluid, a process material that is not a fluid, or a heat transfer material, instead of steam, for use in a process.
- (16) "Lean-burn internal combustion engine" means a spark ignition internal combustion engine originally designed and manufactured to operate with an exhaust oxygen concentration greater than one percent.
- (17) "NO_x" means nitrogen oxides.
- (18) "Ozone season" means the period beginning May 31 and ending September 30 for 2004 and beginning May 1 and ending September 30 for all other years.
- (19) "Potential emissions" means the quantity of NO_x that would be emitted at the maximum capacity of a stationary source to emit NO_x under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit NO_x shall be treated as a part of its design if the limitation is federally enforceable. Such physical or operational limitations include air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed.
- (20) "Projected seasonal energy input" means the maximum design heat input per hour times 3300 hours.
- (21) "Projected seasonal energy output" means the maximum design energy output per hour times 3300 hours.
- (22) "Reasonable assurance" means a demonstration to the Director that a method, procedure, or technique is possible and practical for a source or facility under the expected operating conditions.
- (23) "Reasonably Available Control Technology" or "RACT" means the lowest emission limitation for NO_x that a particular source can meet by the application of control technology that is reasonably available considering technological and economic feasibility.
- (24) "Reasonable effort" means the proper installation of technology designed to meet the requirements of Rule .1407, .1408, or .1409 of this Section and the utilization this technology, according to the manufacturer's recommendations or other similar guidance for not less than six months, in an effort to meet the applicable limitation for a source.

- (25) “Rich-burn internal combustion engine” means a spark ignition internal combustion engine originally designed and manufactured to operate with an exhaust oxygen concentration less than or equal to one percent.
- (26) “Seasonal energy input” means the total energy input of a combustion source during the period beginning May 1 and ending September 30.
- (27) “Seasonal energy output” means the total energy output of a combustion source during the period beginning May 1 and ending September 30.
- (28) “Shutdown” means the cessation of operation of a source or its emission control equipment.
- (29) “Source” means a stationary boiler, combustion turbine, combined cycle system, reciprocating internal combustion engine, indirect-fired process heater, or a stationary article, machine, process equipment, or other contrivance, or combination thereof, from which nitrogen oxides emanate or are emitted.
- (30) “Startup” means the commencement of operation of any source that has shutdown or ceased operation for a period sufficient to cause temperature, pressure, process, chemical, or pollution control device imbalance that would result in excess emissions.
- (31) “Stationary internal combustion engine” means a reciprocating internal combustion engine that is not self propelled; however, it may be mounted on a vehicle for portability.

(b) Whenever reference is made to the Code of Federal Regulations in this Section, the definitions in the Code of Federal Regulations shall apply unless specifically stated otherwise in a particular rule.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5), (7), (10); Eff. April 1, 1995; Temporary Amendment Eff. August 1, 2001; November 1, 2000; Amended Eff. July 15, 2002.

15A NCAC 02D .1402 APPLICABILITY

- (a) The requirements of this Section shall apply to all sources May 1 through September 30 of each year.
- (b) Rules .1409(b) and .1416 through .1423 of this Section apply statewide.
- (c) Rules .1407, .1408, .1409(a), and .1413 of this Section apply to sources identified according to Paragraph (d) of this Rule.
- (d) With the exceptions stated in Paragraph (h) of this Rule, this Section shall apply to:
 - (1) Charlotte/Gastonia, consisting of Mecklenburg and Gaston Counties according to Paragraph (e) of this Rule;

- (2) Greensboro/Winston-Salem/High Point, consisting of Davidson, Forsyth, and Guilford Counties and the part of Davie County bounded by the Yadkin River, Dutchmans Creek, North Carolina Highway 801, Fulton Creek and back to Yadkin River according to Paragraph (f) of this Rule; or
- (3) Raleigh/Durham, consisting of Durham and Wake Counties and Dutchville Township in Granville County according to Paragraph (g) of this Rule.

(e) If a violation of the ambient air quality standard for ozone is measured according to 40 CFR 50.9 in Cabarrus, Gaston, Iredell, Lincoln, Mecklenburg, Rowan, or Union County, North Carolina or York County, South Carolina, the Director shall initiate analysis to determine the control measures needed to attain and maintain the ambient air quality standard for ozone. By the following May 1, the Director shall implement the specific stationary source control measures contained in this Section that are required as part of the control strategy necessary to bring the area into compliance and to maintain compliance with the ambient air quality standard for ozone. The Director shall implement the rules in this Section identified as necessary by the analysis by notice in the North Carolina Register. The notice shall identify the rules that are to be implemented and shall identify whether the rules implemented are to apply in Gaston or Mecklenburg County or in both counties. At least one week before the scheduled publication date of the North Carolina Register containing the Director's notice implementing rules in this Section, the Director shall send written notification to all permitted facilities within the county in which the rules are being implemented that are or may be subject to the requirements of this Section informing them that they are or may be subject to the requirements of this Section. (For Mecklenburg County, "Director" means for the purpose of notifying permitted facilities in Mecklenburg County, the Director of the Mecklenburg County local air pollution control program.) Compliance shall be according to Rule .1403 of this Section.

(f) If a violation of the ambient air quality standard for ozone is measured according to 40 CFR 50.9 in Davidson, Forsyth, or Guilford County or that part of Davie County bounded by the Yadkin River, Dutchmans Creek, North Carolina Highway 801, Fulton Creek and back to Yadkin River, the Director shall initiate analysis to determine the control measures needed to attain and maintain the ambient air quality standard for ozone. By the following May 1, the Director shall implement the specific stationary source control measures contained in this Section that are required as part of the control strategy necessary to bring the area into compliance and to maintain compliance with the ambient air quality standard for ozone. The Director shall implement the rules in this Section identified as necessary by the analysis by notice in the North Carolina Register. The notice shall identify the rules that are to be implemented and shall identify whether the rules implemented are to apply in Davidson, Forsyth, or Guilford

County or that part of Davie County bounded by the Yadkin River, Dutchmans Creek, North Carolina Highway 801, Fulton Creek and back to Yadkin River or any combination thereof. At least one week before the scheduled publication date of the North Carolina Register containing the Director's notice implementing rules in this Section, the Director shall send written notification to all permitted facilities within the county in which the rules are being implemented that are or may be subject to the requirements of this Section informing them that they are or may be subject to the requirements of this Section. (For Forsyth County, "Director" means for the purpose of notifying permitted facilities in Forsyth County, the Director of the Forsyth County local air pollution control program.) Compliance shall be according to Rule .1403 of this Section.

(g) If a violation of the ambient air quality standard for ozone is measured according to 40 CFR 50.9 in Durham or Wake County or Dutchville Township in Granville County, the Director shall initiate analysis to determine the control measures needed to attain and maintain the ambient air quality standard for ozone. By the following May 1, the Director shall implement the specific stationary source control measures contained in this Section that are required as part of the control strategy necessary to bring the area into compliance and to maintain compliance with the ambient air quality standard for ozone. The Director shall implement the rules in this Section identified as necessary by the analysis by notice in the North Carolina Register. The notice shall identify the rules that are to be implemented and shall identify whether the rules implemented are to apply in Durham or Wake County or Dutchville Township in Granville County or any combination thereof. At least one week before the scheduled publication date of the North Carolina Register containing the Director's notice implementing rules in this Section, the Director shall send written notification to all permitted facilities within the county in which the rules are being implemented that are or may be subject to the requirements of this Section informing them that they are or may be subject to the requirements of this Section. Compliance shall be in according to Rule .1403 of this Section.

(h) This Section does not apply to any:

- (1) source not required to obtain an air permit under 15A NCAC 2Q .0102 or is an insignificant activity as defined at 15A NCAC 2Q .0103(19);
- (2) incinerator or thermal or catalytic oxidizer used primarily for the control of air pollution;
- (3) emergency generator;
- (4) emergency use internal combustion engine;
- (5) source that is not covered under Rule .1416, .1417, or .1418, and that is at a facility with a federally enforceable potential to emit nitrogen oxides of:
 - (A) less than 100 tons per year; and

- (B) less than 560 pounds per calendar day beginning May 1 through September 30 of any year.
- (6) stationary internal combustion engine less than 2400 brake horsepower that operates no more than the following hours between May 1 and September 30:
 - (A) for diesel engines:
 - (B) for natural gas-fired engines:

where t equals time in hours and ES equals engine size in horsepower.

This exemption shall not apply to any of the sources listed in Rules .1417(a)(1) or (2) or .1417(b) of this Section except that it shall apply to:

- (7) stationary combustion turbine constructed before January 1, 1979, that has a federally enforceable permit that restricts:
 - (A) its potential emissions of nitrogen oxides to no more than 25 tons between May 1 and September 30;
 - (B) it to burning only natural gas or oil; and
 - (C) its hours of operation as described in 40 CFR 96.4 (b) (1)(ii) and (iii).

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5), (7), (10);
 Eff. April 1, 1995;
 Amended Eff. April 1, 1997; July 1, 1995; April 1, 1995.
 Temporary Amended Eff.; November 1, 2000;
 Amended Eff. April 1, 2001;
 Temporary Amended Eff. August 1, 2001;
 Amended Eff. July 15, 2002;

15A NCAC 02D .1403 COMPLIANCE SCHEDULES

- (a) Applicability. This Rule applies to sources as set out below.
- (b) Maintenance areas. The owner or operator of a source subject to this Rule because of the applicability of Paragraphs (e), (f), or (g) of Rule .1402 of this Section, 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 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, according to Rule .1415 of this Section, 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, according to Rule .1404 of this Section, 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 according to Rule .1412 of this Section. If such a petition is made, 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 as provided for in Rule .1410 of this Section:
- (A) The owner or operator shall abide by the applicable requirements of 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 according to Rule .1410 of this Section 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 as provided for in Rule .1411 of this Section:
 - (A) The owner or operator shall make all necessary modifications according to Subparagraph (b)(2) of this Rule.
 - (B) The owner or operator shall include a plan for complying with the requirements of Rule .1411 of this Section with the permit application required under Part (A) of this Subparagraph.
 - (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 the deadline for each increment of progress in this Paragraph, whether the required increment of progress has been met.
- (c) Schedule for utility companies. The owner or operator of a source subject to this Rule because of Rule .1416 of this Section shall:
- (1) submit to the Director before October 1, 2003, a description of how the source will comply, which shall include an estimate of the number of tons of nitrogen oxides per ozone season, which may be a range, that will be obtained from the nitrogen oxide budget trading program under Rule .1419 of this Section to show compliance;
 - (2) submit to the Director a permit application, following the schedules in 15A NCAC 2Q .0312, .0313, .0525, or .0527, as applicable, to receive a permit and make the modification or construct and begin operating the control device before the final compliance dates in Rule .1416 of this Section if a permit is needed for source modifications or control device installation or modification; and
 - (3) install and implement any required monitoring, recordkeeping, and reporting requirements before May 1, 2004; if a permit application is necessary to install and operate the monitor, the permit application shall be submitted by October 1, 2003; if a permit application is not submitted, the Director shall modify the source's permit by January 1, 2004, to insert the monitoring, recordkeeping,

and reporting requirements necessary to show compliance with this Section.

(d) Schedule for large combustion sources. The owner or operator of a source subject to this Rule because of Rules .1409(b) or .1417 of this Section shall:

- (1) submit to the Director before October 1, 2003, a description of how the source will comply, which shall include an estimate of the number of tons of nitrogen oxides per ozone season, which may be a range, that will be obtained from the nitrogen oxide budget trading program under Rule .1419 of this Section to show compliance;
- (2) submit to the Director a permit application, following the schedules in 15A NCAC 2Q .0312, .0313, .0525, or .0527, as applicable, to receive a permit and make the modification or construct and begin operating the control device before the final compliance dates in Rules .1409(b) or .1417 of this Section if a permit is needed for source modifications or control device installation or modification;
- (3) install and implement any required monitoring, recordkeeping, and reporting requirements before May 1, 2004; if a permit application is necessary to install and operate the monitor, the permit application shall be submitted by October 1, 2003; if a permit application is not submitted, the Director shall modify the source's permit by January 1, 2004, to insert the monitoring, recordkeeping, and reporting requirements necessary to show compliance with this Section.

(e) New sources. The owner or operator of any new source of nitrogen oxides not permitted as of the date the Director notices in the North Carolina Register according to Paragraphs (e), (f), or (g) of Rule .1402 of this Section, shall comply with all applicable rules in this Section upon start-up of the source. The owner or operator of any new source covered under Rules .1407, .1408, .1409, .1413, or .1418 of this Section 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), (7), (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 15, 2002.

15A NCAC 02D .1404 RECORDKEEPING: REPORTING: MONITORING:

(a) General requirements. The owner or operator of any source shall comply with the monitoring, recordkeeping and reporting requirements in Section .0600 of this Subchapter and shall maintain all records necessary for determining compliance with all applicable limitations and standards of this Section for five years.

(b) Submittal of information to show compliance status. The owner or operator of any source shall maintain and, when requested by the Director, submit any information required by these rules to determine the compliance status of an affected source.

(c) Excess emissions reporting. The owner or operator shall report excess emissions following the procedures under Rule .0535 of this Subchapter.

(d) Continuous emissions monitors.

(1) The owner or operator shall install, operate, and maintain a continuous emission monitoring system according to 40 CFR Part 75, Subpart H, with such exceptions as may be allowed under 40 CFR Part 75, Subpart H or 40 CFR Part 96 if:

- (A) a source is covered under Rules .1416, .1417, or .1418 of this Section except internal combustion engines, or
- (B) any source that opts into the nitrogen oxide budget trading program under Rule .1419 of this Section .

(2) The owner or operator of a source that is subject to the requirements of this Section but not covered under Subparagraph (1) of this Paragraph and that uses a continuous emissions monitoring system to measure emissions of nitrogen oxides shall operate and maintain the continuous emission monitoring system according to 40 CFR Part 60, Appendix B, Specification 2, and Appendix F or Part 75, Subpart H. If diluent monitoring is required, 40 CFR Part 60, Appendix B, Specification 3, shall be used. If flow monitoring is required, 40 CFR Part 60, Appendix B, Specification 6, shall be used.

(3) The owner or operator of the following sources shall not be required to use continuous emission monitors unless the Director determines that a continuous emission monitor is necessary under Rule .0611 of this Subchapter to show compliance with the rules of this Section:

- (A) a boiler or indirect-fired process heater covered under Rule .1407 of this Section with a maximum heat input less than or equal to 250 million Btu per hour;
- (B) stationary internal combustion engines covered under Rule .1409 of this Section except for engines covered under Rules .1409(b) and .1418 of this Section.

(e) Missing data.

- (1) If data from continuous emission monitoring systems required to meet the requirements of 40 CFR Part 75 are not available at a time that the source is operated, the procedures in 40 CFR Part 75 shall be used to supply the missing data.
 - (2) For continuous emissions monitors not covered under Subparagraph (1) of this Paragraph, data shall be available for at least 95 percent of the emission sources operating hours for the applicable averaging period, where four equally spaced readings constitute a valid hour. If data from continuous emission monitoring systems are not available for at least 95 percent of the time that the source is operated, the owner or operator of the monitor shall:
 - (A) use the procedures in 40 CFR 75.33 through 75.37 to supply the missing data; or
 - (B) document that the combustion source or process equipment and the control device were being properly operated (acceptable operating and maintenance procedures are being used, such as, compliance with permit conditions, operating and maintenance procedures, and preventative maintenance program, and monitoring results and compliance history) when the monitoring measurements were missing.
- (f) Quality assurance for continuous emissions monitors.
- (1) The owner or operator of a continuous emission monitor required to meet 40 CFR Part 75, Subpart H, shall follow the quality assurance and quality control requirements of 40 CFR Part 75, Subpart H.
 - (2) For a continuous emissions monitor not covered under Subparagraph (1) of this Paragraph, the owner or operator of the continuous emissions monitor shall follow the quality assurance and quality control requirements of 40 CFR Part 60, Appendix F, if the monitor is required to be operated annually under another rule. If the continuous emissions monitor is being operated only to satisfy the requirements of this Section, then the quality assurance and quality control requirements of 40 CFR Part 60, Appendix F, shall apply except that:
 - (A) A relative accuracy test audit shall be conducted after January 1 and before May 1 of each year;
 - (B) **One of the following shall be conducted at least once between May 1 and September 30 of each year:**
 - (i) a linearity test, according to 40 CFR Part 75, Appendix A, Section 3.2, 6.2, and 7.1;
 - (ii) a relative accuracy audit, according to 40 CFR Part 60, Appendix F, Section 5 and 6; or
 - (iii) a cylinder gas audit according to 40 CFR Part 60, Appendix F, Section 5 and 6; and

- (C) A daily calibration drift test shall be conducted according to 40 CFR Part 60, Appendix F, Section 4.0.
- (g) End of season reporting for large sources. The owner or operator of a source covered under Rules .1416, .1417, or .1418 of this Section shall report to the Director no later than October 30 of each year, the tons of nitrogen oxides emitted during the previous ozone season. The Division of Air Quality shall make this information publicly available.
- (h) Recordkeeping and reporting requirements for large sources. The owner or operator of a source covered under Rules .1416, .1417, or .1418 of this Section shall comply with the recordkeeping and reporting requirements of 40 CFR Part 96, Budget Trading Program for State Implementation Plans.
- (i) Averaging time for continuous emissions monitors. When compliance with a limitation established for a source subject to the requirements of this Section is determined using a continuous emissions monitoring system, a 24-hour block average as described under Rule .0606 of this Subchapter shall be recorded for each day beginning May 1 through September 30 unless a specific rule requires a different averaging time or procedure. Sources covered under Rules .1416, .1417, or .1418 of this Section shall comply with the averaging time requirements of 40 CFR Part 75. A 24-hour block average described in Rule .0606 of this Subchapter shall be used when a continuous emissions monitoring system is used to determine compliance with a short-term pounds-per-million-Btu standard in Rule .1418 of this Section.
- (j) Heat input. Heat input shall be determined:
- (1) for sources required to use a monitoring system meeting the requirements of 40 CFR Part 75, using the procedures in 40 CFR Part 75; or
 - (2) for sources not required to use a monitoring system meeting the requirements of 40 CFR Part 75 using:
 - (A) 40 CFR Part 75,
 - (B) a method in 15A NCAC 2D .0501, or
 - (C) the best available heat input data if approved by the Director (the Director shall grant approval if he finds that the heat input data is the best available).
- (k) **Source testing.** When compliance with a limitation established for a source subject to the requirements of this Section is determined using source testing, the source testing shall follow the procedures of Rule .1415 of this Section.
- (l) Alternative monitoring and reporting procedures. The owner or operator of a source covered under this Rule, except for sources covered under Rule .1419 of this Section, may request alternative monitoring or reporting procedures under Rule .0612, Alternative Monitoring and Reporting Procedures.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5), (7), (10);
Eff. April 1, 1995;
Amended Eff. April 1, 1999.

*Temporary Amendment Eff. November 1, 2000;
Amended Eff. April 1, 2001;
Temporary Amendment Eff. August 1, 2001;
Amended Eff. December 1, 2005; January 1, 2005; May 1, 2004; July 15,
2002.*

15A NCAC 02D .1405 CIRCUMVENTION

- (a) An owner or operator subject to this Section shall not build, erect, install or use any article, machine, equipment, process, or method which conceals an emission which would otherwise constitute a violation of an applicable rule.
- (b) Paragraph (a) of this Rule includes the use of gaseous diluent to achieve compliance and the piecemeal carrying out of an operation to avoid coverage by a rule that applies only to operations larger than a specified size.

*History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. April 1, 1995.*

[pages D-1400-16 through D-1400-18 reserved]

15A NCAC 02D .1406 UTILITY BOILERS (REPEALED)

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
 Eff. April 1, 1995;
 Temporary Repeal Eff. August 1, 2001; November 1, 2000;
 Repealed Eff. July 15, 2002.

15A NCAC 02D .1407 BOILERS AND INDIRECT-FIRED PROCESS HEATERS

(a) The owner or operator of a boiler or indirect-fired process heater subject to the requirements of this Section as determined by Rule .1402(d) of this Section with a maximum heat input rate of less than or equal to 50 million Btu per hour shall comply with the annual tune-up requirements of Rule .1414 of this Section. The owner or operator of a boiler or indirect-fired process heater subject to the requirements of this Paragraph shall maintain records of all tune-ups performed for each source according to Rule .1404 of this Section.

(b) The owner or operator of a fossil fuel-fired boiler with a maximum heat input rate less than or equal to 250 million Btu per hour but greater than 50 million Btu per hour, a boiler with a maximum heat input greater than 50 million Btu per hour that is not a fossil fuel-fired boiler, or an indirect-fired process heater with a maximum heat input greater than 50 million Btu per hour shall comply by:

- (1) installation of, if necessary, combustion modification technology or other NO_x control technology and maintenance, including annual tune-ups and recordkeeping; and
- (2) demonstration through source testing or continuous emission monitoring that the source complies with the following applicable limitation:

**MAXIMUM ALLOWABLE NO_x EMISSION RATES FOR BOILERS AND
 INDIRECT PROCESS HEATERS
 (POUNDS PER MILLION BTU)**

Fuel/Boiler Type	Firing Method		
	Tangential	Wall	Stoker or Other
Coal (Wet Bottom)	1.0	1.0	N/A
Coal (Dry Bottom)	0.45	0.50	0.40
Wood or Refuse	0.20	0.30	0.20
Oil	0.30	0.30	0.30
Gas	0.20	0.20	0.20

(c) If this Rule becomes applicable to a boiler or indirect-fired process heater pursuant to Rule .1402(d), and the emissions are greater than the applicable limitation in Paragraph (b) of this Rule after reasonable effort as defined in Rule

.1401 of this Section, or if the requirements of this Rule are not RACT, the owner or operator may petition the Director for an alternative limitation or standard in accordance with Rule .1412 of this Section.

(d) Compliance with the limitation established for a boiler or indirect-fired process heater under this Rule shall be determined:

- (1) using a continuous emissions monitoring system for boilers or indirect-fired process heaters with a maximum heat input rate greater than 250 million Btu per hour;
- (2) using a continuous emission monitoring system if the boiler or indirect-fired process heater is required to use a continuous emissions monitoring system under Rule .0524 of this Section or 40 CFR Part 60 to measure emissions of nitrogen oxides; or
- (3) using annual source testing according to Rule .1415 of this Section for boilers or indirect-fired process heaters with a maximum heat input rate less than or equal to 250 million Btu per hour but greater than 50 million BTU per hour with the exception allowed under Paragraph (e) of this Rule.

(e) If a source covered under this rule can burn more than one fuel, the owner or operator of the source may choose not to burn one or more of these fuels during the ozone season. If the owner or operator chooses not to burn a particular fuel, the sources testing required under Subparagraph (d)(3) this Rule shall not be required for that fuel.

(f) If two consecutive annual source tests show compliance, the Director may reduce the frequency of testing up to once every five years. In years that a source test is not done, the boiler or indirect-fired process heater shall comply with the annual tune-up requirements of Rule .1414 of this Section. If after the Director reduces the frequency of testing, a source test shows that the emission limit under this Rule is exceeded, the Director shall require the boiler or indirect-fired process heater to be tested annually until two consecutive annual tests show compliance. Then the Director may again reduce the frequency of testing.

*History Note: Authority G.S. 143-215.3(a)(1); 143-215.66; 143-215.107(a)(5), (7), (10);
Temporary Amendment Eff. November 1, 2000;
Eff. April 1, 1995;
Temporary Amendment Eff. August 1, 2001;
Amended Eff. July 15, 2002.*

15A NCAC 02D .1408 STATIONARY COMBUSTION TURBINES

(a) Unless the owner or operator chooses the option of emission averaging under Rule .1410 of this Section, the owner or operator of a stationary combustion turbine with a heat input rate greater than 100 million Btu per hour but less than or equal to 250 million Btu per hour shall comply with the following limitations:

- (1) Emissions of NO_x shall not exceed 75 ppm by volume corrected to 15 percent oxygen for gas-fired turbines or
- (2) Emissions of NO_x shall not exceed 95 ppm by volume corrected to 15 percent oxygen for oil-fired turbines.

If necessary, the owner or operator shall install combustion modification technology or other NO_x control technology to comply with the applicable limitation set forth in this Paragraph.

(b) If this Rule becomes applicable to a stationary combustion turbine pursuant to Rule .1402(d), and the emissions are greater than the applicable limitation in Paragraph (a) of this Rule after reasonable effort as defined in Rule .1401 of this Section, or if the requirements of this Rule are not RACT for the particular stationary combustion turbine, the owner or operator may petition the Director for an alternative limitation or standard according to Rule .1412 of this Section.

(c) Compliance with the limitation established for a stationary combustion turbine under this Rule shall be determined:

- (1) using a continuous emissions monitoring system or
- (2) using annual source testing according to Rule .1415 of this Section.

(d) If a source covered under this rule can burn more than one fuel, the owner or operator of the source may choose not to burn one or more of these fuels during the ozone season. If the owner or operator chooses not to burn a particular fuel, the sources testing required under this Rule shall not be required for that fuel.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.66; 143-215.107(a)(5), (7), (10);

Eff. April 1, 1995;

Temporary Amendment Eff. . August 1, 2001; November 1, 2000;

Amended Eff. July 15, 2002.

15A NCAC 02D .1409 STATIONARY INTERNAL COMBUSTION ENGINES

(a) The owner or operator of a stationary internal combustion engine having a rated capacity of 650 horsepower or more that is not covered under Paragraph (b) of this Rule or Rule .1418 of this Section shall not allow emissions of NO_x from the stationary internal combustion engine to exceed the following limitations:

MAXIMUM ALLOWABLE NO_x EMISSION RATES FOR STATIONARY INTERNAL COMBUSTION ENGINES (GRAMS PER HORSEPOWER HOUR)

Engine Type	Fuel Type	Limitation
Rich-burn	Gaseous	2.5
Lean-burn	Gaseous	2.5

Compression Ignition

Liquid

8.0

(b) Engines identified in the table in this Paragraph shall not exceed the emission limit in the table during the ozone season; for the 2002 and 2003 ozone season, there shall not be any restrictions on emissions of nitrogen oxides from these engines under this Rule.

SUM OF MAXIMUM ALLOWABLE OZONE SEASON NO _x EMISSIONS (tons per ozone season)				
FACILITY	REGULATED SOURCES	ALLOWABLE EMISSIONS 2004	ALLOWABLE EMISSIONS 2005	ALLOWABLE EMISSIONS 2006 and later
Transcontinental Gas Pipeline Station 150	Mainline engines #12, 13, 14, and 15	311	189	76
Transcontinental Gas Pipeline Station 155	Mainline engines #2, 3, 4, 5, and 6	509	314	127
Transcontinental Gas Pipeline Station 160	Mainline engines #11, 12, 13, 14, and 15	597	367	149

Compliance shall be determined by summing the actual emissions from the engines listed in the table at each facility for the ozone season and comparing those sums to the limits in the table. Compliance may be achieved through trading under Paragraph (g) of this Rule if the trades are approved before the ozone season.

(c) If this Rule becomes applicable to a stationary internal combustion engine pursuant to Rule .1402(d), then, if after reasonable effort as defined in Rule .1401 of this Section, the emissions from that stationary internal combustion engine are greater than the applicable limitation in Paragraph (a) of this Rule, or if the requirements of this Rule are not RACT for the particular stationary internal combustion engine, the owner or operator may petition the Director for an alternative limitation or standard according to Rule .1412 of this Section.

(d) For the engines identified in Paragraph (b) of this Rule and any engine involved in emissions trading with one or more of the engines identified in Paragraph (b) of this Rule, the owner or operator shall determine compliance using:

- (1) a continuous emissions monitoring system which meets the applicable requirements of Appendices B and F of 40 CFR part 60 and Rule .1404 of this Section; or
- (2) an alternate monitoring and recordkeeping procedure based on actual emissions testing and correlation with operating parameters.

The installation, implementation, and use of this alternate procedure allowed under Subparagraph (d)(2) of this Paragraph shall be approved by the Director

before it may be used. The Director may approve the alternative procedure if he finds that it can show the compliance status of the engine.

(e) If a stationary internal combustion engine is permitted to operate more than 475 hours during the ozone season, compliance with the limitation established for a stationary internal combustion engine under Paragraph (a) of this Rule shall be determined using annual source testing according to Rule .1415 of this Section. If a source covered under this rule can burn more than one fuel, then the owner or operator of the source may choose not to burn one or more of these fuels during the ozone season. If the owner or operator chooses not to burn a particular fuel, the source testing required under this Rule shall not be required for that fuel.

(f) If a stationary internal combustion engine is permitted to operate no more than 475 hours during the ozone season, the owner or operator of the stationary internal combustion engine shall show compliance with the limitation under Paragraph (a) of this Rule with source testing during the first ozone season of operation according to Rule .1415 of this Section. Each year after that, the owner or operator of the stationary internal combustion engine shall comply with the annual tune-up requirements of Rule .1414 of this Section.

(g) The owner or operator of a source covered under Paragraph (b) of this Rule may offset part or all of the emissions of that source by reducing the emissions of another stationary internal combustion engine at that facility by an amount equal to or greater than the emissions being offset. Only actual decreased emissions that have not previously been relied on to comply with Subchapter 2D or 2Q of this Title or Title 40 of the Code of Federal Regulations can be used to offset the emissions of another source. The person requesting the offset shall submit the following information to the Director:

- (1) identification of the source, including permit number, providing the offset and what the new allowable emission rate for the source will be;
- (2) identification of the source, including permit number, receiving the offset and what the new allowable emission rate for the source will be;
- (3) the amount of allowable emissions in tons per ozone season being offset;
- (4) a description of the monitoring, recordkeeping, and reporting that shall be used to show compliance; and
- (5) documentation that the offset is an actual decrease in emissions that has not previously been relied on to comply with Subchapter 2D or 2Q of this Title or Title 40 of the Code of Federal Regulations.

The Director may approve the offset if he finds that all the information required by this Paragraph has been submitted and that the offset is an actual decrease in emissions that have not previously been relied on to comply with Subchapter 2D or 2Q of this Title or Title 40 of the Code of Federal Regulations. If the Director

approves the offset, he shall put the new allowable emission rates in the respective permits.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.66; 143-215.107(a)(5), (7), (10);
Temporary Amendment Eff. November 1, 2000;
Eff. April 1, 1995;
Temporary Amendment Eff. August 1, 2001;
Amended Eff. June 1, 2004; July 15, 2002.

15A NCAC 02D .1410 EMISSIONS AVERAGING

(a) This Rule shall not apply to sources covered under Rule .1416, .1417, or .1418 of this Section. Sources that have obtained an alternative limitation as provided by Rule .1412 of this Section or that apply seasonal fuel switching as provided by Rule .1411 of this Section are not eligible to participate in an emissions averaging plan under this Rule.

(b) With the exceptions in Paragraph (a) of this Rule, the owner or operator of a facility with two or more sources with comparable plume rise and subject to the requirements of this Section for all such sources as determined by Rule .1402 of this Section may elect to apply an emissions averaging plan according to Paragraph (c) of this Rule. An emission averaging plan may be used if the total NO_x emissions from the averaged set of sources based on the total heat input are equal to or less than the NO_x emissions that would have occurred if each source complied with the applicable limitation.

(c) To request approval of an emissions averaging plan to comply with the requirements of this Section, the owner or operator of a facility shall submit a written request to the Director including the following information:

- (1) the name and location of the facility;
- (2) information identifying each source to be included under the averaging plan;
- (3) the maximum heat input rate for each source;
- (4) the fuel or fuels combusted in each source;
- (5) the maximum allowable NO_x emission rate proposed for each averaging source;
- (6) a demonstration that the nitrogen oxide emissions of the sources being averaged when operated together at the maximum daily heat input rate, will be less than or equal to the total NO_x emissions if each source complied with the applicable limitation of this Section individually;
- (7) an operational plan to provide reasonable assurance that the sources being averaged will satisfy Subparagraph (5) of this Paragraph when the combined maximum daily heat input rate is less than the permitted maximum heat input rate; and

- (8) the method to be used to determine the actual NO_x emissions from each source.

*History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.107(a)(5), (7), (10);
Temporary Amendment Eff. August 1, 2001; November 1, 2000;
Eff. April 1, 1995;
Amended Eff. July 15, 2002.*

15A NCAC 02D .1411 SEASONAL FUEL SWITCHING

(a) This Rule shall not apply to sources covered under Rule .1416, .1417, or .1418 of this Section.

(b) The owner or operator of a coal-fired or oil-fired boiler subject to the requirements of Rule .1407 of this Section may elect to comply by applying seasonal combustion of natural gas according to Paragraph (c) of this Rule. This option is not available to a boiler that used natural gas as its primary fuel in or since 1990. Compliance with this Section according to this Rule does not remove or reduce any applicable requirement of the Acid Rain Program.

(c) The owner or operator electing to comply with the requirements of this Section through the seasonal combustion of natural gas shall establish a NO_x emission limit beginning October 1 and ending April 30 that will result in annual NO_x emissions of less than or equal to the NO_x that would have been emitted if the source complied with the applicable limitation for the combustion of coal for the entire calendar year. Compliance with this Section according to this Rule does not remove or reduce any applicable requirement of the Acid Rain Program.

(d) To comply with the requirements of this Section through the seasonal combustion of natural gas, the owner or operator shall submit to the Director the following information:

- (1) the name and location of the facility;
- (2) information identifying the source to use seasonal combustion of natural gas for compliance;
- (3) the maximum heat input rate for each source;
- (4) a demonstration that the source will comply with the applicable limitation for the combustion of coal during the ozone season
- (5) a demonstration that the source will comply with the NO_x emission limitation established under Paragraph (c) of this Rule beginning October 1 and ending April 30; and
- (6) a written statement from the natural gas supplier providing reasonable assurance that the fuel will be available beginning during the ozone season.

History Note: Authority G.S. 143-215.3(a)(1) 143-215.65; 143-215.107(a)(5), (7), (10);

*Eff. April 1, 1995;
Temporary Amendment Eff November 1, 2000;
Amended Eff. April 1, 2001;
Temporary Amendment Eff August 1, 2001;
Amended Eff. July 15, 2002.*

15A NCAC 02D .1412 PETITION FOR ALTERNATIVE LIMITATIONS

(a) If the owner or operator of a source subject to the requirements of Rule .1407, .1408, or .1409(a) of this Section:

- (1) cannot achieve compliance with the applicable limitation after reasonable effort to satisfy the requirements of Rules .1407, .1408, or .1409 of this Section or if the requirements of Rules .1407, .1408, or .1409 of this Section are not RACT for the particular source; and
- (2) cannot provide reasonable assurance for overall compliance at a facility through the implementation of an emissions averaging plan as provided for in Rule .1410 of this Section;

the owner or operator may petition the Director for an alternative limitation according to Paragraph (b) or (c) of this Rule.

(b) To petition the Director for an alternative limitation, the owner or operator of the source shall submit;

- (1) the name and location of the facility;
- (2) information identifying the source for which an alternative limitation is being requested;
- (3) the maximum heat input rate for the source;
- (4) the fuel or fuels combusted in the source;
- (5) the maximum allowable NO_x emission rate proposed for the source for each fuel;
- (6) a demonstration that the source has satisfied the requirements to apply for an alternative limitation under Paragraph (a) of this Rule; and
- (7) a demonstration that the proposed alternative limitation is RACT for that source.

(c) If the source is required to comply with best achievable control technology under Rule .0530, Prevention of Significant Deterioration, of this Subchapter, the owner or operator of the source shall provide the information required under Subparagraphs (b)(1) through (6) of this Rule and documentation that the source is required to use best available control technology and is complying with that requirement. For this source, its best available control technology shall be considered RACT without any further demonstrations.

(d) The Director shall approve the alternative limitation if he finds that:

- (1) all the information required by Paragraph (b) of this Rule has been submitted,

- (2) the requirements of Paragraph (a) of this Rule have been satisfied, and
- (3) the proposed alternative limitation is RACT for that source.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.107(a)(5), (7), (10);
Eff. April 1, 1995;
Temporary Amendment Eff. August 1, 2001; November 1, 2000;
Amendment Eff. July 15, 2002.

15A NCAC 02D .1413 SOURCES NOT OTHERWISE LISTED IN THIS SECTION

- (a) The owner or operator of any source of nitrogen oxides, except boilers, indirect-fired process heaters, stationary combustion turbines, or stationary internal combustion engines, at a facility that has the potential to emit 100 tons per year or more of nitrogen oxides or 560 pounds per calendar day or more from May 1 through September 30 shall apply RACT according to Paragraph (b) of this Rule.
- (b) To apply RACT to a source of nitrogen oxides covered under this Rule, the owner or operator of the source shall submit;
 - (1) the name and location of the facility;
 - (2) information identifying the source for which RACT is being proposed;
 - (3) a demonstration that shows the proposed limitation is RACT for the source and
 - (4) a proposal for demonstrating compliance with the proposed RACT.
- (c) The Director shall approve the proposed limitation if he finds that:
 - (1) the owner or operator of the source has submitted all the information required under Paragraph (b),
 - (2) the sources is covered under this Rule, and
 - (3) the proposed limitation is RACT for this source.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5), (7), (10);
Eff. April 1, 1995;
Temporary Amendment Eff. August 1, 2001; November 1, 2000;
Amended Eff. July 15, 2002.

15A NCAC 02D .1414 TUNE-UP REQUIREMENTS

- (a) This Rule applies to boilers and indirect-fired process heaters subject to the requirements of Rule .1407 of this Section or stationary internal combustion engines subject to the requirements of Rule .1409 of this Section that are complying with Rules .1407 or .1409 of this Section through an annual tune-up.

(b) When a tune-up to a boiler or indirect-fired process heater is required for compliance with this Section, the owner or operator shall at least annually and according to the manufacturer's recommendations:

- (1) inspect each burner and clean or replace any component of the burner as required;
- (2) inspect the flame pattern and make any adjustments to the burner, or burners, necessary to optimize the flame pattern to minimize total emissions of NO_x and carbon monoxide;
- (3) inspect the combustion control system to ensure proper operation and correct calibration of components that control the air to fuel ratio and adjust components to meet the manufacturer's established operating parameters; and
- (4) inspect any other component of the boiler or indirect-fired process heater and make adjustments or repairs as necessary to improve combustion efficiency. The owner or operator shall perform the tune-up according to a unit specific protocol approved by the Director. The Director shall approve the protocol if it meets the requirements of this Rule.

(c) When a tune-up to a stationary internal combustion engine is required for compliance with this Section, the owner or operator shall at least annually inspect, adjust, and repair or replace according to the manufacturer's recommendation, the following, as equipped:

- (1) engine air cleaners, fuel filters, and water traps;
- (2) turbochargers and superchargers;
- (3) spark plugs;
- (4) valve lash;
- (5) ignition systems, including ignition coils and wiring;
- (6) aftercooler cores;
- (7) any other component of the engine as necessary to improve engine efficiency; and
- (8) emission control systems.

The owner or operator shall perform the tune-up according to a unit specific protocol, including inspection, maintenance, and performance procedures as recommended by the manufacturer, approved by the Director. The Director shall approve the protocol if it meets the requirements of this Rule.

(d) The owner or operator shall maintain records of tune-ups performed to comply with this Section according to Rule .1404 of this Section. The following information shall be included for each source:

- (1) identification of the source;
- (2) the date and time the tune-up started and ended;
- (3) the person responsible for performing the tune-up;
- (4) for boilers and indirect-fired process heaters, the checklist for inspection of the burner, flame pattern, combustion control system,

- and all other components of the boiler or indirect-fired process heater identified in the protocol, noting any repairs or replacements made;
- (5) for stationary internal combustion engines, the checklist for engine air cleaners, turbochargers, sparkplugs, valve lash, ignition coils and wiring, aftercooler cores, and all other components of the engine identified in the protocol, noting any repairs or replacements made.
 - (6) any stack gas analyses performed after the completion of all adjustments to show that the operating parameters of the boiler, indirect-fired process heater, or stationary internal combustion engine have been optimized with respect to fuel consumption and output; at a minimum these parameters shall be within the range established by the equipment manufacturer to ensure that the emission limitation for nitrogen oxides has not been exceeded; and
 - (7) any other information requested by the Director to show that the boiler, indirect-fired process heater, or stationary internal combustion engine is being operated and maintained in a manner to minimize the emissions of nitrogen oxides.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5), (7), (10);
Eff. April 1, 1995;
Temporary Amendment Eff. August 1, 2001; November 1, 2000;
Amended Eff. July 15, 2002.

15A NCAC 02D .1415 TEST METHODS AND PROCEDURES

(a) For stationary combustion turbines, Method 20 at 40 CFR Part 60, Appendix A or other equivalent method approved by Director shall be used when source testing is used to demonstrate compliance with a limitation established according to this Section. For all other sources, Method 7E or Method 19 at 40 CFR Part 60, Appendix A or other equivalent method approved by the Director shall be used when source testing is used to demonstrate compliance with a limitation established according to this Section. The procedures specified in Methods 1, 2, 2F, 2G, 3, 3A, 3B, and 4 of 40 CFR Part 60, Appendix A, shall be used to measure velocity, flow rate, and molecular weight and to calculate heat input, as necessary, to determine compliance.

(b) When compliance with a limitation established according to this Section is determined using source testing, such testing shall be conducted according to this Rule.

(c) Before conducting a source test, the owner or operator of the sources to be tested shall submit to the Director a testing protocol describing what is to be

tested and the test method or methods that will be used. The Director shall approve or disapprove the protocol within 45 days after receipt.

(d) The owner or operator shall notify the Director and obtain the Director's approval at least 21 days before beginning a test to demonstrate compliance with this Section so that the Division may observe the test. The notification required by this Paragraph shall include:

- (1) a statement of the purpose of the proposed test;
- (2) the location and a description of the facility where the test is to take place;
- (3) the proposed test method and a description of the test procedures, equipment, and sampling points; and
- (4) a schedule setting forth the dates that:
 - (A) the test will be conducted and data collected;
 - (B) the final test report will be submitted.

(e) The final test report shall be submitted to the Director no later than 45 days after the test data have been collected.

(f) The owner or operator shall be responsible for all costs associated with any tests required to demonstrate compliance with this Section.

(g) The owner or operator shall maintain records of tests performed to demonstrate compliance with this Section according to Rule .1404 of this Section.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5), (7), (10);
Temporary Amendment Eff. November 1, 2000;
Eff. April 1, 1995;
Temporary Amendment Eff. August 1, 2001;
Amended Eff. July 15, 2002.

[pages D-1400-32 through D-1400-34
reserved]

15A NCAC 2D .1416 EMISSION ALLOCATIONS FOR UTILITY COMPANIES

(a) After November 1, 2000 but before the EPA promulgation of revisions to 40 CFR Part 51, Subpart G, revising the nitrogen oxide budget for North Carolina, the following limits apply:

- (1) Carolina Power & Light. The total emissions from all the coal-fired boilers and combustion turbines that are not listed in Rule .1417 of this Section at Carolina Power & Light Company's Asheville, Cape Fear, Lee, Mayo, Roxboro, Sutton, and Weatherspoon facilities shall not exceed:
 - (A) 12,019 tons per ozone season for 2004;
 - (B) 15,566 tons per ozone season for 2005;
 - (C) 14,355 tons per ozone season for 2006 and each year thereafter until revised according to Rule .1420 of this Section; and

Furthermore, except as allowed under Paragraph (d) of this Rule, individual sources at these facilities named in the table in this Subparagraph shall not exceed during the ozone season the nitrogen oxide emission allocations in the table.

FACILITY	SOURCE	EMISSION ALLOCATIONS (tons/ozone season) 2004	EMISSION ALLOCATIONS (tons/ozone season) 2005	EMISSION ALLOCATIONS (tons/ozone season) 2006 and later
Asheville, Buncombe Co.	1	551	714	659
	2	538	697	643
Cape Fear Chatham Co	5	286	371	342
	6	406	526	485
Lee Wayne Co	1	145	188	173
	2	159	206	190
	3	465	603	556
Mayo Person Co	1	1987	2572	2373
Roxboro Person Co	1	861	1115	1028
	2	1602	2075	1914
	3	1773	2295	2116
	4	1698	2199	2028
L V Sutton New Hanover Co.	1	182	236	217
	2	198	256	236
	3	806	1044	962
Weatherspoon Robeson Co.	1	85	110	102
	2	97	125	116
	3	180	234	215

- (2) **Duke Power.** The total emissions from all the coal-fired boilers and combustion turbines that are not listed in Rule .1417 of this Section at Duke Power Company's Allen, Belews Creek, Buck, Cliffside, Dan River, Marshall, and Riverbend facilities shall not exceed:
- (A) 17,816 tons per ozone season for 2004;
 - (B) 23,072 tons per ozone season for 2005;
 - (C) 21,278 tons per ozone season for 2006 and each year thereafter until revised according to Rule .1420 of this Section; and

Furthermore, except as allowed under Paragraph (d) of this Rule, individual sources at these facilities named in the table in this Subparagraph shall not exceed during the ozone season the nitrogen oxide emission allocations in the table.

FACILITY	SOURCE	EMISSION ALLOCATIONS (tons/ozone season) 2004	EMISSION ALLOCATIONS (tons/season) 2005	EMISSION ALLOCATIONS (tons/season) 2006 and later
G G Allen Gaston Co.	1	350	453	418
	2	355	460	424
	3	590	764	705
	4	528	683	630
	5	678	748	690
Belews Creek Stokes Co.	1	2591	3356	3095
	2	3020	3911	3608
Buck Rowan Co.	5	66	86	79
	6	73	95	87
	7	78	101	93
	8	319	413	381
	9	337	437	403
Cliffside Cleveland and Rutherford Co.	1	76	98	91
	2	82	106	98
	3	107	138	128
	4	120	156	144
	5	1326	1717	1584
Dan River Rockingham Co.	1	132	171	157
	2	144	186	172
	3	304	394	363
Marshall Catawba Co.	1	1011	1309	1207
	2	1056	1367	1261
	3	1784	2311	2131
	4	1764	2285	2107

FACILITY	SOURCE	EMISSION ALLOCATIONS (tons/ozone season) 2004	EMISSION ALLOCATIONS (tons/season) 2005	EMISSION ALLOCATIONS (tons/season) 2006 and later
Riverbend Gaston Co.	10	299	387	357
	7	216	280	258
	8	225	291	268
	9	285	369	340

(b) After November 1, 2000, and after any EPA promulgation of revisions to 40 CFR Part 51, Subpart G, revising the nitrogen oxide budget for North Carolina, the following limits apply:

- (1) Carolina Power & Light. The total emissions from all the coal-fired boilers and combustion turbines that are not listed in Rule .1417 of this Section at Carolina Power & Light Company's Asheville, Cape Fear, Lee, Mayo, Roxboro, Sutton, and Weatherspoon facilities shall not exceed:

- (A) 12,019 tons per ozone season in 2004;
 (B) 15,024 tons per ozone season for 2005;
 (C) 11,320 tons per ozone season for 2006 and each year thereafter until revised according to Rule .1420 of this Section; and

Furthermore, except as allowed under Paragraph (d) of this Rule, individual sources at these facilities named in the table in this Subparagraph shall not exceed during the ozone season the nitrogen oxide emission allocations in the table.

FACILITY	SOURCE	EMISSION ALLOCATIONS (tons/ozone season) 2004	EMISSION ALLOCATIONS (tons/ozone season) 2005	EMISSION ALLOCATIONS (tons/ozone season) 2006 and later
Asheville Buncombe Co	1	551	689	519
	2	538	672	507
Cape Fear Chatham Co	5	286	358	270
	6	406	508	382
Lee Wayne Co.	1	145	182	137
	2	159	199	150
	3	465	582	438
Mayo Person Co	1	1987	2483	1872

FACILITY	SOURCE	EMISSION ALLOCATIONS (tons/ozone season) 2004	EMISSION ALLOCATIONS (tons/ozone season) 2005	EMISSION ALLOCATIONS (tons/ozone season) 2006 and later
Roxboro Person Co	1	861	1076	811
	2	1602	2003	1509
	3	1773	2215	1669
	4	1698	2122	1599
L V Sutton New Hanover Co.	1	182	228	171
	2	198	247	186
	3	806	1007	759
Weatherspoon Robeson Co.	1	85	107	80
	2	97	121	91
	3	180	225	170

- (2) Duke Power. The total emissions from all the coal-fired boilers and combustion turbines that are not listed in Rule .1417 of this Section at Duke Power Company's Allen, Belews Creek, Buck, Cliffside, Dan River, Marshall, and Riverbend facilities shall not exceed:
- (A) 17,816 tons per ozone season;
 - (B) 22,270 tons per ozone season for 2005;
 - (C) 16,780 tons per ozone season for 2006 and each year thereafter until revised according to Rule .1420 of this Section; and

Furthermore, except as allowed under Paragraph (d) of this Rule, individual sources at these facilities named in the table in this Subparagraph shall not exceed during the ozone season the nitrogen oxide emission allocations in the table.

FACILITY	SOURCE	EMISSION ALLOCATIONS (tons/ozone season) 2004	EMISSION ALLOCATIONS (tons/ozone season) 2005	EMISSION ALLOCATIONS (tons/ozone season) 2006 and later
G G Allen Gaston Co.	1	350	437	329
	2	355	444	334
	3	590	737	556
	4	528	660	497
	5	578	722	544
Belews Creek Stokes Co.	1	2591	3239	2441
	2	3020	3775	2846
Buck Rowan Co.	5	66	83	63
	6	73	91	69

FACILITY	SOURCE	EMISSION ALLOCATIONS (tons/ozone season) 2004	EMISSION ALLOCATIONS (tons/ozone season) 2005	EMISSION ALLOCATIONS (tons/ozone season) 2006 and later
	7	78	97	73
	8	319	399	300
	9	337	422	318
Cliffside Cleveland and Rutherford Co.	1	76	95	71
	2	82	102	77
	3	107	134	101
	4	120	150	113
	5	1326	1658	1249
Dan River Rockingham Co.	1	132	165	124
	2	144	180	135
	3	304	380	286
Marshall Catawba Co.	1	1011	1263	952
	2	1056	1320	994
	3	1784	2230	1680
	4	1764	2206	1662
Riverbend Gaston Co.	10	299	374	282
	7	216	270	204
	8	225	281	212
	9	285	356	268

(c) Posting of emission allocation. The Director shall post the emission allocations for sources covered under this Rule on the Division's web page.

(d) Trading. Sources shall comply with the requirements of this Rule using the nitrogen oxide budget trading program set out in Rule .1419 of this Section.

(e) Monitoring. The owner or operator of a source subject to this Rule shall show compliance using a continuous emission monitor that meets the requirements of 40 CFR Part 75, Subpart H, with such exceptions as allowed under 40 CFR Part 75, Subpart H or 40 CFR Part 96.

(f) Operation of control devices. All emission control devices and techniques installed to comply with this Rule shall be operated during the ozone season in the manner in which they are designed and permitted to be operated.

(g) Days of violations. For the purposes of this Rule, the number of days of violation for a source shall be determined after the end of the ozone season as follows:

- (1) To the source's allocation in this Rule, the allocations acquired before December 1 of that year under Rule .1419 of this Section are added and the allocations transferred before December 1 of that year under Rule .1419 of this Section are subtracted.

- (2) The value calculated under Subparagraph (1) of this Paragraph is compared to the actual emissions from the source for the ozone season. If the value calculated under Subparagraph (1) of this Paragraph is greater than or equal to the actual emissions from the source for the ozone season, the source is in compliance. If the value calculated under Subparagraph (1) of this Paragraph is less than the actual emissions from the source for the ozone season, the source is not in compliance.
- (3) If the source is not in compliance, beginning with September 30, the actual emissions for that day and each preceding day are subtracted from the actual emissions for the ozone season until the value calculated under Subparagraph (1) of this Paragraph is greater than or equal to the actual emissions. Each day that the source operated after this day to September 30 is a day of violation.
- (h) Modification and reconstruction. The modification or reconstruction of a source covered under this Rule shall not make that source a “new” source under this Rule. A source that is modified or reconstructed shall retain its emission allocations under Paragraph (a) or (b) of this Rule.
- (i) Additional controls. The Environmental Management Commission may specify through rulemaking a specific emission limit lower than that established under this Rule for a specific source if compliance with the lower emission limit is required as part of the State Implementation Plan to attain or maintain the ambient air quality standard for ozone.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5), (7), (10);
 Temporary Adoption Eff. November 1, 2000;
 Eff. April 1, 2001;
 Temporary Amendment Eff. August 1, 2001;
 Amended Eff. June 1, 2004; July 15, 2002.

15A NCAC 02D .1417 EMISSION ALLOCATIONS FOR LARGE COMBUSTION SOURCES

(a) Applicability. This rule applies to the sources listed in Paragraph (b) of this Rule or to the following types of sources that are permitted before November 1, 2000, and are not covered under Rule .1416 of this Section:

- (1) fossil fuel-fired stationary boilers, combustion turbines, or combined cycle systems serving a generator with a nameplate capacity greater than 25 megawatts electrical and selling any amount of electricity; or
- (2) fossil fuel-fired stationary boilers, combustion turbines, or combined cycle systems having a maximum design heat input

greater than 250 million Btu per hour that are not covered under Subparagraph (1) of this Paragraph.

(b) Initial emission allocations.

- (1) After November 1, 2000 but before the EPA promulgation of revisions to 40 CFR Part 51, Subpart G, revising the nitrogen oxide budget for North Carolina, the emission allocations in the tables in this Subparagraph shall apply. Except as allowed under Paragraph (d) of this Rule, sources named in the tables in this Subparagraph shall not exceed during the ozone season the nitrogen oxide (NO_x) emission allocations in the tables until revised according to Rule .1420 of this Section:

ELECTRICAL GENERATING UNITS

FACILITY	SOURCE	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2004	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2005	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2006 and later
Butler Warner Generating, Cumberland Co.	Combustion Turbine 1	27	33	49
	Combustion Turbine 2	27	33	49
	Combustion Turbine 3	27	33	49
	Combustion Turbine 6	28	35	52
	Combustion Turbine 7	27	33	49
	Combustion Turbine 8	27	33	49
	Combustion Turbine 4	34	43	63
	Combustion Turbine 5	35	43	63
Cogentrix-Rocky Mount, Edgecombe Co.	Boiler ST unt	319	398	351

FACILITY	SOURCE	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2004	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2005	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2006 and later
Cogentrix- Elizabethtown, Bladen Co.	Coal boiler ST-own	115	143	126
Cogentrix- Kenansville, Duplin Co.	Stoker boiler ST- LLE	103	128	113
Cogentrix- Lumberton, Robeson Co.	Coal boiler ST-TON	114	142	125
Cogentrix-Roxboro, Person Co.	ST-ORO	175	218	192
Cogentrix- Southport, Brunswick Co.	ST-ORT	356	443	391
Duke Power, Lincoln Duke Power, Lincoln	Combustion Turbine 1	18	23	23
	Combustion Turbine 2	18	23	23
	Combustion Turbine 3	18	23	23
	Combustion Turbine 4	18	23	23
	Combustion Turbine 5	18	23	23
	Combustion Turbine 6	18	23	23
	Combustion Turbine 7	18	23	23

FACILITY	SOURCE	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2004	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2005	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2006 and later
	Combustion Turbine 8	18	23	23
	Combustion Turbine 9	18	23	23
	Combustion Turbine 10	18	23	23
	Combustion Turbine 11	18	23	23
	Combustion Turbine 12	18	23	23
	Combustion Turbine 13	18	23	23
	Combustion Turbine 14	18	23	23
	Combustion Turbine 15	18	23	23
	Combustion Turbine 16	19	24	24
Panda-Rosemary, Halifax Co.	CT-ary	35	43	32
	CW-ary	25	31	23
Roanoke Valley, Halifax Co.	1	447	557	492
	2	142	178	167
	Boiler 1	194	243	64

FACILITY	SOURCE	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2004	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2005	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2006 and later
RJ Reynolds Tobaccoville Facility, Forsyth Co.	Boiler 2	218	273	64
	Boiler 3	178	223	64
	Boiler 4	190	238	64
UNC-CH, Orange Co.	Boiler no. 5, 6, and 7	116	145	128
	Boiler no. 8	120	150	113
CP&L, Lee Plant, Wayne County	Combustion Turbine 10	25	31	31
	Combustion Turbine 11	25	31	31
	Combustion Turbine 12	92	115	115
	Combustion Turbine 13	92	115	115
Dynergy, Rockingham County	Combustion Turbine 1	34	42	42
	Combustion Turbine 2	33	42	42
	Combustion Turbine 3	33	42	42
	Combustion Turbine 4	33	41	41

FACILITY	SOURCE	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2004	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2005	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2006 and later
	Combustion Turbine 5	33	41	41
CP&L, Woodleaf, Rowan County	Combustion Turbine 1	22	27	27
	Combustion Turbine 2	22	27	27
	Combustion Turbine 3	22	27	27
	Combustion Turbine 4	21	27	27
	Combustion Turbine 5	22	27	27
CP&L, Mark's Creek, Richmond County	Combustion Turbine 1	22	27	27
	Combustion Turbine 2	22	27	27
	Combustion Turbine 3	22	27	27
	Combustion Turbine 4	22	27	27
	Combustion Turbine 5	21	27	27
	Combustion Turbine 6	21	27	27

FACILITY	SOURCE	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2004	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2005	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2006 and later
	Combustion Turbine 7	22	28	28
CP&L, Asheville, Buncombe County	Combustion Turbine	60	75	75
	Combustion Turbine	60	75	75

NON-ELECTRICAL GENERATING UNITS

FACILITY	SOURCE	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2004	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2005	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2006 and later
Weyerhaeuser Paper Co., Martin Co.	Riley boiler	566	709	379
	Package boiler	20	25	25
Blue Ridge Paper Products, Haywood Co.	Pulverized coal dry bottom boiler – Big Bill	212	265	141
	Pulverized coal dry bottom boiler – Peter G	187	234	125

FACILITY	SOURCE	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2004	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2005	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2006 and later
	Pulverized coal dry bottom boiler – Riley Coal	358	447	239
	Pulverized coal, wet bottom boiler – No. 4	365	456	244
	Boiler – Riley Bark	135	169	90
International Paper Corp., Halifax Co.	Wood/ bark, no. 6 oil, pulverized coal dry bottom boiler	518	648	346
Weyerhaeuser Co. New Bern Mill, Craven Co.	#1 power boiler	181	226	121
	#2 power boiler	58	72	72
International. Paper, Columbus Co.	No. 3 Power Boiler	126	158	84
	No. 4 Power Boiler	334	418	223
Fieldcrest-Cannon, Plant 1 Cabarrus Co.	Boiler	174	217	116

- (2) After November 1, 2000, and after any EPA promulgation of revisions to 40 CFR Part 51, Subpart G, revising the nitrogen oxide budget for North Carolina, the emission allocations in the tables in this Subparagraph shall apply. Except as allowed under Paragraph (d) of this Rule, sources named in the tables in this Subparagraph

shall not exceed during the ozone season the nitrogen oxide (NO_x) emission allocations in the tables until revised according to Rule .1420 of this Section:

ELECTRIC GENERATING UNITS

FACILITY	SOURCE	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2004	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2005	NO _x EMISSIONS ALLOCA- TIONS (tons/ozone season) 2006 and later
Butler Warner Generating, Cumberland Co.	Combustion Turbine 1	27	33	49
	Combustion Turbine 2	27	33	49
	Combustion Turbine 3	27	33	49
	Combustion Turbine 6	28	35	52
	Combustion Turbine 7	27	33	49
	Combustion Turbine 8	27	33	49
	Combustion Turbine 4	34	43	63
	Combustion Turbine 5	35	43	63
Cogentrix-Rocky Mount, Edgecombe Co.	Boiler ST- unt	319	398	351
Cogentrix- Elizabethtown, Bladen	Coal boiler ST-OWN	115	143	126
Cogentrix- Kenansville, Duplin Co.	Stoker boiler ST-LLE	103	128	113
Cogentrix- Lumberton,	Coal boiler ST-TON	114	142	125

FACILITY	SOURCE	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2004	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2005	NO _x EMISSIONS ALLOCA- TIONS (tons/ozone season) 2006 and later
Robeson Co.				
Cogentrix- Roxboro, Person Co.	ST-ORO	175	218	192
Cogentrix- Southport, Brunswick Co.	ST-ORT	356	444	392
Duke Power, Lincoln	Combustion Turbine 1	18	23	26
	Combustion Turbine 2	18	23	26
	Combustion Turbine 3	18	23	26
	Combustion Turbine 4	18	23	26
	Combustion Turbine 5	18	23	26
	Combustion Turbine 6	18	23	26
	Combustion Turbine 7	18	23	26
	Combustion Turbine 8	18	23	26
	Combustion Turbine 9	18	23	26
	Combustion Turbine 10	18	23	26
	Combustion Turbine 11	18	23	26
	Combustion Turbine 12	18	23	26
	Combustion Turbine 13	18	23	26
	Combustion Turbine 14	18	23	26

FACILITY	SOURCE	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2004	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2005	NO _x EMISSIONS ALLOCA- TIONS (tons/ozone season) 2006 and later
	Combustion Turbine 15	18	23	26
	Combustion Turbine 16	19	24	27
Panda-Rosemary, Halifax Co.	CT-ary	35	43	32
	CW-ary	25	31	23
Roanoke Valley, Halifax Co.	1	447	558	493
	2	142	178	167
RJ Reynolds Tobbaccoville Facility, Forsyth Co.	Boiler 1	194	243	64
	Boiler 2	218	273	64
	Boiler 3	178	223	64
	Boiler 4	190	238	64
UNC-CH, Orange Co.	Boiler no. 5, 6, and 7	116	145	128
	Boiler no. 8	120	150	113
CP&L, Lee Plant, Wayne County	Combustion Turbine 10	25	31	31
	Combustion Turbine 11	25	31	31
	Combustion Turbine 12	92	115	115
	Combustion Turbine 13	92	115	115
Dynergy, Rockingham County	Combustion Turbine 1	34	42	42
	Combustion Turbine 2	33	42	42
	Combustion Turbine 3	33	42	42
	Combustion Turbine 4	33	41	41
	Combustion Turbine 5	33	41	41
CP&L, Woodleaf, Rowan County	Combustion Turbine 1	22	27	27
	Combustion Turbine 2	22	27	27

FACILITY	SOURCE	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2004	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2005	NO _x EMISSIONS ALLOCA- TIONS (tons/ozone season) 2006 and later
	Combustion Turbine 3	22	27	27
	Combustion Turbine 4	21	27	27
	Combustion Turbine 5	22	28	28
CP&L, Mark's Creek, Richmond County	Combustion Turbine 1	22	27	27
	Combustion Turbine 2	22	27	27
	Combustion Turbine 3	22	27	27
	Combustion Turbine 4	22	27	27
	Combustion Turbine 5	21	27	27
	Combustion Turbine 6	21	27	27
	Combustion Turbine 7	22	28	28
CP&L, Asheville, Buncombe County	Combustion Turbine	60	75	75
	Combustion Turbine	60	75	75

NON-ELECTRIC GENERATING UNITS

FACILITY	SOURCE	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2004	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2005	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2006 and later

FACILITY	SOURCE	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2004	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2005	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2006 and later
Weyerhaeuser Paper Company, Martin Co.	Riley boiler	566	708	379
	Package boiler	20	25	25
Blue Ridge Paper Products, Haywood Co.	Pulverized coal dry bottom boiler – Big Bill	212	265	141
	Pulverized coal dry bottom boiler – Peter G	187	234	125
	Pulverized coal dry bottom boiler – Riley Coal	358	447	239
	Pulverized coal, wet bottom boiler – No. 4	365	456	244
	boiler–Riley Bark	135	169	90
International Paper Corp., Halifax Co.	Wood/bark, no. 6 oil, pulverized coal dry bottom boiler	518	648	346
Weyerhaeuser Co. New Bern Mill, Craven Co.	#1 power boiler	181	226	121
	#2 power boiler	58	72	72
International. Paper, Columbus Co.	No. 3 Power Boiler	126	158	84
	No. 4 Power Boiler	334	418	223
Fieldcrest- Cannon, Plant 1,	Boiler	174	217	116

FACILITY	SOURCE	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2004	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2005	NO _x EMISSION ALLOCA- TIONS (tons/ozone season) 2006 and later
Cabarrus Co.				

- (3) Any source covered under this Rule but not listed in Subparagraph (b)(1) or (2) of this Paragraph shall have a nitrogen oxide emission allocation of zero tons per season during the ozone season.
- (c) Posting of emission allocations. The Director shall post the emission allocations for sources covered under this Rule on the Division's web page.
- (d) Trading. Sources shall comply with the requirements of this Rule using the nitrogen oxide budget trading program set out in Rule .1419 of this Section.
- (e) Monitoring. The owner or operator of a source subject to this Rule shall show compliance using a continuous emission monitor that meets the requirements of Rule .1404(d) of this Section.
- (f) Operation of control devices. All emission control devices and techniques installed to comply with this Rule shall be operated beginning May 1 through September 30 in the manner in which they are designed and permitted to be operated.
- (g) Days of violations. For the purposes of this Rule, the number of days of violation for a source shall be determined after the end of the ozone season as follows:
- (1) To the source's allocation in this Rule, the allocations acquired before December 1 of that year under Rule .1419 of this Section are added and the allocations transferred before December 1 of that year under Rule .1419 of this Section are subtracted.
 - (2) The value calculated under Subparagraph (1) of this Paragraph is compared to the actual emissions from the source for the ozone season. If the value calculated under Subparagraph (1) of this Paragraph is greater than or equal to the actual emissions from the source for the ozone season, the source is in compliance. If the value calculated under Subparagraph (1) of this Paragraph is less than the actual emissions from the source for the ozone season, the source is not in compliance.
 - (3) If the source is not in compliance, beginning with September 30, the actual emissions for that day and each preceding day are subtracted from the actual emissions for the ozone season until the value calculated under Subparagraph (1) of this Paragraph is

greater than or equal to the actual emissions. Each day that the source operated after this day to September 30 is a day of violation.

(h) Modification and reconstruction, replacement, retirement, or change of ownership. The modification or reconstruction of a source covered under this Rule shall not make that source a “new” source under this Rule. A source that is modified or reconstructed shall retain its emission allocation under Paragraph (b) of this Rule. If one or more sources covered under this Rule is replaced, the new source shall receive the allocation of the source, or sources, that it replaced instead of an allocation under Rule .1421 of this Section. If the owner of a source changes, the emission allocations under this Rule and revised emission allocations made under Rule .1420 of this Section shall remain with the source. If a source is retired, the owner or operator of the source shall follow the procedures in 40 CFR 96.5. The allocations of a retired source shall remain with the owner or operator of the retired source until a reallocation occurs under Rule .1420 of this Section when the allocation shall be removed and given to other sources if the retired source is still retired.

(i) Additional controls. The Environmental Management Commission may specify through rulemaking a specific emission limit lower than that established under this Rule for a specific source if compliance with the lower emission limit is required as part of the State Implementation Plan to attain or maintain the ambient air quality standard for ozone.

History Note: Authority G.S. 143-215.3(a)(1);143-215.107(a)(5), (7), (10);
Temporary Adoption Eff. November 1, 2000;
Temporary Amendment Eff. August 1, 2001;
Eff. July 15, 2002;
Amended Eff. June 1, 2004.

[page D-1400-56 reserved]

15A NCAC 02D .1418 NEW ELECTRIC GENERATING UNITS, LARGE BOILERS, AND LARGE I/C ENGINES

(a) Electric generating units. Emissions of nitrogen oxides from any fossil fuel-fired stationary boiler, combustion turbine, or combined cycle system permitted after October 31, 2000, serving a generator with a nameplate capacity greater than 25 megawatts electrical and selling any amount of electricity shall not exceed:

- (1) 0.15 pounds per million Btu for gaseous and solid fuels and 0.18 pounds per million Btu for liquid fuels if it is not covered under Rule .0530 (prevention of significant deterioration) or .0531 (nonattainment area major new source review) of this Subchapter;
- (2) 0.15 pounds per million Btu for gaseous and solid fuels and 0.18 pounds per million Btu for liquid fuels or best available control technology requirements of Rule .0530 of this Subchapter, whichever requires the greater degree of reduction, if it is covered under Rule .0530 of this Subchapter; or
- (3) lowest available emission rate technology requirements of Rule .0531 of this Subchapter if it is covered under Rule .0531 of this Subchapter.

(b) Large boilers. Emissions of nitrogen oxides from any fossil fuel-fired stationary boiler, combustion turbine, or combined cycle system having a maximum design heat input greater than 250 million Btu per hour which is permitted after October 31, 2000, and not covered under Paragraph (a) of this Rule, shall not exceed:

- (1) 0.17 pounds per million Btu for gaseous and solid fuels and 0.18 pounds per million Btu for liquid fuels if it is not covered under Rule .0530 (prevention of significant deterioration) or .0531 (nonattainment area major new source review) of this Subchapter;
- (2) 0.17 pounds per million Btu for gaseous and solid fuels and 0.18 pounds per million Btu for liquid fuels or best available control technology requirements of Rule .0530 of this Subchapter, whichever requires the greater degree of reduction, if it is covered under Rule .0530 of this Subchapter; or
- (3) lowest available emission rate technology requirements of Rule .0531 of this Subchapter if it is covered under Rule .0531 of this Subchapter.

(c) Internal combustion engines. The following reciprocating internal combustion engines permitted after October 31, 2000, shall comply with the applicable requirements in Rule .1423 of this Section if the engine is not covered under Rule .0530 (prevention of significant deterioration) or .0531 (nonattainment area major source review) of this Subchapter:

- (1) rich burn stationary internal combustion engines rated at equal to or greater than 2,400 brake horsepower,

- (2) lean burn stationary internal combustion engines rated at equal to or greater than 2,400 brake horsepower,
- (3) diesel stationary internal combustion engines rated at equal to or greater than 3,000 brake horsepower, or
- (4) dual fuel stationary internal combustion engines rated at equal to or greater than 4,400 brake horsepower,

If the engine is covered under Rule .0530 of this Subchapter, it shall comply with the requirements of Rule .1423 of this Section or the best available control technology requirements of Rule .0530 of this Subchapter, whichever requires the greater degree of reduction. If the engine is covered under Rule .0531 of this Subchapter, it shall comply with lowest available emission rate technology requirements of Rule .0531 of this Subchapter.

(d) Monitoring. The owner or operator of a source subject to this Rule except internal combustion engines shall show compliance using a continuous emission monitor that meets the requirements of Rule .1404(d) of this Section. Internal combustion engines shall comply with the monitoring requirements in Rule .1423 of this Section. Monitors shall be installed before the first ozone season in which the source will operate and shall be operated each day during the ozone season that the source operates.

(e) Offsets. If emission allocations are not granted under Rule .1421 of this Section or are not equal to or greater than the emissions of nitrogen oxides of the source for that ozone season, until revised under Rule .1420 of this Section, the owner or operator of the source shall acquire emission allocations of nitrogen oxides under Rule .1419 of this Section from other sources sufficient to offset its emissions. Sources shall comply with the requirements of this Rule using the nitrogen oxide budget trading program set out in Rule .1419 of this Section. The owner or operator of internal combustion engines covered under Paragraph (c) of this Rule shall not be required to obtain emission allocations or emission reductions.

*History Note: Authority G.S. 143-215.3(a)(1);143-215.107(a)(5), (7), (10);
Temporary Adoption Eff. November 1, 2000;
Temporary Amendment Eff. August 1, 2001;
Eff. July 15, 2002;
Amended Eff. June 1, 2004.*

15A NCAC 02D .1419 NITROGEN OXIDE BUDGET TRADING PROGRAM

(a) Definitions. For the purposes of this Rule, the definitions in 40 CFR 96.2 shall apply except that:

- (1) "Permitting agency" means the North Carolina Division of Air Quality.

- (2) “Fossil fuel fired” means fossil fuel fired as defined under Rule .1401 of this Section instead of the definition in 40 CFR 96.2.
- (b) Existing sources. Sources covered under Rule .1416 or .1417 of this Section shall comply with the requirements of Rule .1416 or .1417 of this Section using the procedures of and complying with the requirements of 40 CFR Part 96, Nitrogen Oxide Budget Trading Program for State Implementation Plans, with the following exceptions:
- (1) Permit applications shall be submitted following the procedures and schedules in this Section and in Subchapter 2Q of this Title instead of the procedures and schedules in 40 CFR Part 96; and
 - (2) The dates and schedules for monitoring systems in 40 CFR Part 96 shall not apply; however, if a source operates during the ozone season, it shall have installed and begun operating by May 1, 2004, a continuous emissions monitoring system that complies with 40 CFR Part 96.
- (c) New sources. Except for internal combustion engines, sources covered under Rule .1418 of this Section shall comply with the requirements of Rule .1418 of this Section using the procedures of and complying with the requirements of 40 CFR Part 96, Budget Trading Program for State Implementation Plans, with the following exceptions:
- (1) Permit applications shall be submitted following the procedures and schedules in this Section and in Subchapter 2Q of this Title instead of the procedures and schedules in 40 CFR Part 96; and
 - (2) The dates and schedules for monitoring systems in 40 CFR Part 96 shall not apply; however, a source shall not operate during the ozone season until it has installed and is operating a continuous emissions monitoring system that complies with 40 CFR Part 96.
- (d) Opt-in provisions. Boilers, turbines, and combined cycle systems not covered under Rule .1416, .1417, or .1418 of this Section or internal combustion engines may opt into the budget trading program of 40 CFR Part 96 by following the procedures and requirements of 40 CFR Part 96, Subpart I, including using continuous emission monitors that meet the requirements of 40 CFR Part 75, Subpart H. Before an internal combustion engine opts into the budget trading program, the owner or operator of the engine shall demonstrate that the continuous emissions monitor on the engine can comply with the requirements of 40 CFR Part 75, Subpart H, by operating monitor on the engine under the conditions specified in 40 CFR Part 75 for at least one ozone season before opting into the budget trading program.
- (e) Divisional requirements. The Director and the Division of Air Quality shall follow the procedures of 40 CFR Part 96 in reviewing permit applications and issuing permits for NO_x Budget sources, in approving or disapproving monitoring systems for NO_x Budget sources, and in taking enforcement action against NO_x Budget sources. The Director may issue permits after May 1, 2003, for sources

covered under this Section that are participating in the nitrogen oxide budget trading program under this Section. The provisions of 40 CFR Part 96 pertaining to early reduction credits shall not apply.

(f) Submitting emission allocations to the EPA. For sources covered under Rule .1416, .1417, or .1418, the Director shall submit to the Administrator of the Environmental Protection Agency NO_x emission allocations according to 40 CFR Part 96. The Environmental Management Commission and the Director shall follow Rules .1416, .1417, and .1420 for emission allocations instead of the methodology specified in 40 CFR Part 96. The Environmental Management Commission and the Director shall follow, Rule .1421 of this Section for set-asides and new source allocations instead of the provisions of 40 CFR Part 96. The Environmental Management Commission and the Director shall follow Rule .1422 of this Section for distributing the compliance supplement pool instead of the provisions of 40 CFR Part 96.

(g) EPA to administer. The United States Environmental Protection Agency (EPA) shall administer the budget trading program of 40 CFR Part 96 on behalf of North Carolina. The Director shall provide the EPA the information necessary under 40 CFR Part 96 for the EPA to administer 40 CFR Part 96 on behalf of North Carolina. The owner or operator of each source covered under Rule .1416, .1417, or .1418, except internal combustion engines, of this Section shall establish an account, designate an authorized account representative, and comply with the other requirements of 40 CFR Part 96 as necessary for the EPA to administer the nitrogen oxide budget trading program on behalf of North Carolina.

(h) Restrictions on trading. NO_x emission allocations obtained under this Rule shall not be used to meet the emission limits for a source if compliance with that emission limit is required as part of the State Implementation Plan to attain or maintain the ambient air quality ozone standard. Sources covered under Rule .0531 (nonattainment area major new source review) of this Subchapter shall not use the nitrogen oxide budget trading program to comply with Rule .0531 of this Subchapter.

History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143- 215.107(a)(5), (7), (10);
Temporary Adoption Eff. November 1, 2000;
Temporary Amendment Eff. August 1, 2001;
Eff. July 15, . 2002.
Amended Eff. June 1, 2004.

15A NCAC 02D .1420 PERIODIC REVIEW AND REALLOCATIONS

(a) Periodic Review. In 2006 and every five years thereafter, the Environmental Management Commission shall review the emission allocations of sources covered under Rules .1416, .1417, or .1418 of this Section and decide if any revisions are needed. In making this decision the Environmental Management Commission shall consider the following:

- (1) the size of the allocation pool for new source growth under Rule .1421 of this Section;
- (2) the amount of emissions allocations requested under Rule .1421 of this Section;
- (3) the amount of emissions allocations available through nitrogen oxide budget trading program;
- (4) the impact of reallocation on existing sources;
- (5) the impact of reallocations on sources covered under Rule .1421 of this Section;
- (6) impact on future growth; and
- (7) other relevant information on the impacts of reallocation.

(b) If the Environmental Management Commission decides to revise emission allocations, it shall propose for each source that has been permitted for and has complied with an emission rate of 0.10 pounds per million Btu or less, emission allocations greater than or equal to the greater of:

- (1) the source's current allocation, or
- (2) an allocation calculated by multiplying the average of the source's two highest seasonal energy inputs for the four most recent years by 0.15 pounds per million Btu and dividing by 2000.

(c) Posting of emission allocations. The Director shall post the new emission allocations once they are adopted on the Division's web page.

History Note: Statutory Authority G.S. 143-215.3(a)(1);143-215.65; 143-215.66; 143-215.107(a)(5), (7), (10);
Temporary Adoption Eff. November 1, 2000;
Temporary Amendment Eff. August 1, 2001;
Eff. July 15, 2002.

15A NCAC 02D .1421 ALLOCATIONS FOR NEW GROWTH OF MAJOR POINT SOURCES

(a) Purpose. The purpose of this Rule is to establish an allocation pool from which emission allocations of nitrogen oxides may be allocated to sources permitted after October 31, 2000.

(b) Eligibility. This Rule applies only to the following types of sources covered under Rule .1418 of this Section, and permitted after October 31, 2000:

- (1) fossil fuel-fired stationary boilers, combustion turbines, or combined cycle systems serving a generator with a nameplate

- capacity greater than 25 megawatts electrical and selling any amount of electricity; or
- (2) fossil fuel-fired stationary boilers, combustion turbines, or combined cycle systems having a maximum design heat input greater than 250 million Btu per hour that are not covered under Subparagraph (1) of this Paragraph;
- (c) Requesting allocation. To receive emission allocations under this Rule, the owner or operator of the source shall provide the following written documentation to the Director before January 1 of the year preceding the ozone season for which the emission allocation is sought:
- (1) a description of the combustion source or sources including heat input;
 - (2) evidence that the source complies with the emission limit under Rule .1418 of this Section;
 - (3) an estimate of the actual emissions of nitrogen oxides in tons per ozone season;
 - (4) the expected hours of operation during the ozone season;
 - (5) the date on which the source is expected to begin operating if it is not already operating;
 - (6) the tons per ozone season of emission allocations being requested (the amount requested shall be the lesser of the estimated actual emissions under Subparagraph (3) of this Paragraph or the product of the emission limit under Rule .1418 of this Section times the maximum design heat input in millions of Btu per hour times the number of hours that the source is projected to operate (not to exceed 3672 hours) divided by 2000); and
 - (7) a description of the monitoring, recordkeeping, and reporting plan that will assure continued compliance.
- (d) Approving requests. The Director shall approve a request for emissions allocation if he finds that:
- (1) All the information and documentation required under Paragraph (c) of this Rule has been submitted;
 - (2) The request was received before January 1;
 - (3) The source is eligible for emission allocations under this Rule;
 - (4) The source complies with Rule .1418 of this Section;
 - (5) The requested emission allocations do not exceed the estimated actual emissions of nitrogen oxides;
 - (6) The source has or is likely to have an air quality permit before the end of the upcoming ozone season; and
 - (7) The source is operating or is scheduled to begin operating before the end of the upcoming ozone season.
- (e) Preliminary allocations. By March 1 before each ozone season, the Director shall have calculated and posted on the Division's web page preliminary emission

allocations for sources whose requests under this Rule he has approved.

Preliminary emission allocations shall be determined as follows:

- (1) If the emission allocations requested do not exceed the amount in the pool, each source shall have a preliminary allocation equal to its request.
- (2) If the emission allocations requested exceed the amount in the pool, each source's emission allocations shall be calculated as follows:
 - (A) For each source, its maximum design heat input in millions of Btu per hour is multiplied by the number of hours that the source is projected to operate not to exceed 3672 hours; this product is the source's seasonal heat input;
 - (B) The seasonal heat inputs calculated under Part (A) of this Subparagraph are summed.
 - (C) For each source, its seasonal heat input calculated under Part (A) of this Subparagraph is multiplied by the tons of emission allocations in the allocation pool and divided by the sum of seasonal heat inputs calculated under Part (B) of this Subparagraph; this amount is the source's preliminary emission allocations.

The preliminary emission allocations computed under this Paragraph may be revised under Paragraph (f) of this Rule after the ozone season. Emissions allocations issued under this Paragraph are solely for planning purposes and are not reported to the EPA to be recorded in allowance tracking system account. The emission allocations granted under Paragraph (f) of this Rule shall be the emission allocations granted the source to offset its emissions.

(f) Final allocations. According to Paragraph (g) of this Rule, the Director shall grant emission allocations for each source for which he has approved an allocation from the allocation pool as follows:

- (1) For each individual source, its allowable emission rate under Rule .1418 of this Section is multiplied by its heat input during the ozone season. This product is divided by 2000.
- (2) The lesser of the source's actual emissions of nitrogen oxides, the value calculated under Subparagraph (1) of this Paragraph, or the preliminary emission allocations determined under Paragraph (e) of this Rule shall be the source's emission allocation from the allocation pool.

Emissions allocations granted under this Paragraph are reported to the EPA to be recorded in allowance tracking system account.

(g) Issuance of final allocations. By November 1 following each ozone season, the Director shall issue final allocations according to Paragraph (f) of this Rule and shall notify each source that receives an allocation of the amount of allocation that it has been granted. By November 1 following the ozone season, the Director shall also notify the EPA of allocations issued and to whom they have been issued

and the amount issued to each source. The Director shall post the final allocations on the Division's web page.

(h) Allocation pool.

- (1) Before the EPA promulgation of revisions after November 1, 2000, to 40 CFR Part 51, Subpart G, revising the nitrogen oxide budget for North Carolina, the allocation pool shall contain the following:
 - (A) in 2004, 122 tons,
 - (B) in 2005, 599 tons plus emission allocations carried over from the previous year;
 - (C) in 2006, 505 tons plus emission allocations carried over from the previous year; and
 - (D) in 2007, 1,058 tons plus emission allocations carried over from the previous year.
 - (2) After the EPA promulgates revisions after November 1, 2000, to 40 CFR Part 51, Subpart G, revising the nitrogen oxide budget for North Carolina, the allocation pool shall contain the following:
 - (A) in 2004, 122 tons,
 - (B) in 2005, 78 tons plus emission allocations carried over from the previous year;
 - (C) in 2006, 1117 tons plus emission allocations carried over from the previous year; and
 - (D) in 2007, 1670 tons plus emission allocations carried over from the previous year.
- (i) Changes in the allocation pool. By July 1, 2006, the Commission shall begin to develop and adopt through rulemaking allocations for 2008 and later years.
- (j) Carryover. Emission allocations remaining in the allocation pool at the end of the year shall be carried over into the next year for use during the next ozone season.
- (k) Future requests. Once the owner or operator of a source has made a request under this Rule for emission allocations from the allocation pool, he does not have to request emission allocations under this Rule in future years. The request shall automatically be included in following years as long as the source remains eligible for emission allocations under this Rule.
- (l) Loss of eligibility. Once a source receives emission allocations under Rule .1420 of this Section, it shall no longer be eligible for emission allocations under this Rule.
- (m) Use of allocation. Allocations granted under this rule apply only to the ozone season immediately preceding the issuance of final allocations under Paragraph (g) of this Rule. Allocations issued under Paragraph (g) of this Rule for use in one year do not carry forward into any following ozone season. Allocations granted under this Rule shall be calculated for each ozone season.

History Note: Statutory Authority G.S. 143-215.3(a)(1);143-215.65; 143-215.66; 143 215.107(a)(5), (7), (10);
Temporary Adoption Eff. November 1, 2000;
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Eff. July 15, 2002.

15A NCAC 02D .1422 COMPLIANCE SUPPLEMENT POOL CREDITS

(a) Purpose. The purpose of this Rule is to regulate North Carolina's eligibility for and use of the Compliance Supplement Pool under 40 CFR 51.121(e)(3).

(b) Eligibility. Sources covered under Rule .1416 of this Section may earn Compliance Supplement Pool Credits for those nitrogen oxide emissions reductions required by Rule .1416 of this Section that are achieved during the ozone season after September 30, 1999 and are demonstrated using baseline and current emissions determined according to 40 CFR Part 75 before May 1, 2003, and are beyond the total emission reductions required under 40 CFR Part 76 or any other provision of the federal Clean Air Act.

(c) Credits. The Compliance Supplement Pool Credits earned under this Rule shall be tabulated in tons of nitrogen oxides reduced per ozone season. The control device, modification, or change in operational practice that enables the combustion source or sources to achieve the emissions reductions shall be permitted. The facility shall provide the Division of Air Quality with written notification certifying the installation and operation of the control device or the modification or change in operational practice that enables the combustion source or sources to achieve the emissions reduction. Only emission reductions that are beyond emission reductions required under 40 CFR Part 76 or any other provision of the federal Clean Air Act are creditable Compliance Supplement Pool Credits. Credits are counted in successive seasons through May 1, 2003. Seasonal credits shall be recorded in a Division of Air Quality database and will accumulate in this database until May 1, 2003. At that point a cumulative total of all the Compliance Supplement Pool Credits earned during the entire period shall be tabulated. These credits will then be available for use by the State of North Carolina to achieve compliance with the State ozone season NOx budget.

(d) Requesting credits. In order to earn Compliance Supplement Pool Credits, the owner or operator of the facility shall provide the following written documentation to the Director before January 1, 2003.

- (1) the combustion source or sources involved in the emissions reduction;
- (2) the start date of the emissions reduction;
- (3) a description of the add-on control device, modification, or change in operational practice that enables the combustion source or sources to achieve the emissions reduction;

- (4) the current and baseline emissions of nitrogen oxides of the combustion source or sources involved in this reduction in terms of tons of nitrogen oxides per season;
 - (5) the amount of reduction of emissions of nitrogen oxides achieved by this action in tons of nitrogen oxides per season per combustion source involved;
 - (6) the total reduction of nitrogen oxides achieved by this action in tons of nitrogen oxides per season for all the combustion sources involved;
 - (7) a demonstration that the proposed action has reduced the emissions of nitrogen oxides from the combustion sources involved by the amount specified in Subparagraphs (d)(5) and (d)(6) of this Rule; and
 - (8) a description of the monitoring, recordkeeping, and reporting plan used to ensure continued compliance with the proposed emissions reduction activity; continuous emissions monitors shall be used to monitor emissions.
- (e) Approving requests. Before any Compliance Supplement Pool Credits can be allocated, the Director shall have to approve them. The Director shall approve credits if he finds that:
- (1) early emissions reductions are demonstrated using baseline and current emissions determined according to 40 CFR Part 75 to be beyond the reductions required under 40 CFR Part 76, Acid Rain Nitrogen Oxides Emission Reduction Program and any other requirement of the federal Clean Air Act;
 - (2) the emission reductions are achieved after September 30, 1999, and before May 1, 2003, and
 - (3) all the information and documentation required under Paragraph (d) have been submitted.

The Director shall notify the owner or operator of the source and EPA of his approval or disapproval of a request and of the amount of Compliance Supplement Pool Credits approved. If the Director disapproves a request or part of a request, he shall explain in writing to the owner or operator of the source the reasons for disapproval.

(f) Compliance supplement pool. The Director shall verify that the Compliance Supplement Pool Credits do not exceed a statewide total of 10,737 tons for all the ozone seasons of the years 2003, 2004, and 2005.

(g) Interim report. The owner or operators of the facility shall submit to the Director by January 1, 2001 and January 1, 2002 an interim report that contains the information in Paragraph (d) of this Rule for the previous ozone season.

(h) Recording credits. Based on the interim reports submitted under Paragraph (g) of this Rule, the Division shall record the Compliance Supplement Pool Credits earned under this Rule in a central database. The Division of Air Quality

shall maintain this database. These credits shall be recorded in tons of emissions of nitrogen oxides reduced per season with the actual start date of the reduction activity. Based on the final formal request submitted under Paragraph (d) of this Rule as approved under Paragraph (e) of this Rule, the Director shall finalize the Compliance Supplement Pool Credits earned and record the final earned credits in the Division's database. .

(i) Use of credits. Final earned Compliance Supplement Pool Credits shall be available for Carolina Power & Light Co. and Duke Power Co. to use in 2003. The allocations of Carolina Power & Light Co.'s sources and Duke Power Co.'s sources in Rule .1416 of this Section shall be reduced for 2004 or 2005 by the amount of Compliance Supplement Pool Credits used in 2003 using the procedures in Paragraph (k) of this Rule. Compliance Supplement Pool Credits not used in 2003 shall be available for use by the Director of the Division of Air Quality to offset excess emissions of nitrogen oxides in order to achieve compliance with the North Carolina ozone season NOx budget after May 30, 2004, but no later than September 30, 2005. The credits shall be used on a one for one basis, that is, one ton per season of credit can be used to offset one ton, or less, per season of excess emissions to achieve compliance with the requirements of Rule .1416 or .1417 of this Section. All credits shall expire and will no longer be available for use after November 30, 2005.

(j) Reporting. The Director shall report:

- (1) to the EPA, Carolina Power & Light Co. and Duke Power Co. by
 - (A) March 1, 2003 the Compliance Supplement Pool Credits earned by Carolina Power & Light Co. and by Duke Power Co., and
 - (B) March 1, 2004 the reductions in allocations calculated under Paragraphs (k) and (l) of this Rule; and
- (2) to the EPA by:
 - (A) December 1, 2003, the Compliance Supplement Pool Credits used beginning May 1 through September 30, 2003,
 - (B) December 1, 2004, the Compliance Supplement Pool Credits used beginning May 31 through September 30, 2004, and
 - (C) December 1, 2005, the Compliance Supplement Pool Credits used beginning May 1 through September 30, 2005.

(k) Using Compliance Supplement Pool Credits in 2003. Carolina Power & Light Co. and Duke Power Co. may use Compliance Supplement Pool Credits in 2003. If they do use Compliance Supplement Pool Credits in 2003, then the allocations for their sources in Rule .1416 of this Section shall be reduced for 2004 or 2005 by the amount of Compliance Supplement Pool Credits used in 2003. Before the Director approves the use of Compliance Supplement Pool Credits in 2003, the company shall identify the sources whose allocations are to be reduced to offset the Compliance Supplement Pool Credits requested for 2003 and the year (2004 or 2005) in which the allocation is reduced. The Director shall approve no more

than 4,295 tons for Carolina Power & Light Co. and no more than 6,442 tons for Duke Power Co. The Director shall approve no more than 5,771 tons being offset by reductions in allocations in 2004 and no more than 4,966 tons being offset by reductions in allocations in 2005.

(l) Failure to receive sufficient credits. If the sum of Compliance Supplement Pool Credits received by Carolina Power & Light Co. and Duke Power Co. are less than 10,737 tons, the following procedure shall be used to reduce the allocations in Rule .1416 of this Section:

- (1) If the Compliance Supplement Pool Credits received by Carolina Power & Light Co. are less than 4,295 tons, and the Compliance Supplement Pool Credits received by Duke Power Co. are greater than or equal to 6,442 tons, the allocation for Carolina Power & Light Co.'s sources shall be reduced by the amount obtained by subtracting from 10,737 tons the sum of Compliance Supplement Pool Credits received by Carolina Power & Light Co. and Duke Power Co. The allocations of Carolina Power & Light Co.'s sources shall be reduced using the procedure in Subparagraph (4) of this Paragraph.
- (2) If the Compliance Supplement Pool Credits received by Duke Power Co. are less than 6,442 tons, and the Compliance Supplement Pool Credits received by Carolina Power & Light Co. are greater than or equal to 4,295 tons, the allocation for Duke Power Co.'s sources shall be reduced by the amount obtained by subtracting from 10,737 tons the sum of Compliance Supplement Pool Credits received by Carolina Power & Light Co. and Duke Power Co. The allocations of Duke Power Co.'s sources shall be reduced using the procedure in Subparagraph (4) of this Paragraph.
- (3) If the Compliance Supplement Pool Credits received by Carolina Power & Light Co. are less than 4,295 tons, and the Compliance Supplement Pool Credits received by Duke Power Co. are less than 6,442 tons:
 - (A) The allocation for Carolina Power & Light Co.'s sources shall be reduced by the amount obtained by subtracting from 4,295 tons the Compliance Supplement Pool Credits received by Carolina Power & Light Co. The allocations of Carolina Power & Light Co.'s sources shall be reduced using the procedure in Subparagraph (4) of this Paragraph; and
 - (B) The allocation for Duke Power Co.'s sources shall be reduced by the amount obtained by subtracting from 6,442 tons the Compliance Supplement Pool Credits received by Duke Power Co. The allocations of Duke Power Co.'s sources shall be reduced using the procedure in Subparagraph (4) of this Paragraph.

- (4) When the allocations in Rule .1416 of this Section for Carolina Power & Light Co.'s sources or for Duke Power Co.'s sources are required to be reduced, the following procedure shall be used:
- (A) If the reduction required is less than or equal to 4,966 tons, then following procedure shall be used:
- (i) The allocation of all sources listed in Rule .1416 of this Section for 2005 for Carolina Power & Light Co. or Duke Power Co. are summed.
 - (ii) The reduction required under Subparagraph (1), (2), or (3) of this Paragraph is subtracted from the sum computed under Subpart (i) of this Part.
 - (iii) The allocation of each source listed in Rule .1416 of this Section for 2005 for Carolina Power & Light Co. or Duke Power Co. is multiplied by the value computed under Subpart (ii) of this Part and divided by the value computed under Subpart (i) of this Part. The result is the revised allocation for that source.
- (B) If the reduction required is more than 4,966 tons, then the following procedure shall be used:
- (i) The reduction for the allocations for 2005 is determined using the procedure under Part (A) of this Subparagraph and substituting 4,966 as the reduction required under Subpart (A)(ii) of this Subparagraph.
 - (ii) The reduction for the allocations for 2004 shall be determined using the following procedure:
 - (I) The reduction required under Subparagraph (1), (2), or (3) of this Paragraph is subtracted from 4,966.
 - (II) The allocations of all sources listed in Rule .1416 of this Section for 2004 for Carolina Power & Light Co. or Duke Power Co. for 2004 are summed.
 - (III) The allocation of each source listed in Rule .1416 of this Section for 2004 for Carolina Power & Light Co. or Duke Power Co. is multiplied by the value computed under Sub-Subpart (I) of this Subpart and divided by the value computed Sub-Subpart (II) of this Subpart. The result is the revised allocation for that source
- (m) If allocations are reduced in 2004 or 2005 for Carolina Power & Light Co. or Duke Power Co. under Paragraph (k) or (l) of this Rule, the company whose allocations are reduced shall reduce its allocations by returning allowances

through the use of allowance transfers to the State following the procedures in 40 CFR Part 96. These allowances shall be retired.

*History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5), (7), (10);
Temporary Adoption Eff. August 1, 2001;
Eff. July 15, 2002;
Amended Eff. June 1, 2004.*

15A NCAC 2D .1423 LARGE INTERNAL COMBUSTION ENGINES

(a) Applicability. This rule applies to the following internal combustion engines permitted after October 30, 2000 that are subject to Rule .1418 of this Section but are not subject to Rules .0530 (prevention of significant deterioration) or .0531 (nonattainment area major new source review) of this Subchapter:

- (1) rich burn stationary internal combustion engines rated at equal or greater than 2,400 brake horsepower,
- (2) lean burn stationary internal combustion engines rated at equal or greater than 2,400 brake horsepower,
- (3) diesel stationary internal combustion engines rated at equal or greater than 3,000 brake horsepower, or
- (4) dual fuel stationary internal combustion engines rated at equal or greater than 4,400 brake horsepower,

(b) Emission limitation. The owner or operator of a stationary internal combustion engine shall not cause to be emitted into the atmosphere nitrogen oxides in excess of the following applicable limit, expressed as nitrogen dioxide corrected to 15 percent parts per million by volume (ppmv) stack gas oxygen on a dry basis, averaged over a rolling 30-day period, as may be adjusted under Paragraph (c) of this Rule:

MAXIMUM ALLOWABLE EMISSION CONCENTRATION FOR STATIONARY INTERNAL COMBUSTION ENGINES (parts per million)

Engine Type	Limitation
Rich-burn	110
Lean-burn	125
Diesel	175
Dual fuel	125

(c) Adjustment. Each emission limit expressed in Paragraph (b) of this Rule may be multiplied by X, where X equals the engine efficiency (E) divided by a reference efficiency of 30 percent. Engine efficiency (E) shall be determined using one of the methods specified in Subparagraph (1) or (2) of this Paragraph, whichever provides a higher value. However, engine efficiency (E) shall not be

less than 30 percent. An engine with an efficiency lower than 30 percent shall be assigned an efficiency of 30 percent.

(1)

$$E = \frac{(\text{Engine output}) * (100)}{\text{Energy input}}$$

where energy input is determined by a fuel measuring device accurate to plus or minus 5 percent and is based on the higher heating value (HHV) of the fuel. Percent efficiency (E) shall be averaged over 15 consecutive minutes and measured at peak load for the applicable engine.

(2)

$$E = \frac{(\text{Manufacture's Rated Efficiency [continuous] at LHV}) * (\text{LHV})}{(\text{HHV})}$$

where LHV is the lower heating value of the fuel; and HHV is the higher heating value of the fuel.

(d) Compliance determination and monitoring. The owner or operator of an internal combustion engine subject to the requirements of this Rule shall determine compliance using:

- (1) a continuous emissions monitoring system (CEMS) which meets the applicable requirements of Appendices B and F of 40 CFR part 60, excluding data obtained during periods specified in Paragraph (g) of this Rule and .1404 of this Section; or
- (2) an alternate calculated and recordkeeping procedure based on actual emissions testing and correlation with operating parameters. The installation, implementation, and use of this alternate procedure shall be approved by the Director before it may be used. The Director may approve the alternative procedure if he finds that it can show the compliance status of the engine.

(e) Reporting requirements. The owner or operator of a stationary internal combustion engine subject to this Rule shall submit:

- (1) a report documenting the engine's total nitrogen oxide emissions beginning May 1 and ending September 30 of each year to the Director by October 31 of each year, beginning with the year of first ozone season that the engine operates.
- (2) an excess emissions and monitoring systems performance report, according to the requirements of 40 CFR 60.7(c) and 60.13, if a continuous emissions monitoring system is used.

(f) Recordkeeping requirements. The owner or operator of a stationary internal combustion engine subject to this Rule shall maintain all records necessary to

demonstrate compliance with the Rule for two calendar years at the facility at which the engine is located. The records shall be made available to the Director upon request. The owner or operator shall maintain records of the following information for each day the engine operates:

- (1) identification and location of the engine;
- (2) calendar date of record;
- (3) the number of hours the engine operated during each day, including startups, shutdowns, and malfunctions, and the type and duration of maintenance and repairs;
- (4) date and results of each emissions inspection;
- (5) a summary of any emissions corrective maintenance taken;
- (6) the results of all compliance tests;
- (7) if a unit is equipped with a continuous emission monitoring system:
 - (A) identification of time periods during which nitrogen oxide standards are exceeded, the reason for the excess emissions, and action taken to correct the excess emissions and to prevent similar future excess emissions; and
 - (B) identification of the time periods for which operating conditions and pollutant data were not obtained including reasons for not obtaining sufficient data and a description of corrective actions taken.

(g) Exemptions. The emission standards of this Rule shall not apply to the following periods of operation:

- (1) start-up and shut-down periods and periods of malfunction, not to exceed 36 consecutive hours;
- (2) regularly scheduled maintenance activities.

*History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5), (7), (10);
Temporary Adoption Eff. August 1, 2001;
Eff. July 15, 2002.*

SECTION .1900 - OPEN BURNING**15A NCAC 02D .1901 PURPOSE, SCOPE, AND PERMISSIBLE OPEN BURNING**

(a) Purpose. The purpose of this Section is to control air pollution resulting from the open burning of combustible materials and to protect the air quality in the immediate area of the open burning.

(b) Scope. This Section applies to all operations involving open burning. This Section does not authorize any open burning which is a crime under G.S. 14-136 through G.S. 14-140.1, or affect the authority of the Division of Forest Resources to issue or deny permits for open burning in or adjacent to woodlands as provided in G.S. 113-60.21 through G.S. 113-60.31. This Section does not affect the authority of any local government to regulate open burning through its fire codes or other ordinances. The issuance of any open burning permit by the Division of Forest Resources or any local government does not relieve any person from the necessity of complying with this Section or any other air quality rule.

(c) Permissible Open Burning. A person shall not cause, allow, or permit open burning of combustible material except as allowed by Rule .1903 and Rule .1904 of this Section.

*History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1996;
Amended Eff. June 1, 2004.*

15A NCAC 02D .1902 DEFINITIONS

For the purpose of this Section, the following definitions apply:

- (1) "Air Curtain Burner" means a stationary or portable combustion device that directs a plane of high velocity forced draft air through a manifold head into a pit or container with vertical walls in such a manner as to maintain a curtain of air over the surface of the pit and a recirculating motion of air under the curtain.
- (2) "Air Quality Action Day Code 'Orange' or above" means an air quality index greater than 100 as defined in 40 CFR Part 58, Appendix G.
- (3) "Air quality forecast area" means for
 - (a) Asheville air quality forecast area: Buncombe, Haywood, Henderson, Jackson, Madison, Swain, Transylvania, and Yancey Counties;
 - (b) Charlotte air quality forecast area: Cabarrus, Gaston, Iredell South of Interstate 40, Lincoln, Mecklenburg, Rowan, and Union Counties;
 - (c) Hickory air quality forecast area: Alexander, Burke, Caldwell, and Catawba Counties;

- (d) Fayetteville air quality forecast area: Cumberland and Harnett Counties;
 - (e) Rocky Mount air quality forecast area: Edgecombe and Nash Counties;
 - (e) Triad air quality forecast area: Alamance, Caswell, Davidson, Davie, Forsyth, Guilford, Randolph, Rockingham, and Stokes Counties; and
 - (f) Triangle air quality forecast area: Chatham, Durham, Franklin, Granville, Johnston, Person, Orange, Vance, and Wake Counties.
- (4) "Dangerous materials" means explosives or containers used in the holding or transporting of explosives.
 - (5) "HHCB" means the Health Hazards Control Branch of the Division of Epidemiology.
 - (6) "Initiated" means start or ignite a fire or reignite or rekindle a fire.
 - (7) "Land clearing" means the uprooting or clearing of vegetation in connection with construction for buildings; right-of-way maintenance; agricultural, residential, commercial, institutional, or industrial development; mining activities; or the initial clearing of vegetation to enhance property value; but does not include routine maintenance or property clean-up activities.
 - (8) "Log" means any limb or trunk whose diameter exceeds six inches.
 - (9) "Nonattainment area" means an area identified in 40 CFR 81.334 as nonattainment.
 - (10) "Nuisance" means causing physical irritation exacerbating a documented medical condition, visibility impairment, or evidence of soot or ash on property or structure other than the property on which the burning is done.
 - (11) "Occupied structure" means a building in which people may live or work or one intended for housing farm or other domestic animals.
 - (12) "Off-site" means any area not on the premises of the land-clearing activities.
 - (13) "Open burning" means the burning of any matter in such a manner that the products of combustion resulting from the burning are emitted directly into the atmosphere without passing through a stack, chimney, or a permitted air pollution control device.
 - (14) "Operator" as used in .1904(b)(6) and .1904(b)(2)(D) of this Section, means the person in operational control over the open burning.
 - (15) "Person" as used in 02D .1901(c), means:
 - (a) the person in operational control over the open burning; or

- (b) the landowner or person in possession or control of the land when he has directly or indirectly allowed the open burning or has benefited from it.
- (16) "Public pick-up" means the removal of refuse, yard trimmings, limbs, or other plant material from a residence by a governmental agency, private company contracted by a governmental agency or municipal service.
- (17) "Public road" means any road that is part of the State highway system; or any road, street, or right-of-way dedicated or maintained for public use.
- (18) "RACM" means regulated asbestos containing material as defined in 40 CFR 61.142.
- (19) "Refuse" means any garbage, rubbish, or trade waste.
- (20) "Regional Office Supervisor" means the supervisor of personnel of the Division of Air Quality in a regional office of the Department of Environment and Natural Resources.
- (21) "Salvageable items" means any product or material that was first discarded or damaged and then all, or part, was saved for future use, and include insulated wire, electric motors, and electric transformers.
- (22) "Synthetic material" means man-made material, including tires, asphalt materials such as shingles or asphaltic roofing materials, construction materials, packaging for construction materials, wire, electrical insulation, and treated or coated wood.

History Note: Authority G.S. 143-212; 143-213; 143-215.3(a)(1);
 Eff. July 1, 1996;
 Amended Eff. December 1, 2005; June 1, 2004; July 1, 1998.

15A NCAC 02D .1903 PERMISSIBLE OPEN BURNING WITHOUT AN AIR QUALITY PERMIT

(a) All open burning is prohibited except open burning allowed under Paragraph (b) of this Rule or Rule .1904 of this Section. Except as allowed under Paragraphs (b)(3) through (b)(9) of this Rule, open burning shall not be initiated in an air quality forecast area that the Department, or the Forsyth County Environmental Affairs Department for the Triad air quality forecast area, has forecasted to be in an Air Quality Action Day Code "Orange" or above during the time period covered by that forecast.

(b) The following types of open burning are permissible without an air quality permit:

- (1) open burning of leaves, tree branches or yard trimmings, excluding logs and stumps, if the following conditions are met:
 - (A) The material burned originates on the premises of private

- residences and is burned on those premises;
 - (B) There are no public pickup services available;
 - (C) Non-vegetative materials, such as household garbage, lumber, or any other synthetic materials are not burned;
 - (D) The burning is initiated no earlier than 8:00 a.m. and no additional combustible material is added to the fire between 6:00 p.m. on one day and 8:00 a.m. on the following day;
 - (E) The burning does not create a nuisance; and
 - (F) Material is not burned when the Division of Forest Resources has banned burning for that area.
- (2) open burning for land clearing or right-of-way maintenance if the following conditions are met:
- (A) The wind direction at the time that the burning is initiated and the wind direction as forecasted by the National Weather Service during the time of the burning are away from any area, including public roads within 250 feet of the burning as measured from the edge of the pavement or other roadway surface, which may be affected by smoke, ash, or other air pollutants from the burning;
 - (B) The location of the burning is at least 1,000 feet from any dwelling, group of dwellings, or commercial or institutional establishment, or other occupied structure not located on the property on which the burning is conducted. The regional office supervisor may grant exceptions to the setback requirements if:
 - (i) a signed, written statement waiving objections to the open burning associated with the land clearing operation is obtained and submitted to, and the exception granted by, the regional office supervisor before the burning begins from a resident or an owner of each dwelling, commercial or institutional establishment, or other occupied structure within 1,000 feet of the open burning site. In the case of a lease or rental agreement, the lessee or renter shall be the person from whom permission shall be gained prior to any burning; or
 - (ii) an air curtain burner that complies with Rule .1904 of this Section, is utilized at the open burning site. Factors that the regional supervisor shall consider in deciding to grant the exception include: all the persons who need to sign the statement waiving the objection have signed it, the location of the burn, and

- the type, amount, and nature of the combustible substances;
- (C) Only land cleared plant growth is burned. Heavy oils, asphaltic materials such as shingles and other roofing materials, items containing natural or synthetic rubber, or any materials other than plant growth shall not be burned; however, kerosene, distillate oil, or diesel fuel may be used to start the fire;
 - (D) Initial burning begins only between the hours of 8:00 a.m. and 6:00 p.m., and no combustible material is added to the fire between 6:00 p.m. on one day and 8:00 a.m. on the following day;
 - (E) No fires are initiated or vegetation added to existing fires when the Division of Forest Resources has banned burning for that area; and
 - (F) Materials are not carried off-site or transported over public roads for open burning unless the materials are carried off-site or transported over public roads to facilities permitted according to Rule .1904 of this Section for the operation of an air curtain burner at a permanent site;
- (3) camp fires and fires used solely for outdoor cooking and other recreational purposes, or for ceremonial occasions, or for human warmth and comfort and which do not create a nuisance and do not use synthetic materials or refuse or salvageable materials for fuel;
 - (4) fires purposely set to forest land for forest management practices for which burning is acceptable to the Division of Forest Resources;
 - (5) fires purposely set to agricultural lands for disease and pest control and fires set for other agricultural or apicultural practices for which burning is currently acceptable to the Department of Agriculture;
 - (6) fires purposely set for wildlife management practices for which burning is currently acceptable to the Wildlife Resource Commission;
 - (7) fires for the disposal of dangerous materials when it is the safest and most practical method of disposal;
 - (8) fires purposely set by manufacturers of fire extinguishing materials or equipment, testing laboratories, or other persons, for the purpose of testing or developing these materials or equipment in accordance with a standard qualification program;
 - (9) fires purposely set for the instruction and training of fire-fighting personnel at permanent fire-fighting training facilities(10) fires purposely set for the instruction and training of fire-fighting personnel when conducted under the supervision of or with the cooperation of one or more of the following agencies:

- (A) the Division of Forest Resources;
 - (B) the North Carolina Insurance Department;
 - (C) North Carolina technical institutes; or
 - (D) North Carolina community colleges, including:
 - (i) the North Carolina Fire College; or
 - (ii) the North Carolina Rescue College;
- (11) fires not described in Subparagraphs (9) or (10) of this Paragraph, purposely set for the instruction and training of fire-fighting personnel, provided that:
- (A) The regional office supervisor of the appropriate regional office and the HHCB have been notified according to the procedures and deadlines contained in the appropriate regional notification form. This form may be obtained by writing the appropriate regional office at the address in Rule .1905 of this Section and requesting it, and
 - (B) The regional office supervisor has granted permission for the burning. Factors that the regional office supervisor shall consider in granting permission for the burning include type, amount, and nature of combustible substances. The regional office supervisor shall not grant permission for the burning of salvageable items, such as insulated wire and electric motors or if the primary purpose of the fire is to dispose of synthetic materials or refuse. The regional office supervisor of the appropriate regional office shall not consider previously demolished structures as having training value. However, the regional office supervisor of the appropriate regional office may allow an exercise involving the burning of motor vehicles burned over a period of time by a training unit or by several related training units. Any deviations from the dates and times of exercises, including additions, postponements, and deletions, submitted in the schedule in the approved plan shall be communicated verbally to the regional office supervisor of the appropriate regional office at least one hour before the burn is scheduled; and
- (12) fires for the disposal of material generated as a result of a natural disaster, such as tornado, hurricane, or flood, if the regional office supervisor grants permission for the burning. The person desiring to do the burning shall document and provide written notification to the regional office supervisor of the appropriate regional office that there is no other practical method of disposal of the waste. Factors that the regional office supervisor shall consider in granting permission for the burning include type, amount, location of the burning, and nature of combustible substances. The regional office

supervisor shall not grant permission for the burning if the primary purpose of the fire is to dispose of synthetic materials or refuse or recovery of salvageable materials. Fires authorized under this Subparagraph shall comply with the conditions of Subparagraph (b)(2) of this Rule.

(c) The authority to conduct open burning under this Section does not exempt or excuse any person from the consequences, damages or injuries that may result from this conduct. It does not excuse or exempt any person from complying with all applicable laws, ordinances, rules or orders of any other governmental entity having jurisdiction even though the open burning is conducted in compliance with this Section.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1996;
Amended Eff. December 1, 2005; June 1, 2004; July 1, 1998.

15A NCAC 02D .1904 AIR CURTAIN BURNERS

(a) Air quality permits shall be required for air curtain burners subject to 40 CFR 60.2245 through 60.2265 or located at permanent sites or where materials are transported in from another site. Air quality permits shall not be required for air curtain burners located at temporary land clearing or right-of-way maintenance sites for less than nine months unless they are subject to 40 CFR 60.2245 through 60.2265. The operation of air curtain burners in particulate and ozone nonattainment areas shall cease in any area that has been forecasted by the Department, or the Forsyth County Environmental Affairs Department for the Triad air quality forecast area, to be in an Air Quality Action Day Code "Orange" or above during the time period covered by that forecast.

(b) Air curtain burners shall comply with the following conditions and stipulations:

- (1) The wind direction at the time that the burning is initiated and the wind direction as forecasted by the National Weather Service during the time of the burning shall be away from any area, including public roads within 250 feet of the burning as measured from the edge of the pavement or other roadway surface, which may be affected by smoke, ash, or other air pollutants from the burning;
- (2) Only collected land clearing and yard waste materials may be burned. Heavy oils, asphaltic materials, items containing natural or synthetic rubber, tires, grass clippings, collected leaves, paper products, plastics, general trash, garbage, or any materials containing painted or treated wood materials shall not be burned. Leaves still on trees or brush may be burned;
- (3) No fires shall be started or material added to existing fires when the Division of Forest Resources has banned burning for that area;

- (4) Burning shall be conducted only between the hours of 8:00 a.m. and 6:00 p.m.;
- (5) The air curtain burner shall not be operated more than the maximum source operating hours-per-day and days-per-week. The maximum source operating hours-per-day and days-per-week shall be set to protect the ambient air quality standard and prevention of significant deterioration (PSD) increment for particulate. The maximum source operating hours-per-day and days-per-week shall be determined using the modeling procedures in Rule .1106(b), (c), and (f) of this Subchapter. This Subparagraph shall not apply to temporary air curtain burners;
- (6) An air curtain burner with an air quality permit shall have onsite at all times during operation of the burner a visible emissions reader certified according to 40 CFR Part 60, Method 9 to read visible emissions, and the facility shall test for visible emissions within five days after initial operation and within 90 days before permit expiration;
- (7) Air curtain burners shall meet manufacturer's specifications for operation and upkeep to ensure complete burning of material charged into the pit. Manufacturer's specifications shall be kept on site and be available for inspection by Division staff;
- (8) Except during start-up, visible emissions shall not exceed ten percent opacity when averaged over a six-minute period except that one six-minute period with an average opacity of more than ten percent but no more than 35 percent shall be allowed for any one-hour period. During start-up, the visible emissions shall not exceed 35 percent opacity when averaged over a six-minute period. Start-up shall not last for more than 45 minutes, and there shall be no more than one start-up per day. Air curtain burners subject to 40 CFR 60.2245 through 60.2265 shall comply with the opacity standards in 40 CFR 60.2250 instead of the opacity standards in this Subparagraph;
- (9) The owner or operator of an air curtain burner shall not allow ash to build up in the pit to a depth higher than one-third of the depth of the pit or to the point where the ash begins to impede combustion, whichever occurs first. The owner or operator of an air curtain burner shall allow the ashes to cool and water the ash prior to its removal to prevent the ash from becoming airborne;
- (10) The owner or operator of an air curtain burner shall not load material into the air curtain burner such that it will protrude above the air curtain;
- (11) Only distillate oil, kerosene, diesel fuel, natural gas, or liquefied petroleum gas may be used to start the fire; and

- (12) The location of the burning shall be at least 500 feet from any dwelling, group of dwellings, or commercial or institutional establishment, or other occupied structure not located on the property on which the burning is conducted. The regional office supervisor may grant exceptions to the setback requirements if a signed, written statement waiving objections to the air curtain burning is obtained from a resident or an owner of each dwelling, commercial or institutional establishment, or other occupied structure within 500 feet of the burning site. In case of a lease or rental agreement, the lessee or renter, and the property owner shall sign the statement waiving objections to the burning. The statement shall be submitted to and approved by the regional office supervisor before initiation of the burn. Factors that the regional supervisor shall consider in deciding to grant the exception include: all the persons who need to sign the statement waiving the objection have signed it; the location of the burn; and the type, amount, and nature of the combustible substances.

Compliance with this Rule does not relieve any owner or operator of an air curtain burner from the necessity of complying with other rules in this Section or any other air quality rules.

(c) Recordkeeping Requirements. The owner or operator of an air curtain burner at a permanent site shall keep a daily log of specific materials burned and amounts of material burned in pounds per hour and tons per year. The logs at a permanent air curtain burner site shall be maintained on site for a minimum of two years and shall be available at all times for inspection by the Division of Air Quality. The owner or operator of an air curtain burner at a temporary site shall keep a log of total number of tons burned per temporary site. The owner or operator of air curtain burner subject to 40 CFR 60.2245 through 60.2265 shall comply with the monitoring, recordkeeping, and reporting requirements in 40 CFR 60.2245 through 60.2265.

(d) Title V Considerations. Burners that have the potential to burn 8,100 tons of material or more per year may be subject to Section 15A NCAC 2Q .0500, Title V Procedures.

(e) Prevention of Significant Deterioration Consideration. Burners that burn 16,200 tons per year or more may be subject to 15A NCAC 2D .0530, Prevention of Significant Deterioration.

(f) A person may use a burner using a different technology or method of operation than an air curtain burner as defined under Rule .1902 of this Section if he demonstrates to the Director that the burner is at least as effective as an air curtain burner in reducing emissions and if the Director approves the use of the burner. The Director shall approve the burner if he finds that it is at least as effective as an air curtain burner. This burner shall comply with all the requirements of this Rule.

(g) In addition to complying with the requirements of this rule, an air curtain burner that commenced construction after November 30, 1999, or that commenced reconstruction or modification on or after June 1, 2001, shall also comply with 40 CFR 60.2245 through 60.2265 in addition to the requirements of this Rule.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5), (10); 143-215.66; 143-215.108; 40 CFR 60.2865;
Eff. July 1, 1996;
Amended Eff. December 1, 2005; August 1, 2004.

15A NCAC 02D .1905 REGIONAL OFFICE LOCATIONS

Inquiries, requests and plans shall be handled by the appropriate Department of Environment and Natural Resources regional offices. They are:

- (1) Asheville Regional Office, 2090 Highway 70, Swannanoa, North Carolina 28778
- (2) Winston-Salem Regional Office, 585 Waughtown Street, Winston-Salem, North Carolina 27107;
- (3) Mooresville Regional Office, 610 East Center Avenue, Suite 301, Mooresville, North Carolina 28115;
- (4) Raleigh Regional Office, 3800 Barrett Drive, Raleigh, North Carolina 27611;
- (5) Fayetteville Regional Office, Systel Building, 225 Green Street, Suite 714, Fayetteville, North Carolina 28301;
- (6) Washington Regional Office, 943 Washington Square Mall, Washington, North Carolina 27889; and
- (7) Wilmington Regional Office, 127 Cardinal Drive Extension, Wilmington, North Carolina 28405.

History Note: Authority G.S. 143-215.3(a)(1);
Eff. July 1, 1996;
Amended Eff. December 1, 2005;

15A NCAC 02D .1906 DELEGATION TO COUNTY GOVERNMENTS

(a) The governing body of any county or municipality or group of counties or municipalities may establish a partial air pollution control program to implement and enforce this Section provided that:

- (1) It has the administrative organization, staff, financial and other resources necessary to carry out such a program;
- (2) It has adopted appropriate ordinances, resolutions, and regulations to establish and maintain such a program; and
- (3) It has otherwise complied with G.S. 143-215.112 "Local Air Pollution Control Programs."

(b) The governing body shall submit to the Director documentation demonstrating that the requirements of Paragraph (a) of this Rule have been met. Within 90 days after receiving the submittal from the governing body, the Director shall review the documentation to determine if the requirements of Paragraph (a) of this Rule have been met and shall present his findings to the Commission. If the Commission determines that the air pollution program is adequate, it shall certify the local air pollution program to implement and enforce this Section within its area of jurisdiction.

(c) County and municipal governments shall not have the authority to issue permits for air curtain burners at a permanent site as defined in 15A NCAC 02D .1904.

(d) The three certified local air pollution programs, the Western North Carolina Regional Air Quality Control Agency, the Forsyth County Environmental Affairs Department, and Mecklenburg County Air Quality, a Division of Land Use and Environmental Services Agency , shall continue to enforce open burning rules as part of their local air pollution programs.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.112;*
 Eff. July 1, 1996;
 Amended Eff. December 1, 2005; June 1, 2004.

SECTION .2300 – BANKING EMISSION REDUCTION CREDITS**15A NCAC 02D .2301 PURPOSE**

This Section provides for the creation, banking, transfer, and use of emission reduction credits for:

- (1) nitrogen oxides (NO_x),
- (2) volatile organic compounds (VOC),
- (3) sulfur dioxide (SO₂),
- (4) fine particulate (PM_{2.5}), and
- (5) ammonia (NH₃)

for offsets under 15A NCAC 02D .0531, Sources in Nonattainment Area.

*History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(12);
Eff. December 1, 2005.*

15A NCAC 02D .2302 DEFINITIONS

For the purposes of this Section, the following definitions shall apply:

- (1) “Air permit” means a construction and operation permit issued under 15A NCAC 02Q .0300, Construction and Operation Permits, or .0500, Title V Procedures.
- (2) “Banking” means a system for recording emission reduction credits so that they may be used or transferred in the future.
- (3) “Enforceable” means enforceable by the Division. Methods for ensuring that emission reduction credits are enforceable include conditions in air permits issued.
- (4) “Federally designated ozone nonattainment area in North Carolina” means an area designated as nonattainment for ozone and described in 40 CFR 81.334.
- (5) “Federally designated fine particulate (PM_{2.5}) nonattainment area in North Carolina” means an area designated as nonattainment for fine particulate (PM_{2.5}) and described in 40 CFR 81.334.
- (6) “Netting Demonstration” means the act of calculating a “net emissions increase” under the preconstruction review requirements of Title I, Part D of the Federal Clean Air Act and the regulations promulgated there under in 15A NCAC 02D .0530, Prevention of Significant Deterioration, or .0531, Sources in Nonattainment Area.
- (7) “Permanent” means assured for the life of the corresponding emission reduction credit through an enforceable mechanism such as a permit condition or revocation.
- (8) “Quantifiable” means that the amount, rate, and characteristics of the emission reduction credit can be estimated through a reliable, reproducible method.

- (9) “Real” means a reduction in actual emissions emitted into the air.
- (10) “Surplus” means not required by any local, State, or federal law, rule, order, or requirement and in excess of reductions used by the Division in issuing any air permit, in excess of any conditions in an air permit to avoid an otherwise applicable requirement, or to demonstrate attainment of ambient air quality standards in 15A NCAC 02D .0400 or reasonable further progress towards achieving attainment of ambient air quality standards. For the purpose of determining the amount of surplus emission reductions, any seasonal emission limitation or standard shall be assumed to apply throughout the year. The following are not considered surplus:
 - (a) emission reductions that have previously been used to avoid 15A NCAC 02D .0530 or .0531 (new source review) through a netting demonstration;
 - (b) Emission reductions in hazardous air pollutants listed pursuant to Section 112(b) of the federal Clean Air Act to the extent needed to comply with 15A NCAC 02D .1109, .1111, or .1112; however, emission reductions in hazardous air pollutants that are also volatile organic compounds beyond that necessary to comply with 15A NCAC 02D .1109, .1111, or .1112 are surplus; or
 - (c) emission reductions used to offset excess emissions from another source as part of an alternative mix of controls (“bubble”) demonstration under 15A NCAC 02D .0501.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(12);
 Eff. December 1, 2005.

15A NCAC 02D .2303 APPLICABILITY AND ELIGIBILITY

(a) Applicability. Any facility that has the potential to emit nitrogen oxides, volatile organic compounds, sulfur dioxide, ammonia, or fine particulate (PM_{2.5}) in amounts greater than 25 tons per year and that is in a federally designated ozone or fine particulate (PM_{2.5}) nonattainment area in North Carolina shall be eligible to create and bank nitrogen oxides, volatile organic compounds, sulfur dioxide, ammonia, or fine particulate (PM_{2.5}) emission reduction credits.

(b) Eligibility of emission reductions.

- (1) To be approved by the Director as an emission reduction credit, a reduction in emissions shall be real, permanent, quantifiable, enforceable, and surplus and shall have occurred:
 - (A) for ozone after December 31, 2002 for the Charlotte-Gastonia-Rock Hill, NC-SC nonattainment area, the Raleigh-Durham-Chapel Hill nonattainment area, the Rocky Mount

- nonattainment area, and the Haywood and Swain Cos (Great Smoky Mountains National Park) nonattainment area, and after December 31, 2000 for all other nonattainment areas.
- (B) for fine particulate (PM_{2.5}) after December 31, 2002 for the Greensboro-Winston-Salem-High Point, NC and Hickory-Morganton-Lenoir, NC nonattainment areas.
- (2) To be eligible for consideration as emission reduction credits, emission reductions may be created by any of the following methods:
- (A) installation of control equipment beyond what is necessary to comply with existing rules;
 - (B) a change in process inputs, formulations, products or product mix, fuels, or raw materials;
 - (C) a reduction in actual emission rate;
 - (D) a reduction in operating hours;
 - (E) production curtailment or reduction in throughput;
 - (F) shutdown of emitting sources or facilities; or
 - (G) any other enforceable method that the Director finds resulting in real, permanent, quantifiable, enforceable, and surplus reduction of emissions.
- (c) Ineligible for emission reduction credit. Emission reductions from the following shall not be eligible to be banked as emission reduction credits:
- (1) sources covered under a special order or variance until compliance with the emission standards that are the subject of the special order or variance is achieved;
 - (2) sources that have operated less than 24 months;
 - (3) emission allocations and allowances used in the nitrogen oxide budget trading program under 15A NCAC 02D .1419; .
 - (4) emission reductions outside North Carolina; or
 - (5) mobile sources.

History Note: Authority *G.S. 143-215.3(a)(1); 143-215.107(a)(12)*
Eff. December 1, 2005.

15A NCAC 02D .2304 QUALIFICATION OF EMISSION REDUCTION CREDITS

For purposes of calculating the amount of emission reduction that can be quantified as an emission reduction credit, the following procedures shall be followed:

- (1) The source's average actual annual emissions before the emission reduction shall be calculated in tons per year. In calculating average actual annual emissions before the emission reduction, data from

the 24-month period immediately preceding the reduction in emissions shall be used. The Director may allow the use of a different time period, not to exceed seven years immediately preceding the reduction in emissions if the owner or operator of the source documents that such period is more representative of normal source operation.

- (2) The emission reduction credit generated by the emission reduction shall be calculated by subtracting the allowable annual emissions rate following the reduction from the average actual annual emissions prior to the reduction.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(12);
Eff. December 1, 2005.

15A NCAC 02D .2305 CREATING AND BANKING EMISSION REDUCTION CREDITS

(a) The owner or operator of a source seeking to create and bank emission reduction credits shall submit over the signature of the responsible official for a Title V facility or the official identified in 15A NCAC 02Q .0304(j) for a non-Title V facility the following information, which may be on an application form provided by the Division:

- (1) the company name, contact person and telephone number, and street address of the source seeking the emission reduction credit;
- (2) a description of the type of source where the proposed emission reduction occurred or will occur;
- (3) a detailed description of the method or methods to be employed to create the emission reduction;
- (4) the date that the emission reduction occurred or will occur;
- (5) quantification of the emission reduction credit as described under Rule .2304 of this Section;
- (6) the proposed method for ensuring the reductions are permanent and enforceable, including any necessary application to amend the facility's air permit or, for a shutdown of an entire facility, a request for permit rescission;
- (7) whether any portion of the reduction in emissions to be used to create the emission reduction credit has previously been used to avoid 15A NCAC 02D .0530 (prevention of significant deterioration) or .0531 (nonattainment major new source review) through a netting demonstration;
- (8) any other information necessary to demonstrate that the reduction in emissions is real, permanent, quantifiable, enforceable, and surplus, and

- (9) a complete permit application if the permit needs to be modified to create or enforce the emission reduction credit.
- (b) If the Director finds that
- (1) all the information required to be submitted under Paragraph (a) of this Rule has been submitted;
 - (2) the source is eligible under Rule .2303 of this Section;
 - (3) a complete permit application has been submitted, if necessary, to implement the reduction in emissions; and
 - (4) the reduction in emissions is real, permanent, quantifiable, enforceable, and surplus;
- the Director shall issue the source a certificate of emission reduction credit once the facility's permit is modified, if necessary, to reflect permanently the reduction in emissions. The Director shall register the emission reduction credit for use only after the reduction has occurred.
- (c) Processing schedule.
- (1) The Division shall send written acknowledgement of receipt of the request to create and bank emission credits within 10 days of receipt of the request.
 - (2) The Division shall review all request to create and bank emission credits within 30 days to determine whether the application is complete or incomplete for processing purposes. If the application is incomplete the Division shall notify the applicant of the deficiency. The applicant shall have 90 days to submit the requested information. If the applicant fails to provide the requested information within 90 days, the Division shall return the application.
 - (3) The Director shall either approve or disapprove the request within 90 days after receipt of a complete application requesting the banking of emission reduction credits. Upon approval the Director shall issue a certificate of emission reduction credit.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(12);
Eff. December 1, 2005.

15A NCAC 02D .2306 DURATION OF EMISSION REDUCTION CREDITS

Banked emission reduction credits are permanent until withdrawn by the owner or until withdrawn by the Director under Rule .2310 of this Section.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(12);
Eff. December 1, 2005.

15A NCAC 02D .2307 USE OF EMISSION REDUCTION CREDITS

(a) Persons holding emission reduction credits may withdraw the emission reduction credits and may use them in any manner consistent with this Section.

(b) An emission reduction credit may be withdrawn only by the owner of record or by the Director under Rule .2310 of this Section and may be withdrawn in whole or in part. In the case of a partial withdrawal, the Director shall issue a revised certificate of emission reduction credit to the owner of record reflecting the new amount of the credit and shall revoke the original certificate.

(c) Emission reduction credits may be used for the following purposes:

- (1) as offsets or netting demonstrations required by 15A NCAC 02D .0531 for a major new source of:
 - (A) nitrogen oxides or volatile organic compounds in a federally designated ozone nonattainment area, or
 - (B) fine particulate (PM2.5) in a federally designated PM2.5 nonattainment area;
- (2) as offsets or netting demonstrations required by 15A NCAC 02D .0531 for a major modification to an existing major source of:
 - (A) nitrogen oxides or volatile organic compounds in a federally designated ozone nonattainment area, or
 - (B) fine particulate (PM2.5) in a federally designated PM2.5 nonattainment area;
- (3) as part of a netting demonstration required by 15A NCAC 02D .0530 when the source using the emission reduction credits is the same source that created and banked the emission reduction credits; or
- (4) to remove a permit condition that created an emission reduction credit.

(d) Emission reduction credits generated through reducing emissions of one pollutant shall not be used for trading with or offsetting of another pollutant, for example emission reduction credits for volatile organic compounds in an ozone nonattainment area shall not be used to offset nitrogen oxide emissions.

(e) Limitations on use of emission reduction credits.

- (1) Emission reduction credits shall not be used to exempt a source from:
 - (A) prevention of significant deterioration requirements (15A NCAC 02D .0530) for netting demonstrations unless the emission reduction credits have been banked by the facility at which the new or modified source is located and have been banked during the period specified in 15A NCAC 02D .0530. This Subparagraph does not preclude the use of emission reductions not banked as emission credits to complete netting demonstrations.

- (B) nonattainment major new source review (15A NCAC 02D .0531) unless the emission reduction credits have been banked by the facility at which the new or modified source is located and have been banked during the period specified in 15A NCAC 02D .0531. This Subparagraph does not preclude the use of emission reductions not banked as emission credits to complete netting demonstrations.
 - (C) new source performance standards (15A NCAC 02D .0524), national emission standards for hazardous air pollutants (15A NCAC 02D .1110), or maximum achievable control technology (15A NCAC 02D .1109, .1111, or .1112); or
 - (D) any other requirement of Subchapter 15A NCAC 02D unless the emission reduction credits have been banked by the facility at which the new or modified source is located.
- (2) Emission reduction credits shall not be used to allow a source to emit above the limit established by a rule in Subchapter 15A NCAC 02D. (If the owner or operator wants to permit a source to emit above the limit established by a rule in Subchapter 15A NCAC 02D, he needs to follow the procedures in 15A NCAC 02D .0501 for an alternative mix of controls [“bubble”].)

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(12);
Eff. December 1, 2005.

15A NCAC 02D .2308 CERTIFICATES AND REGISTRY

(a) Certificates of emission reduction credit issued by the Director shall contain the following information:

- (1) the pollutant reduced (nitrogen oxides, volatile organic compounds, sulfur dioxide, ammonia, or fine particulate);
- (2) the amount of the credit in tons per year;
- (3) the date the reduction occurred;
- (4) company name, the street address and county of the source where the reduction occurred; and
- (5) the date of issuance of the certificate.

(b) The Division shall maintain an emission reduction credit registry that constitutes the official record of all certificates of emission reduction credit issued and all withdrawals made. The registry shall be available for public review. For each certificate issued, the registry shall show the amount of the emission reduction credit, the pollutant reduced, the name and location of the facility generating the emission reduction credit, and the facility contact person. The Division shall maintain records of all deposits, deposit applications, withdrawals, and transactions.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(12);
Eff. December 1, 2005.

15A NCAC 02D .2309 TRANSFERRING EMISSION REDUCTION CREDITS

- (a) If the owner of a certificate of emission reduction credit transfers the certificate to a new owner, the Director shall issue a certificate of emission reduction credit to the new owner and shall revoke the certificate held by the current owner of record.
- (b) If the owner of a certificate of emission reduction credit transfers part of the emission reduction credits represented by the certificate to a new owner, the Director shall issue a certificate of emission reduction credit to the new owner reflecting the transferred amount and shall issue a certificate of emission reduction credit to the current owner of record reflecting the amount of emission reduction credit remaining after the transfer. The Director shall revoke the original certificate of emission reduction credit.
- (c) For any transferred emission reduction credits, the creator of the emission reduction credit shall continue to have enforceable conditions in the appropriate permit to assure permanency of the emission reduction and shall be held liable for compliance with those conditions; the user of any transferred emission reduction credits shall not be held liable for any failure of the creator to comply with its permit.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(12);
Eff. December 1, 2005.

15A NCAC 02D .2310 REVOCATION AND CHANGES OF EMISSION REDUCTION CREDITS

- (a) The Director may withdraw emission reduction credits if the emission credits:
- (1) have already been used;
 - (2) are incorrectly calculated; or
 - (3) achieved are less than those claimed.
- (b) If a banked emission reduction credit were calculated using an emission factor and the emission factor changes, the Director shall revise the banked emission reductions credit to reflect the change in the emission factor. If a banked emission reduction credit has been used, then no change shall be made in the used credit.
- (c) When a rule is adopted or amended in this Subchapter or Subchapter 15A NCAC 02Q after November 1, 2005, the Director shall adjust the banked emission reduction credits to account for changes in emissions that would be

allowed under the new emission limitation with which the source must currently comply if it is still operating. If a source has permanently ceased operations, then the Director shall make no adjustments in its banked emissions reduction credits. If a banked emission reduction credit has been used, no change shall be made in the used credit.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(12);
Eff. December 1, 2005.

15A NCAC 02D .2311 MONITORING

The Director shall require the owner or operator of a source whose emissions are being reduced to create an emission reduction credit to verify the reduction in emissions with a source test, continuous emission monitoring, or other methods that measure the actual emissions or may require the use of parametric monitoring to show that the source or its control device is being operated in the manner that it is designed or is permitted.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.66; 143-215.107(a)(12);
Eff. December 1, 2005.

SECTION .2400 – CLEAN AIR INTERSTATE RULES

15A NCAC 02D .2401 PURPOSE AND APPLICABILITY

(a) Purpose. The purpose of this Section is to implement the federal Clean Air Interstate Rule and thereby reduce the interstate transportation of fine particulate matter and ozone.

(b) Applicability. Except as provided in 40 CFR 96.104(b), 96.204(b), and 96.304(b), this Section applies to:

- (1) any stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time, since the later of November 15, 1990 or the start-up of a unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe producing electricity for sale;
- (2) for a unit that qualifies as a cogeneration unit during the 12-month period starting on the date that the unit first produces electricity and continues to qualify as a cogeneration unit, a cogeneration unit serving at any time since the later of November 15, 1990 or start-up of the unit's combustion chamber a generator with nameplate capacity of more than 25 MWe and supplying in any calendar year more than one-third of the unit's potential electric output capacity or 219,000 MWh, whichever is greater, to any utility power distribution system for sale. If a unit that qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity but subsequently no longer qualifies as a cogeneration unit, the unit shall be subject to Subparagraph (1) of this Paragraph starting on the day on which the unit first serves a generator with nameplate capacity of more than 25 MWe producing electricity for sale; or
- (3) fossil fuel-fired stationary boilers, combustion turbines, or combined cycle systems having a maximum design heat input greater than 250 million Btu per hour that are not covered under Subparagraph (b)(1) or (2) of this Rule except stationary combustion turbines constructed before January 1, 1979, that have a federally enforceable permit that restricts:
 - (A) its potential emissions of nitrogen oxides to no more than 25 tons between May 1 and September 30;
 - (B) it to burning only natural gas or oil; and
 - (C) its hours of operation as described in 40 CFR 96.4(b)(1)(ii) and (iii).

(c) Retired unit exemption. Any unit that is permanently retired and is not an opt-in unit under Rule .2411 of this Section shall be exempted from the annual trading program for:

- (1) nitrogen oxides if it complies with the provisions of 40 CFR 96.105,
 - (2) sulfur dioxide if it complies with the provisions of 40 CFR 96.205,
- or

- (3) ozone season nitrogen oxides if it complies with the provisions of 40 CFR 96.305.
- (d) Effect on other authorities. No provision of this Section, any application submitted or any permit issued pursuant to Rule .2406 of this Section, or any exemption under 40 CFR 96.105, 96.205, or 96.305 shall be construed as exempting any source or facility covered under this Section or the owner or operator or designated representative of any source or facility covered under this Section from complying with any other requirements of this Subchapter or Subchapter 15A NCAC 02Q or the Clean Air Act. The Environmental Management Commission may specify through rulemaking a specific emission limit lower than that established under this Rule for a specific source if compliance with the lower emission limit is required to attain or maintain the ambient air quality standard for ozone or fine particulate (PM_{2.5}) or any other ambient air quality standard in Section 15A NCAC 02D .0400.

History Note: Authority G.S. 143-215.3(a); 143-215.107(a)(5), (10); Eff. July 1, 2006.

15A NCAC 02D .2402 DEFINITIONS

(a) For the purpose of this Section, the definitions in 40 CFR 96.102, 96.202 and 96.302 shall apply except that solely for the purposes of units subject to Subparagraph .2401(b)(3) of this Section or .2405 (a)(2) of this Section, the term “fossil-fuel-fired” means:

- (1) sources that began operation before January 1, 1996, where fossil fuel actually combusted either alone or in combination with any other fuel, comprised more than 50 percent of the annual heat input on a Btu basis during 1995, or, if a source had no heat input in 1995, during the last year of operation of the unit before 1995;
- (2) sources that began operation on or after January 1, 1996 and before January 1, 1997, where fossil fuel actually combusted either alone or in combination with any other fuel, comprised more than 50 percent of the annual heat input on a Btu basis during 1996; or
- (3) sources that began operation on or after January 1, 1997;
 - (A) Where fossil fuel actually combusted either alone or in combination with any other fuel, comprised more than 50 percent of the annual heat input on a Btu basis during any year as determined by the owner or operator of the source and verified by the Director; or
 - (B) Where fossil fuel combusted either alone or in combination with any other fuel, is projected to comprise more than 50 percent of the annual heat input on a Btu basis during any year, provided that the unit shall be “fossil-fuel-fired” as of the date, during such year, on which the source begins combusting fossil fuel.

(b) Notwithstanding the provisions of the definition of “commence commercial

operation” in 40 CFR 96.302, for a unit under Subparagraphs .2401(b)(3) or .2405(a)(2) of this Section, and not serving a generator, the unit’s date of commencement of operations shall also be the unit’s date of commencement of commercial operation.

(c) Notwithstanding the provisions of the definition of “commence operation” in 40 CFR 96.302, and solely for the purposes of 40 CFR Part 96 Subpart HHHH, for a unit that is not a CAIR NO_x Ozone Season unit, under Rule .2401(b)(3) or .2405(a)(2) on the later of November 15, 1990 or the date the unit commenced or commences operation as defined in the first provision of this definition in 40 CFR 96.302 and that subsequently becomes or became such a CAIR NO_x Ozone Season unit, the unit’s date for commencement of operation shall be the date on which the unit becomes or became a CAIR NO_x Ozone Season unit under Rule .2401(b)(3) or .2405(a)(2) of this Section.

(d) For the purposes of this Section, the following definitions apply:

- (1) “Modification” means modification as defined in 15A NCAC 02D .0101.
- (2) “Reconstruction” means the replacement of components of an existing unit that meets the requirements of 40 CFR 60.15(b)(1).
- (3) “Replacement” means removing an existing unit and putting in its place at the same facility a functionally equivalent new unit.

(e) For the purpose of this Section, the abbreviations and acronyms listed in 40 CFR 96.103, 96.203, 96.303 shall apply.

History Note: Authority G.S. 143-215.3(a); 143-215.107(a)(5), (10);
Eff. July 1, 2006.

15A NCAC 02D .2403 NITROGEN OXIDE EMISSIONS

(a) Allocations. The annual allocations of nitrogen oxide allowances are:

FACILITY	ALLOCATIONS FOR 2009-2014 (TONS)	ALLOCATIONS FOR 2015 AND LATER (TONS)
Butler-Warner Generation Plant	77	65
Craven County Wood Energy, LP	498	424
Duke Energy, Belews Creek	10,837	9,220
Duke Energy, Buck	1,355	1,153
Duke Energy, Cliffside	2,932	2,495
Duke Energy, Dan River	792	674
Duke Energy, G.G. Allen	4,338	3,691
Duke Energy, Lincoln	230	196
Duke Energy, Marshall	9,667	8,225
Duke Energy, Riverbend	1,709	1,454

FACILITY	ALLOCATIONS FOR 2009-2014 (TONS)	ALLOCATIONS FOR 2015 AND LATER (TONS)
Dynegy-Rockingham Power	194	165
Edgecombe GenCo	807	687
Elizabethtown Power	86	73
Lumberton Power	121	103
NC Electric Membership Corps.,	7	6
NC Electric Membership Corps.,	7	6
NC Electric Membership Corps.,	7	6
NC Electric Membership Corps.,	7	6
Primary Energy, Roxboro	164	140
Primary Energy, Southport	401	341
Progress Energy, Asheville	2,103	1,789
Progress Energy, Blewett	8	7
Progress Energy, Cape Fear	1,244	1,059
Progress Energy, H.F. Lee	1,776	1,511
Progress Energy, L.V. Sutton	2,146	1,826
Progress Energy, Lee Wayne Co.	94	80
Progress Energy, Mark's Creek	374	318
Progress Energy, Mayo	4,004	3,407
Progress Energy, Roxboro	11,578	9,851
Progress Energy, Weatherspoon	674	573
Progress Energy, Woodleaf Rowan	25	22
Rosemary Power Station, Halifax	42	36
Westmoreland LG&E Partners	963	819
Westmoreland LG&E Partners	306	261

In the event that EPA determines that Craven County Wood Energy is not subject to the provisions of this Section, its allocation shall go to the new source growth pool.

(b) Compliance. The emissions of nitrogen oxides of a CAIR NO_x source shall not exceed the number of allowances that it has in its compliance account established and administered under Rule .2408 of this Section.

(c) Emission measurement requirements. The emissions measurements recorded and reported according to 40 CFR Part 96 Subpart HH shall be used to determine compliance by each CAIR NO_x source with its emissions limitation according to 40 CFR 96.106(c).

(d) Excess emission requirements. The provisions of 40 CFR 96.106(d) shall be used for excess emissions.

(e) Liability. The owner or operator of any unit or source covered under this Section shall be subject to the provisions of 40 CFR 96.106(f).

(f) Modification and reconstruction, replacement, retirement, or change of ownership. The modification or reconstruction of a CAIR NOx unit shall not make that CAIR NOx unit a “new” CAIR NOx unit under Rule .2412 of this Section. The CAIR NOx unit that is modified or reconstructed shall not change the emission allocation under Paragraph (a) of this Rule. If one or more CAIR NOx units at a facility covered under this Rule is replaced, the new CAIR NOx unit shall not receive an allocation under Rule .2412 of this Section, nor shall it change the allocation of the facility. If the owner of a facility changes, the emission allocations under this Rule and revised emission allocations made under Rule .2413 of this Section shall remain with the facility. If a CAIR NOx unit is retired, the owner or operator and the designated representatives of the CAIR NOx unit shall follow the procedures in 40 CFR 96.105. The allocations of a retired CAIR NOx unit shall remain with the owner or operator of the retired CAIR NOx unit until a reallocation occurs under Rule .2413 of this Section when the allocation shall be removed and given to other CAIR NOx units if the retired CAIR NOx unit is still retired using the procedure in Rule .2413 of this Section.

History Note: Authority G.S. 143-215.3(a); 143-215.65; 143-215.66; 143-215.107(a)(5), (10);
Eff. July 1, 2006.

15A NCAC 02D .2404 SULFUR DIOXIDE

- (a) Applicability. This Rule applies only to facilities that meet the description in Rule .2401(b)(1) or (2) of this Section.
- (b) Allocations. The annual allocation of sulfur dioxide allowances shall be determined by EPA. The allocations for CAIR SO₂ units are in 40 CFR 73.10.
- (c) Compliance. The emissions of sulfur dioxides of a source described in Paragraph (a) of this Rule shall not exceed the number of allowances that it has in its compliance account established and administered under Rule .2408 of this Section.
- (d) Emission measurement requirements. The emissions measurements recorded and reported according to 40 CFR Part 96 Subpart HHH shall be used to determine compliance by each CAIR SO₂ source with its emissions limitation according to 40 CFR 96.206(c).
- (e) Excess emission requirements. The provisions of 40 CFR 96.206(d) shall be used for excess emissions.
- (f) Liability. The owner or operator of any unit or source covered under this Section shall be subject to the provisions of 40 CFR 96.206(f).

History Note: Authority G.S. 143-215.3(a); 143-215.65; 143-215.66; 143-215.107(a)(5), (10);
Eff. July 1, 2006.

15A NCAC 02D .2405 NITROGEN OXIDE EMISSIONS DURING OZONE SEASON

(a) Allocations. The ozone season allocations of nitrogen oxide allowances are:

- (1) Facilities that meet the description in 15A NCAC 02D .2401(b)(1) or
(b)(2):

FACILITY	ALLOCATIONS FOR 2009-2014 (TONS)	ALLOCATIONS FOR 2015 AND LATER (TONS)
Butler-Warner Generation Plant	53	45
Craven County Wood Energy, LP	211	179
Duke Energy, Belews Creek	4,917	4,184
Duke Energy, Buck	656	558
Duke Energy, Cliffside	1,350	1,148
Duke Energy, Dan River	436	371
Duke Energy, G.G. Allen	2,096	1,784
Duke Energy, Lincoln	169	144
Duke Energy, Marshall	4,179	3,556
Duke Energy, Riverbend	859	731
Dynegy-Rockingham Power	99	84
Edgecombe GenCo	331	281
Elizabethtown Power	51	43
Lumberton Power	46	39
NC Electric Membership Corps.- Anson	7	6
NC Electric Membership Corps.- Person	7	6
NC Electric Membership Corps.- Richmond	7	6
NC Electric Membership Corps.- Wake	7	6
Primary Energy, Roxboro	83	71
Primary Energy, Southport	213	181
Progress Energy, Asheville	899	765
Progress Energy, Blewett	7	6
Progress Energy, Cape Fear	527	448
Progress Energy, H.F. Lee	841	716
Progress Energy, L.V. Sutton	1,023	871
Progress Energy, Lee Wayne Co. Plant	64	54

FACILITY	ALLOCATIONS FOR 2009-2014 (TONS)	ALLOCATIONS FOR 2015 AND LATER (TONS)
Progress Energy, Mark's Creek Richmond Co.	335	285
Progress Energy, Mayo	1,735	1,476
Progress Energy, Roxboro	5,069	4,314
Progress Energy, Weatherspoon	346	295
Progress Energy, Woodleaf Rowan Co. Plant	25	20
Rosemary Power Station, Halifax	26	22
Westmoreland LG&E Partners Roanoke Valley I	387	329
Westmoreland LG&E Partners Roanoke Valley II	124	105

In the event that EPA determines that Craven County Wood Energy is not subject to the provisions of this Section, its allocation shall go to the new source growth pool.

- (2) Facilities that do not meet the description in 15A NCAC 02D .2401(b)(1) or (b)(2):

FACILITY	ALLOCATON FOR 2009-2014 (TONS)	ALLOCATIONS FOR 2015 AND LATER (TONS)
Blue Ridge Paper Products	839	839
International Paper Corp., Columbus Co.	307	307
International Paper Corp., Halifax Co.	346	346
United Cogen, Kenansville	113	113
UNC-Chapel Hill	241	241
Weyerhaeuser, New Bern Mill	193	193
Weyerhaeuser, Plymouth	404	404

(b) Ozone season defined. The ozone season is from May 1 through September 30 of each year.

(c) Change in status. If a unit at a facility named in Subparagraph (a)(2) of this Rule meets the description under Subparagraphs (b)(1) or (b)(2) of Rule .2401 of this Section, it shall lose its allocation under Subparagraph (a)(2) of this Rule and shall receive an allocation under Rule .2412 of this Section as a new unit until it receives an allocation under Rule .2413 of this Section.

(d) Compliance. The nitrogen oxide ozone season emissions of a CAIR NO_x Ozone Season source shall not exceed the number of allowances that it has in its compliance account established and administered under Rule .2408 of this Section. For purposes of making deductions for excess emissions for the ozone season in 2008 under the NO_x SIP Call (Section 15A NCAC 02D .1400), the Administrator shall deduct allowances allocated under this Rule for the ozone season in 2009.

(e) Emission measurement requirements. The emissions measurements recorded and reported according to 40 CFR Part 96 Subpart HHHH shall be used to determine compliance by each CAIR NO_x Ozone Season source with its emissions limitation according to 40 CFR 96.306(c).

(f) Excess emission requirements. The provisions of 40 CFR 96.306(d) shall be used for excess emissions.

(g) Liability. The owner or operator of any unit or source covered under this Section shall be subject to the provisions of 40 CFR 96.306(f).

(h) Modification and reconstruction, replacement, retirement, or change of ownership. The modification or reconstruction of a CAIR NO_x Ozone Season unit shall not make that CAIR NO_x Ozone Season unit a “new” CAIR NO_x Ozone Season unit under Rule .2412. The CAIR NO_x Ozone Season unit that is modified or reconstructed shall not change the emission allocation under Paragraph (a) of this Rule. If one or more CAIR NO_x Ozone Season units at a facility is replaced, the new CAIR NO_x Ozone Season unit shall not receive an allocation under Rule .2412 of this Section, nor shall it change the allocation of the facility. If the owner of a facility changes, the emission allocations under this Rule and revised emission allocations made under Rule .2413 of this Section shall remain with the facility. If a CAIR NO_x Ozone Season unit is retired, the owner or operator, and designated representatives, of the CAIR NO_x Ozone Season unit shall follow the procedures in 40 CFR 96.305. The allocations of a retired CAIR NO_x Ozone Season unit shall remain with the owner or operator of the retired CAIR NO_x Ozone Season unit until a reallocation occurs under Rule .2413 of this Section when the allocation shall be removed and given to other CAIR NO_x Ozone Season units if the retired CAIR NO_x Ozone Season unit is still retired using the procedure in Rule .2413 of this Section.

History Note: Authority G.S. 143-215.3(a); 143-215.65; 143-215.66; 143-215.107(a)(5), (10);
Eff. July 1, 2006.

15A NCAC 02D .2406 PERMITTING

(a) The owner or operator of any source covered under this Section shall submit permit applications to comply with the requirements of this Section following the procedures and requirements in 15A NCAC 02Q .0500 (Title V permitting procedures) and in:

- (1) 40 CFR 96.106(a), 96.121, and 96.122 for each CAIR NO_x source;

- (2) 40 CFR 96.206(a), 96.221, and 96.222 for each CAIR SO₂ source;
and
- (3) 40 CFR 96.306(a), 96.321, and 96.322 for each CAIR NO_x Ozone Season source.

(b) The Director shall review applications submitted under Paragraph (a) of this Rule and issue permits for compliance with this Section following the procedures and requirements in 15A NCAC 02Q .0500 (Title V permitting procedures) and in:

- (1) 40 CFR 96.106(a), 96.120, 96.123, and 96.124 for each CAIR NO_x source;
- (2) 40 CFR 96.206(a), 96.220, 96.223, and 96.224 for each CAIR SO₂ source; and
- (3) 40 CFR 96.306(a), 96.320, 96.323, and 96.324 for each CAIR NO_x Ozone Season source.

History Note: Authority G.S. 143-215.3(a); 143-215.107(a)(5), (10); 143-215.108'

Eff. July 1, 2006.

15A NCAC 02D .2407 MONITORING, REPORTING, AND RECORDKEEPING

(a) The owner or operator of a unit covered under this Section shall comply with the monitoring, recordkeeping, and reporting requirements in:

- (1) 40 CFR 96.106(b) and (e) and in 40 CFR Part 96, Subpart HH for each CAIR NO_x unit;
- (2) 40 CFR 96.206(b) and (e) and in 40 CFR Part 96, Subpart HHH for each CAIR SO₂ unit; and
- (3) 40 CFR 96.306(b) and (e) and in 40 CFR Part 96, Subpart HHHH for each CAIR Ozone Season NO_x unit.

(b) To approve or disapprove monitors used to show compliance with Rules .2403, .2404, or .2405 of this Section, the Division shall follow the procedures in:

- (1) 40 CFR 96.171 for nitrogen oxides,
- (2) 40 CFR 96.271 for sulfur dioxides, and
- (3) 40 CFR 96.371 for ozone season nitrogen oxides.

History Note: Authority G.S. 143-215.3(a); 143-215.65; 143-215.66; 143-215.107(a)(5), (10);

Eff. July 1, 2006.

15A NCAC 02D .2408 TRADING PROGRAM AND BANKING

(a) EPA to administer. The United States Environmental Protection Agency (EPA) shall administer the allowance tracking system according to the procedures in:

- (1) 40 CFR Part 96, Subpart FF and Subpart GG for nitrogen oxides;
 - (2) 40 CFR Part 96, Subpart FFF and Subpart GGG for sulfur dioxide; and
 - (3) 40 CFR Part 96, Subpart FFFF and Subpart GGGG for ozone season nitrogen oxides.
- (b) Compliance account. The owners and operators of each source covered under this Section shall have a compliance account in the EPA administered tracking system that satisfies the requirements of:
- (1) 40 CFR 96.151 for nitrogen oxides,
 - (2) 40 CFR 96.251 for sulfur dioxides, and
 - (3) 40 CFR 96.351 for ozone season nitrogen oxides.
- (c) General account. Any person may apply to open a general account to hold and transfer allowances by using the procedures and meeting the requirements in:
- (1) 40 CFR 96.151(b) for nitrogen oxides and may close that account using the procedures in 40 CFR 96.157,
 - (2) 40 CFR 96.251(b) for sulfur dioxides and may close that account using the procedures in 40 CFR 96.257, and
 - (3) 40 CFR 96.351(b) for ozone season nitrogen oxides and may close that account using the procedures in 40 CFR 96.357.
- (d) Allowance transfers.
- (1) Any person who has a compliance or general account established under 40 CFR 96.151 may transfer allowances using the procedures in 40 CFR 96.160.
 - (2) Any person who has a compliance or general account established under 40 CFR 96.251 may transfer allowances using the procedures in 40 CFR 96.260.
 - (3) Any person who has a compliance or general account established under 40 CFR 96.351 may transfer allowances using the procedures in 40 CFR 96.360.
- (e) Submittal of information. Persons with accounts shall submit information to EPA following the requirements of:
- (1) 40 CFR 96.152 for nitrogen oxides,
 - (2) 40 CFR 96.252 for sulfur dioxides, and
 - (3) 40 CFR 96.352 for ozone season nitrogen oxides.
- (f) Banking. Any person who has a compliance account or a general account may bank allowances for future use or transfer under:
- (1) 40 CFR 96.155 for nitrogen oxides,
 - (2) 40 CFR 96.255 for sulfur dioxides, and
 - (3) 40 CFR 96.355 for ozone season nitrogen oxides.
- (g) Appeal Procedures. The appeal procedures for decisions of the Administrator are set forth in
- (1) 40 CFR 96.108 for nitrogen oxides,
 - (2) 40 CFR 96.208 for sulfur dioxides, and
 - (3) 40 CFR 96.308 for ozone season nitrogen oxides.

History Note: Authority G.S. 143-215.3(a); 143-215.107(a)(5), (10);
Eff. July 1, 2006.

15A NCAC 02D .2409 DESIGNATED REPRESENTATIVE

(a) Designated representative. The owners and operators of any source covered under this Section shall select a designated representative according to 40 CFR 96.110 for each CAIR NO_x source, 96.210 for each CAIR SO₂ source, and 96.310 for each CAIR NO_x Ozone Season source. The designated representative shall have the responsibilities and duties set out in 40 CFR 96.110 for a CAIR NO_x source, 96.210 for a CAIR SO₂ source, and 96.310 for a CAIR NO_x Ozone Season source.

(b) Alternate designated representative. The owners and operators of any source covered under this Section shall select an alternate designated representative according to 40 CFR 96.111 for each CAIR NO_x source, 96.211 for each CAIR SO₂ source, and 96.311 for each CAIR NO_x Ozone Season source. The alternate designated representative shall have the responsibilities and duties set out in 40 CFR 96.111 for a CAIR NO_x source, 96.211 for CAIR SO₂ source, and 96.311 for a CAIR NO_x Ozone Season source.

(c) Changing designated representative and alternate designated representative. The owner or operator of any source covered under this Section may change the designated representative or the alternate designated representative using:

- (1) 40 CFR 96.112 for a CAIR NO_x source;
- (2) 40 CFR 96.212 for a CAIR SO₂ source; and
- (3) 40 CFR 96.312 for a CAIR NO_x Ozone Season source.

(d) Changes in owners and operators. Whenever the owner or operator of a source or unit covered under this Section changes, the following provisions shall be followed:

- (1) 40 CFR 96.112(c) for a CAIR NO_x source;
- (2) 40 CFR 96.212(c) for a CAIR SO₂ source; and
- (3) 40 CFR 96.312(c) for a CAIR NO_x Ozone Season source.

(e) Certificate of representation. A complete certificate of representation for a CAIR designated representative or an alternate CAIR designated representative shall meet the requirements of 40 CFR 96.113 for nitrogen oxides, 40 CFR 96.213 for sulfur dioxide, and 40 CFR 96.313 for ozone season nitrogen oxides.

(f) Objections concerning CAIR designated representative. Objections concerning CAIR designated representative shall be handled according to the procedures in 40 CFR 96.114 for nitrogen oxides, 40 CFR 96.214 for sulfur dioxide, and 40 CFR 96.314 for ozone season nitrogen oxides.

History Note: Authority G.S. 143-215.3(a); 143-215.107(a)(5), (10);
Eff. July 1, 2006.

15A NCAC 02D .2410 COMPUTATION OF TIME

Time periods shall be determined as described in:

- (1) 40 CFR 96.107 for nitrogen oxides;
- (2) 40 CFR 96.207 for sulfur dioxide, and
- (3) 40 CFR 96.307 for ozone season nitrogen oxides.

History Note: Authority G.S. 143-215.3(a); 143-215.107(a)(5), (10);
Eff. July 1, 2006.

15A NCAC 02D .2411 OPT-IN PROVISIONS

(a) Opting in. The owners and operators of a unit may opt into:

- (1) the nitrogen oxide trading program by following the procedures in and meeting the requirements of 40 CFR Part 96 Subpart II,
- (2) the sulfur dioxide trading program by following the procedures in and meeting the requirements of 40 CFR Part 96 Subpart III, and
- (3) the ozone season nitrogen oxide trading program by following the procedures in and meeting the requirements of 40 CFR Part 96 Subpart IIII.

(b) Permitting. The Director shall permit opt-in units under Paragraph (a) of this Rule according to 15A NCAC 02Q .0500 and

- (1) 40 CFR 96.184 and 96.185 for nitrogen oxides and shall allocate allowances according to 40 CFR 96.188,
- (2) 40 CFR 96.284 and 96.285 for sulfur dioxides and shall allocate allowances according to 40 CFR 96.288, and
- (3) 40 CFR 96.384 and 96.385 for ozone season nitrogen oxides and shall allocate allowances according to 40 CFR 96.388.

(c) Withdrawing. The owners and operators of an opt-in unit under Paragraph (a) of this Rule may withdraw from the trading program according to:

- (1) 40 CFR 96.186 for nitrogen oxides,
- (2) 40 CFR 96.286 for sulfur dioxides, and
- (3) 40 CFR 96.386 for ozone season nitrogen oxides.

(d) Change in regulatory status. If an opt-in unit becomes:

- (1) a CAIR NO_x unit under 40 CFR 96.104, then 40 CFR 96.187 shall apply,
- (2) a CAIR SO₂ unit under 40 CFR 96.204, then 40 CFR 96.287 shall apply, or
- (3) a CAIR ozone season NO_x unit under 40 CFR 96.304, then 40 CFR 96.387 shall apply.

History Note: Authority G.S. 143-215.3(a); 143-215.107(a)(5), (10); 143-215.108;

Eff. July 1, 2006.

15A NCAC 02D .2412 NEW UNIT GROWTH

(a) For nitrogen oxide emissions, the total nitrogen oxide allowances available for allocation in the new unit set-aside for each control period in 2009 through 2014 shall be 2611 tons and the total nitrogen oxide allowances available for allocation in each control period in 2015 and thereafter shall be 1131 tons. Except for the reference to 40 CFR 96.142(b), the procedures in 40 CFR 96.142(c)(2) through (4) shall be used to create allocations for units covered under this Section that commenced operations on or after January 1, 2001 and that are not covered in the table in Rule .2403 of this Section.

(b) For ozone season nitrogen oxides emissions, the total ozone season nitrogen oxide allowances available for allocation in the new unit set-aside for each control period in 2009 through 2014 shall be 1206 tons and the total ozone season nitrogen oxide allowances available for allocation in each control period in 2015 and thereafter shall be 531 tons. Except for the reference to 40 CFR 96.142(b) the procedures in 40 CFR 96.342(c)(2) through (4) shall be used to create allocations for units covered under this Section that commenced operations on or after January 1, 2001 and that are not listed in the table in Rule .2405 of this Section.

(c) New unit allowances in Paragraph (a) of this Rule that are not allocated in a given year shall be redistributed to units under .2401(b)(1) and (2) according to the provisions of 40 CFR 96.142(d) and 96.342(d) except that the divisor used in calculating individual unit allocations:

- (1) for nitrogen oxide allowances shall be 2611 tons for each control period in 2009 through 2014 and 1131 tons in each control period in 2015 and thereafter, and
- (2) for ozone season nitrogen oxide allowances shall be 1206 tons for each control period in 2009 through 2014 and 531 tons for each control period in 2015 and thereafter.

History Note: Authority G.S. 143-215.3(a); 143-215.107(a)(5), (10);
Eff. July 1, 2006.

15A NCAC 02D .2413 PERIODIC REVIEW AND REALLOCATIONS

In 2010 and every five years thereafter, the Environmental Management Commission shall review the emission allocations of units covered under Rules .2403 and .2405 of this Section and decide if any revisions are needed. In making this decision the Environmental Management Commission shall consider the following:

- (1) the size of the allocation pool for new unit growth under Rule .2412 of this Section;
- (2) the amount of emissions allocations requested by units under Rule .2412 of this Section;
- (3) the amount of emissions allocations available through the respective trading programs under Rule .2408 of this Section;
- (4) the impact of reallocation on existing units;

- (5) the impact of reallocations on units covered under Rule .2412 of this Section;
- (6) impact on future growth; and
- (7) other relevant information on the impacts of reallocation.

Any revisions of allocations shall be consistent with the requirements in 40 CFR 51.123(o)(2)(ii) and (aa)(2)(iii) or 96.141 and 96.341.

History Note: Authority G.S. 143-215.3(a); 143-215.107(a)(5), (10);
Eff. July 1, 2006.

1 15A NCAC 02Q is proposed for amendment as follows:

2 **15A NCAC 02Q .0207 ANNUAL EMISSIONS REPORTING**

3 (a) The owner or operator of a Title V facility shall report by June 30th of each year the actual
4 emissions during the previous calendar year of:

- 5 (1) volatile organic compounds,
- 6 (2) nitrogen oxides,
- 7 (3) total suspended particulates,
- 8 (4) sulfur dioxide,
- 9 (5) fluorine,
- 10 (6) hydrogen chloride,
- 11 (7) hydrogen fluoride,
- 12 (8) hydrogen sulfide,
- 13 (9) methyl chloroform,
- 14 (10) methylene chloride,
- 15 (11) ozone,
- 16 (12) chlorine,
- 17 (13) hydrazine,
- 18 (14) phosphine,
- 19 (15) particulate matter (PM10),
- 20 (16) carbon monoxide,
- 21 (17) lead, and
- 22 (18) perchloroethylene.

23 (b) The accuracy of the report required by Paragraph (a) of this Rule shall be certified by a
24 responsible official of the facility as defined under 40 CFR 70.2.

25 ~~(b)(c)~~ The owner or operator of a facility not included in Paragraph (a) of this Rule, other than a
26 transportation facility, that has actual emissions of 25 tons per year or more of nitrogen oxides or
27 volatile organic compounds and that is located in Davidson, Durham, Forsyth, Gaston, Guilford,
28 Mecklenburg, or Wake County, in Dutchville Township in Granville County, or in that part of Davie
29 County bounded by the Yadkin River, Dutchmans Creek, North Carolina Highway 801, Fulton
30 Creek and back to the Yadkin River shall report by June 30th of each year the actual emissions of
31 nitrogen oxides and volatile organic compounds during the previous calendar year. year, if the
32 facility is in:

- 33 (1) Cabarrus County,
- 34 (2) Davidson County,
- 35 (3) Durham County,
- 36 (4) Forsyth County,
- 37 (5) Gaston County

1 (6) Guilford County.
 2 (7) Lincoln County
 3 (8) Mecklenburg County
 4 (9) Rowan County
 5 (10) Union County
 6 (11) Wake County.
 7 (12) Davidson Township and Coddle Creek Township in Iredell County
 8 (13) Dutchville Township in Granville County, or
 9 (14) that part of Davie County bounded by the Yadkin River, Dutchmans Creek, North
 10 Carolina Highway 801, Fulton Creek and back to the Yadkin River
 11 (d) The annual reporting requirement under Paragraph (c) of this Rule shall begin with calendar
 12 year 2007 emissions for facilities in Cabarrus, Lincoln, Rowan, and Union counties and Davidson
 13 Township and Coddle Creek Township in Iredell County.
 14 ~~(e)~~(e) The report shall be in or on such form as may be established by the Director. The Director
 15 may require reporting for sources within a facility, for other facilities, or for other pollutants,
 16 parameters, or information, by permit condition or pursuant to 15A NCAC 2D .0202 (Registration
 17 of Air Pollution Sources). ~~This annual reporting requirement shall begin with calendar year 1993~~
 18 ~~emissions. The accuracy of the report shall be certified by a responsible official of the facility as~~
 19 ~~defined under 40 CFR 70.2.~~
 20
 21 *History Note: Filed as a Temporary Adoption Eff. March 8, 1994 for a period of 180 days or*
 22 *until the permanent rule is effective, whichever is sooner;*
 23 *Authority G.S. 143-215.3(a)(1),(1a),(1b),(1d); 143-215.65; 143-215.107;*
 24 *143B-282; 150B-21.6;*
 25 *Eff. July 1, 1994;*
 26 *Amended Eff. July 1, 2007; July 1, 1998; July 1, 1996.*
 27

1 [NOTE: The italicized language has been added as a result of an earlier hearing
2 and recommended for adoption in another rulemaking action, but has not
3 completed the rulemaking process.]
4

5 15A NCAC 02D .0902 is proposed for amendment as follows:

6 **15A NCAC 02D .0902 APPLICABILITY**

7 (a) The rules in this Section do not apply except as specifically set out in this Rule.

8 (b) Regardless of any other statement of applicability of this Section, this Section does not apply
9 to:

- 10 (1) sources whose emissions of volatile organic compounds are not more than 15
11 pounds per day, except that this Section does apply to the manufacture and use
12 of cutback asphalt and to gasoline service stations or gasoline dispensing
13 facilities regardless of levels of emissions of volatile organic compounds;
- 14 (2) sources whose emissions do not exceed 800 pounds of volatile organic
15 compounds per calendar month and that are:
 - 16 (A) bench-scale, on-site equipment used exclusively for chemical or physical
17 analysis for quality control purposes, staff instruction, water or
18 wastewater analyses, or non-production environmental compliance
19 assessments;
 - 20 (B) bench-scale experimentation, chemical or physical analyses, training or
21 instruction from not-for-profit, non-production educational laboratories;
 - 22 (C) bench-scale experimentation, chemical or physical analyses, training or
23 instruction from hospitals or health laboratories pursuant to the
24 determination or diagnoses of illness; or
 - 25 (D) research and development laboratory activities provided the activity
26 produces no commercial product or feedstock material; or
- 27 (3) emissions of volatile organic compounds during startup or shutdown operations
28 from sources which use incineration or other types of combustion to control
29 emissions of volatile organic compounds whenever the off-gas contains an
30 explosive mixture during the startup or shutdown operation if the exemption is
31 approved by the Director as meeting the requirements of this Subparagraph.

32 (c) The following rules of this Section apply statewide:

- 33 (1) .0925, Petroleum Liquid Storage in Fixed Roof Tanks, for fixed roof tanks at
34 gasoline bulk plants and gasoline bulk terminals;
- 35 (2) .0926, Bulk Gasoline Plants;
- 36 (3) .0927, Bulk Gasoline Terminals;
- 37 (4) .0928, Gasoline Service Stations Stage I;
- 38 (5) .0932, Gasoline Truck Tanks and Vapor Collection Systems;

1 (6) .0933, Petroleum Liquid Storage in External Floating Roof Tanks, for external
2 floating roof tanks at bulk gasoline plants and bulk gasoline terminals;
3 (7) .0948, VOC Emissions from Transfer Operations;
4 (8) .0949, Storage of Miscellaneous Volatile Organic Compounds; and
5 (9) .0958, Work Practices for Sources of Volatile Organic Compounds.
6 (d) Rule .0953, Vapor Return Piping for Stage II Vapor Recovery, of this Section applies in
7 Davidson, Durham, Forsyth, Guilford, Wake, Dutchville Township in Granville County, and that
8 part of Davie County bounded by the Yadkin River, Dutchmans Creek, North Carolina Highway
9 801, Fulton Creek and back to Yadkin River in accordance with provisions set out in that Rule.
10 (e) All sources located in Mecklenburg County that were required to comply with any of these
11 *Rules before July 5, 1995:*
12 (1) .0917 through .0937 of this Section, or
13 (2) .0943 through .0945 of this Section,
14 *shall continue to comply with those Rules.*
15 (f) *The Rules in this Section apply to sources with the potential to emit 100 tons or more volatile*
16 *organic compounds per year in the following areas:*
17 (1) *Cabarrus County*
18 (2) *Gaston County*
19 (3) *Lincoln County*
20 (4) *Mecklenburg County*
21 (5) *Rowan County*
22 (6) *Union County*
23 (7) *Davidson Township and Coddle Creek Township in Iredell County*
24 (g) If a violation of the ambient air quality standard for ozone is measured in accordance with 40
25 CFR 50.9 in Davidson, Forsyth, or Guilford County or that part of Davie County bounded by the
26 Yadkin River, Dutchmans Creek, North Carolina Highway 801, Fulton Creek and back to Yadkin
27 River, the Director shall initiate analysis to determine the control measures needed to attain and
28 maintain the ambient air quality standard for ozone. By the following May 1, the Director shall
29 implement the specific stationary source control measures contained in this Section that are
30 required as part of the control strategy necessary to bring the area into compliance and to
31 maintain compliance with the ambient air quality standard for ozone. The Director shall implement
32 the rules in this Section identified as being necessary by the analysis by notice in the North
33 Carolina Register. The notice shall identify the rules that are to be implemented and shall identify
34 whether the rules implemented are to apply in Davidson, Forsyth, or Guilford County or that part
35 of Davie County bounded by the Yadkin River, Dutchmans Creek, North Carolina Highway 801,
36 Fulton Creek and back to Yadkin River or any combination thereof. At least one week before the
37 scheduled publication date of the North Carolina Register containing the Director's notice

1 implementing rules in this Section, the Director shall send written notification to all permitted
2 facilities within the county in which the rules are being implemented that are or may be subject to
3 the requirements of this Section informing them that they are or may be subject to the
4 requirements of this Section. (For Forsyth County, "Director" means for the purpose of notifying
5 permitted facilities in Forsyth County, the Director of the Forsyth County local air pollution control
6 program.) Compliance shall be in accordance with Rule .0909 of this Section.

7 (h) If a violation of the ambient air quality standard for ozone is measured in accordance with 40
8 CFR 50.9 in Durham or Wake County or Dutchville Township in Granville County, the Director
9 shall initiate analysis to determine the control measures needed to attain and maintain the
10 ambient air quality standard for ozone. By the following May 1, the Director shall implement the
11 specific stationary source control measures contained in this Section that are required as part of
12 the control strategy necessary to bring the area into compliance and to maintain compliance with
13 the ambient air quality standard for ozone. The Director shall implement the rules in this Section
14 identified as being necessary by the analysis by notice in the North Carolina Register. The notice
15 shall identify the rules that are to be implemented and shall identify whether the rules
16 implemented are to apply in Durham or Wake County or Dutchville Township in Granville County
17 or any combination thereof. At least one week before the scheduled publication date of the North
18 Carolina Register containing the Director's notice implementing rules in this Section, the Director
19 shall send written notification to all permitted facilities within the county in which the rules are
20 being implemented that are or may be subject to the requirements of this Section informing them
21 that they are or may be subject to the requirements of this Section. Compliance shall be in
22 accordance with Rule .0909 of this Section.

23 (i) If EPA reclassifies the Charlotte-Gastonia-Rock Hill ozone nonattainment area as serious for
24 ozone under Section 182 of the federal Clean Air Act, the rules in this Section shall apply to
25 sources in Cabarrus, Gaston, Lincoln, Mecklenburg, Rowan, and Union Counties and Davidson
26 and Coddle Creek townships in Iredell County with the potential to emit at least 50 tons but less
27 than 100 tons of volatile organic compounds per year. Within 60 days of the reclassification, the
28 Director shall notice the applicability of these rules to these sources in the North Carolina
29 Register and shall send written notification to all permitted facilities within the counties in which
30 the rules are being implemented that are or may be subject to the requirements of this Section
31 informing them that they are or may be subject to the requirements of this Section. (For
32 Mecklenburg County, "Director" means for the purpose of notifying permitted facilities in
33 Mecklenburg County, the Director of the Mecklenburg County local air pollution control program.)
34 Compliance shall be according to Rule .0909 of this Section.

35 ~~(j)~~(i) Sources whose emissions of volatile organic compounds are not subject to limitation under
36 this Section may still be subject to emission limits on volatile organic compounds in Rules, .0524,
37 .1110, or .1111 of this Subchapter.

1

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

3 *Eff. July 1, 1979;*

4 *Amended Eff. July 1, 2007; March 1, 2007; August 1, 2004; July 1, 2000; April 1,*

5 *1997; July 1, 1996; July 1, 1995; May 1, 1995; July 1, 1994.*

[NOTE: The italicized language has been added as a result of an earlier hearing and recommended for adoption in another rulemaking action, but has not completed the rulemaking process.]

15A NCAC 02D .0909 is proposed for amendment as follows:

15A NCAC 02D .0909 COMPLIANCE SCHEDULES FOR SOURCES IN NONATTAINMENT AREAS

(a) *Applicability.* With the exceptions in Paragraph (b) of this Rule, this Rule applies to all sources covered by Paragraphs (f), (g), ~~or (h)~~ (h), or (i) of Rule .0902 of this Section.

(b) *Exceptions.* This Rule does not apply to:

- (1) sources in Mecklenburg County required to comply with the requirements of this Section under Rule .0902(e) of this Section;
- (2) sources covered under Rule .0953 or .0954 of this Section; or
- (3) sources required to comply with the requirements of this Section under Rule .0902(c) of this Section.

(c) *Maintenance areas.* area and Charlotte ozone nonattainment area contingency plan. The owner or operator of any source subject to this Rule because of the application of Paragraphs ~~(g)~~ ~~or (h)~~ (g), (h), or (i) of Rule .0902 of this Section shall adhere to the following increments of progress and schedules:

- (1) if compliance is to be achieved by installing emission control equipment, replacing process equipment, or modifying existing process equipment:
 - (A) *The owner or operator shall submit a permit application and a compliance schedule within six months after the Director notices the implementation of rules in the North Carolina Register that resolves a violation of the ambient air quality standard for ozone;*
 - (B) The compliance schedule shall contain the following increments of progress:
 - (i) a date by which contracts for the emission control system and process equipment shall be awarded or orders shall be issued for purchase of component parts;
 - (ii) a date by which on-site construction or installation of the emission control and process equipment shall begin; and
 - (iii) a date by which on-site construction or installation of the emission control and process equipment shall be completed;
 - (C) Final compliance shall be achieved within three years after the Director notices *the implementation of rules in the North Carolina Register that resolves a violation of the ambient air quality standard for ozone.*

- 1 (2) if compliance is to be achieved by using low solvent content coating technology:
- 2 (A) *The owner or operator shall submit a permit application and a*
- 3 compliance schedule within six months after the Director notices *the*
- 4 *implementation of rules* in the North Carolina Register *that resolves a*
- 5 *violation of the ambient air quality standard for ozone;*
- 6 (B) The compliance schedule shall contain the following increments:
- 7 (i) a date by which research and development of low solvent
- 8 content coating shall be completed if the Director determines that
- 9 low solvent content coating technology has not been sufficiently
- 10 researched and developed;
- 11 (ii) a date by which evaluation of product quality and commercial
- 12 acceptance shall be completed;
- 13 (iii) a date by which purchase orders shall be issued for low solvent
- 14 content coatings and process modifications;
- 15 (iv) a date by which process modifications shall be initiated; and
- 16 (v) a date by which process modifications shall be completed and
- 17 use of low solvent content coatings shall begin;
- 18 (C) Final compliance shall be achieved within three years after the Director
- 19 notices *the implementation of rules in the North Carolina Register that in*
- 20 *resolves a violation of the ambient air quality standard for ozone.*
- 21 (3) *The owner or operator shall certify to the Director within five days after each*
- 22 *increment deadline of progress in this Paragraph, whether the required increment*
- 23 *of progress has been met.*
- 24 (d) *Nonattainment areas. The owner or operator of any source subject to this Rule because of*
- 25 *the application of Paragraphs (f) of Rule .0902 of this Section shall adhere to the following*
- 26 *increments of progress and schedules:*
- 27 (1) *if compliance is to be achieved by installing emission control equipment,*
- 28 *replacing process equipment, or modifying existing process equipment:*
- 29 (A) *The owner or operator shall submit a permit application and a*
- 30 compliance schedule by August 1, 2007
- 31 (B) *The compliance schedule shall contain the following increments of*
- 32 progress:
- 33 (i) a date by which contracts for the emission control system and
- 34 process equipment shall be awarded or orders shall be issued
- 35 for purchase of component parts;
- 36 (ii) a date by which on-site construction or installation of the
- 37 emission control and process equipment shall begin; and

- (iii) a date by which on-site construction or installation of the emission control and process equipment shall be completed;
- (C) Final compliance shall be achieved no later than April 1, 2009.
- (2) if compliance is to be achieved by using low solvent content coating technology:
- (A) The owner or operator shall submit a permit application and a compliance schedule by August 1, 2007.
- (B) The compliance schedule shall contain the following increments:
- (i) a date by which research and development of low solvent content coating shall be completed if the Director determines that low solvent content coating technology has not been sufficiently researched and developed;
- (ii) a date by which evaluation of product quality and commercial acceptance shall be completed;
- (iii) a date by which purchase orders shall be issued for low solvent content coatings and process modifications;
- (iv) a date by which process modifications shall be initiated; and
- (v) a date by which process modifications shall be completed and use of low solvent content coatings shall begin;
- (C) Final compliance shall be achieved no later than April 1, 2009.
- (3) 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.
- (e) If the Director requires a test to demonstrate that compliance has been *achieved*, the owner or operator of sources subject to this Rule shall conduct a test and submit a final test report within six months after the stated date of final compliance.
- (f) Sources already in compliance.
- (1) ~~Maintenance Areas.~~ area and Charlotte ozone nonattainment area contingency plan. Paragraph (c) of this Rule shall not apply to sources that are in compliance with applicable rules of this Section when the Director notices *the implementation of rules in the North Carolina Register that resolves a violation of the ambient air quality standard for ozone* and that have determined and certified compliance to the satisfaction of the Director within six months after the Director notices *implementation of rules in the North Carolina Register that resolves a violation of the ambient air quality standard for ozone*.
- (2) *Nonattainment areas. Paragraphs (d) of this Rule shall not apply to sources in an area named in Paragraph (f) of Rule .0902 of this Section that are in compliance with applicable rules of this Section on March 1, 2007.*

1 (g) New sources.

2 (1) ~~Maintenance areas.~~ area and Charlotte ozone nonattainment area contingency
3 plan. The owner or operator of any new source of volatile organic compounds not
4 in existence or under construction before the date that the Director notices in the
5 North Carolina Register in accordance with Paragraph (g), (h), or (i) ~~(g) or (h)~~ of
6 Rule .0902 of this Section the implementation of rules in the North Carolina
7 Register that resolves a violation of the ambient air quality standard for ozone,
8 shall comply with all applicable rules in this Section upon start-up of the source.

9 (2) Nonattainment areas. The owner or operator of any new source of volatile
10 organic compounds not in existence or under construction before March 1, 2007
11 in an area identified in Paragraph (f) of Rule .0902 shall comply with all
12 applicable rules in this Section upon start-up of the source.

13
14 History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);

15 Eff. July 1, 1979;

16 Amended Eff. July 1, 2007; March 1, 2007; July 1, 2000; April 1, 1997; July 1,
17 1995; July 1, 1994; July 1, 1988; January 1, 1985.

[NOTE: The italicized language has been added as a result of an earlier hearing and recommended for adoption in another rulemaking action, but has not completed the rulemaking process.]

15A NCAC 02D .1402 is proposed for amendment as follows:

15A NCAC 02D .1402 APPLICABILITY

(a) *The rules in this Section do not apply except as specifically set out in this Rule.*

(b) The requirements of this Section shall apply to all sources May 1 through September 30 of each year.

(c) Rules .1409(b) and .1416 through .1423 of this Section apply statewide.

(d) *The Rules .1407 through .1409 and .1413 of this Section apply to sources with the potential to emit 100 ton or more nitrogen oxides per year in the following areas:*

(1) *Cabarrus County*

(2) *Gaston County*

(3) *Lincoln County*

(4) *Mecklenburg County*

(5) *Rowan County*

(6) *Union County*

(7) *Davidson Township and Coddle Creek Township in Iredell County*

(e) If a violation of the ambient air quality standard for ozone is measured according to 40 CFR 50.9 in Davidson, Forsyth, or Guilford County or that part of Davie County bounded by the Yadkin River, Dutchmans Creek, North Carolina Highway 801, Fulton Creek and back to Yadkin River, the Director shall initiate analysis to determine the control measures needed to attain and maintain the ambient air quality standard for ozone. By the following May 1, the Director shall implement the specific stationary source control measures contained in this Section that are required as part of the control strategy necessary to bring the area into compliance and to maintain compliance with the ambient air quality standard for ozone. The Director shall implement the rules in this Section identified as necessary by the analysis by notice in the North Carolina Register. The notice shall identify the rules that are to be implemented and shall identify whether the rules implemented are to apply in Davidson, Forsyth, or Guilford County or that part of Davie County bounded by the Yadkin River, Dutchmans Creek, North Carolina Highway 801, Fulton Creek and back to Yadkin River or any combination thereof. At least one week before the scheduled publication date of the North Carolina Register containing the Director's notice implementing rules in this Section, the Director shall send written notification to all permitted facilities within the county in which the rules are being implemented that are or may be subject to the requirements of this Section informing them that they are or may be subject to the requirements of this Section. (For Forsyth County, "Director" means for the purpose of notifying

1 permitted facilities in Forsyth County, the Director of the Forsyth County local air pollution control
2 program.) Compliance shall be according to Rule .1403 of this Section.

3 (f) If a violation of the ambient air quality standard for ozone is measured according to 40 CFR
4 50.9 in Durham or Wake County or Dutchville Township in Granville County, the Director shall
5 initiate analysis to determine the control measures needed to attain and maintain the ambient air
6 quality standard for ozone. By the following May 1, the Director shall implement the specific
7 stationary source control measures contained in this Section that are required as part of the
8 control strategy necessary to bring the area into compliance and to maintain compliance with the
9 ambient air quality standard for ozone. The Director shall implement the rules in this Section
10 identified as necessary by the analysis by notice in the North Carolina Register. The notice shall
11 identify the rules that are to be implemented and shall identify whether the rules implemented are
12 to apply in Durham or Wake County or Dutchville Township in Granville County or any
13 combination thereof. At least one week before the scheduled publication date of the North
14 Carolina Register containing the Director's notice implementing rules in this Section, the Director
15 shall send written notification to all permitted facilities within the county in which the rules are
16 being implemented that are or may be subject to the requirements of this Section informing them
17 that they are or may be subject to the requirements of this Section. Compliance shall be in
18 according to Rule .1403 of this Section.

19 (g) If EPA notifies the State that its nonattainment plan for ozone has failed to attain the ambient
20 air quality standard for ozone in the Charlotte-Gastonia-Rock Hill ozone nonattainment area, the
21 rules in this Section shall apply to sources in Cabarrus, Gaston, Lincoln, Mecklenburg, Rowan,
22 and Union Counties and Davidson and Coddle Creek townships in Iredell County with the
23 potential to emit at least 50 tons but less than 100 tons of nitrogen oxides per year. Within 60
24 days of receipt of the notification from EPA, the Director shall notice the applicability of these
25 rules to these sources in the North Carolina Register and shall send written notification to all
26 permitted facilities within the counties in which the rules are being implemented that are or may
27 be subject to the requirements of this Section informing them that they are or may be subject to
28 the requirements of this Section. (For Mecklenburg County, "Director" means for the purpose of
29 notifying permitted facilities in Mecklenburg County, the Director of the Mecklenburg County local
30 air pollution control program.) Compliance shall be according to Rule .1403 of this Section.

31 ~~(g)~~(h) *Regardless of any other statement of applicability of this Section, this Section does not*
32 *apply to any:*

- 33 (1) source not required to obtain an air permit under 15A NCAC 02Q .0102 or is an
34 insignificant activity as defined at 15A NCAC 02Q .0103(19);
- 35 (2) incinerator or thermal or catalytic oxidizer used primarily for the control of air
36 pollution;
- 37 (3) emergency generator;

- 1 (4) emergency use internal combustion engine;
- 2 (5) source that is not covered under Rules .1416, .1417, or .1418, and that is at a
- 3 facility with a federally enforceable potential to emit nitrogen oxides of:
- 4 (A) less than 100 tons per year; and
- 5 (B) less than 560 pounds per calendar day beginning May 1 through
- 6 September 30 of any year.
- 7 (6) stationary internal combustion engine less than 2400 brake horsepower that
- 8 operates no more than the following hours between May 1 and September 30:
- 9 (A) for diesel engines:
- 10 $t = 833,333 / ES$
- 11 (B) for natural gas-fired engines:
- 12 $t = 700,280 / ES$
- 13 where t equals time in hours and ES equals engine size in horsepower.
- 14 This exemption shall not apply to any of the sources listed in Rules .1417(a)(1) or (2) or
- 15 .1417(b) of this Section except that it shall apply to:
- 16 (7) stationary combustion turbine constructed before January 1, 1979, that has a
- 17 federally enforceable permit that restricts:
- 18 (A) its potential emissions of nitrogen oxides to no more than 25 tons
- 19 between May 1 and September 30;
- 20 (B) it to burning only natural gas or oil; and
- 21 (C) its hours of operation as described in 40 CFR 96.4 (b) (1)(ii) and (iii).

22

23 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5), (7), (10);*

24 *Eff. April 1, 1995;*

25 *Amended Eff. April 1, 1997; July 1, 1995; April 1, 1995;*

26 *Temporary Amendment Eff. November 1, 2000;*

27 *Amended Eff. April 1, 2001;*

28 *Temporary Amendment Eff. August 1, 2001;*

29 *Amended Eff. July 1, 2007; March 1, 2007; July 18, 2002.*

[NOTE: The italicized language has been added as a result of an earlier hearing and recommended for adoption in another rulemaking action, but has not completed the rulemaking process.]

15A NCAC 02D .1403 is proposed for amendment as follows:

15A NCAC 02D .1403 COMPLIANCE SCHEDULES

(a) Applicability. This Rule applies to sources *covered by Paragraph (d), (e), ~~or (f)~~ (f), or (g) of Rule .1402 of this Section.*

(b) Maintenance ~~areas~~ area and Charlotte ozone nonattainment area contingency plan. The owner or operator of a source subject to this Rule because of the applicability of Paragraph ~~(e) or (f)~~ (e), (f), or (g) of Rule .1402 of this Section, 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, according to Rule .1415 of this Section, 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, according to Rule .1404 of this Section, 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;

- 1 (iii) a date by which installation of the modification shall be
2 completed; and
- 3 (iv) if the source is subject to a limitation, a date by which
4 compliance testing shall be completed.
- 5 (C) Final compliance shall be achieved within three years after the Director's
6 notice in the North Carolina Register unless the owner or operator of the
7 source petitions the Director for an alternative limitation according to
8 Rule .1412 of this Section. If such a petition is made, final compliance
9 shall be achieved within four years after the Director's notice in the North
10 Carolina Register.
- 11 (3) If compliance with this Section is to be achieved through the implementation of
12 an emissions averaging plan as provided for in Rule .1410 of this Section:
- 13 (A) The owner or operator shall abide by the applicable requirements of
14 Subparagraphs (b)(1) or (b)(2) of this Rule for certification or modification
15 of each source to be included under the averaging plan;
- 16 (B) The owner or operator shall submit a plan to implement an emissions
17 averaging plan according to Rule .1410 of this Section within six months
18 after the Director's notice in the North Carolina Register.
- 19 (C) Final compliance shall be achieved within one year after the Director's
20 notice in the North Carolina Register unless implementation of the
21 emissions averaging plan requires the modification of one or more of the
22 averaging sources. If modification of one or more of the averaging
23 sources is required, final compliance shall be achieved within three
24 years.
- 25 (4) If compliance with this Section is to be achieved through the implementation of a
26 seasonal fuel switching program as provided for in Rule .1411 of this Section:
- 27 (A) The owner or operator shall make all necessary modifications according
28 to Subparagraph (b)(2) of this Rule.
- 29 (B) The owner or operator shall include a plan for complying with the
30 requirements of Rule .1411 of this Section with the permit application
31 required under Part (A) of this Subparagraph.
- 32 (C) Final compliance shall be achieved within three years after the Director's
33 notice in the North Carolina Register.
- 34 (5) Increments of progress certification. The owner or operator shall certify to the
35 Director, within five days after each increment *deadline* of progress in this
36 Paragraph, whether the required increment of progress has been met.

1 (c) *Nonattainment areas. The owner or operator of a source subject to this Rule because of the*
2 *applicability of Paragraph (d) of Rule .1402 of this Section, shall adhere to the following:*

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

5 (A) *The owner or operator shall notify the Director in writing by August 1,*
6 *2007;*

7 (B) *The owner or operator shall perform any required testing, according to*
8 *Rule .1415 of this Section, by January 1, 2008 and*

9 (C) *The owner or operator shall implement any required recordkeeping and*
10 *reporting requirements, according to Rule .1404 of this Section, by*
11 *January 1, 2008.*

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

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

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

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

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

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

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

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

27 (3) *If compliance with this Section is to be achieved through the implementation of*
28 *an emissions averaging plan as provided for in Rule .1410 of this Section:*

29 (A) *The owner or operator shall abide by the applicable requirements of*
30 *Subparagraph (c)(1) or (c)(2) of this Rule for certification or modification*
31 *of each source to be included under the averaging plan;*

32 (B) *The owner or operator shall submit a plan to implement an emissions*
33 *averaging plan according to Rule .1410 of this Section by August 1,*
34 *2007.*

35 (C) *Final compliance shall be achieved within one year no later than*
36 *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 Rule .1411 of this Section:*
- (A) *The owner or operator shall make all necessary modifications according to Subparagraph (c)(2) of this Rule.*
- (B) *The owner or operator shall include a plan for complying with the requirements of Rule .1411 of this Section with the permit application required under Part (A) of this Subparagraph.*
- (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 Areas. ~~area and Charlotte ozone nonattainment area contingency plan.~~ Paragraph (b) of this Rule shall not apply to sources that are in compliance with applicable rules of this Section when the Director notices the implementation of rules in the North Carolina Register that resolves a violation of the ambient air quality standard for ozone and that have determined and certified compliance to the satisfaction of the Director within six months after the Director notices 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 Paragraph (d) of Rule .1402 of this Section that are in compliance with applicable rules of this Section on March 1, 2007.*
- (e) *New sources.*
- (1) *Maintenance areas. ~~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 Paragraph ~~(e), (f), or (g)~~ (e) or (f) of Rule .1402 of this Section, shall comply with all applicable rules in this Section upon start-up of the source. The owner or operator of any new source covered under Rules .1407, .1408, .1409, .1413, or .1418 of this Section 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, 2008 in an area identified in Paragraph (d) of Rule .1402 of this Section, shall comply with all applicable rules in this Section upon start-up of the source.*

1 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.107(a)(5), (7), (10);*
2 *Eff. April 1, 1995;*
3 *Amended Eff. April 1, 1997;*
4 *Temporary Amendment Eff. November 1, 2000;*
5 *Amended Eff. April 1, 2001;*
6 *Temporary Amendment Eff. August 1, 2001;*
7 *Amended Eff. July 1, 2007; March 1, 2007;_July 18, 2002.*

GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 1999

SESSION LAW 1999-328
SENATE BILL 953

AN ACT TO ENACT THE AMBIENT AIR QUALITY IMPROVEMENT ACT OF 1999.

Whereas, the Constitution of North Carolina declares that the policy of this State is to conserve and protect State lands and waters for the benefit of all North Carolina citizens and to control and limit air pollution within the State; and

Whereas, the State has enacted comprehensive statutory and regulatory protections for reducing air pollution from stationary sources; and

Whereas, ozone air pollution adversely affects the health and welfare of the citizens of North Carolina through the impairment of lung function and exacerbation of asthma and other diseases of the lung; and

Whereas, visibility at some of the State's places of beauty, such as the Great Smoky Mountains National Park and the Blue Ridge Mountain range, has been impaired by ozone air pollution that is created by the reaction of nitrogen oxides (NOx) and other chemicals in sunlight; and

Whereas, the decentralized system of inspection stations effectively uses a public-private partnership to enforce motor vehicle pollution controls; and

Whereas, gains in motor vehicle pollution control technology have been offset by increased vehicle use, resulting in greater emissions of nitrogen oxides (NOx) and greater ozone air pollution; and

Whereas, the sulfur contained in gasoline impedes the effectiveness of catalytic converters, the devices that reduce the amount of pollution emitted from vehicle tailpipes, thereby degrading the emission control systems of vehicles; and

Whereas, new motor vehicle pollution control technology is more sensitive to the sulfur content of fuels and will require new emissions inspection methods; and

Whereas, reducing emissions of nitrogen oxides (NOx) from motor vehicles by twenty-five percent (25%) within the next 10 years will complement the State's stationary source control strategy; and

Whereas, reducing the growth of vehicle miles traveled in the State by twenty-five percent (25%) within the next 10 years will complement the State's controls of nitrogen oxide (NOx) emissions from stationary sources; and

Whereas, leaking underground storage tanks and tanker trucks release quantities of volatile organic compounds into the air, which mix with nitrogen oxides (NOx) to form ground level ozone; and

Whereas, clean burning fuels, alternative-fueled vehicles, and low emission vehicle usage should be encouraged statewide; and

Whereas, the State must lead the way in combating

ground level ozone pollution from motor vehicles through its own purchases and policies; Now, therefore,

The General Assembly of North Carolina enacts:

PART I. STATEWIDE GOALS

Section 1.1. It shall be the goal of the State to reduce emissions of nitrogen oxides (NOx) from all sources by at least twenty-five percent (25%) by 1 July 2009. It shall be the goal of the State to reduce the growth of vehicle miles traveled in the State by at least twenty-five percent (25%) of that growth that would otherwise occur by 1 July 2009. The Department of Environment and Natural Resources and the Department of Transportation shall evaluate progress toward achieving these goals in each fiscal year and shall report their findings and recommendations as to any measures that may be needed to achieve these goals to the Environmental Review Commission on or before 1 October of each year beginning 1 October 2000.

PART II. SULFUR CONTENT OF MOTOR FUELS

Section 2.1. Article 3 of Chapter 119 of the General Statutes is amended by adding a new section to read:

"§ 119-26.2. Sulfur content standards.

(a) No person shall manufacture, sell, or offer for sale gasoline that contains a concentration of sulfur greater than 30 parts per million except that a person may manufacture, sell, or offer for sale gasoline that contains a concentration of sulfur of not more than 80 parts per million if the average concentration of sulfur in the gasoline manufactured, sold, or offered for sale by that person is 30 parts per million or less. The average concentration of sulfur contained in gasoline shall be determined on the basis of a one-year period established by rule.

(b) The Gasoline and Oil Inspection Board shall adopt rules to implement this section."

Section 2.2. Section 2.1 of this act becomes effective as provided in this section. No later than 1 July 2000, the Governor shall determine whether the United States Environmental Protection Agency has adopted, pursuant to the Notice of Proposed Rulemaking published on 13 May 1999 in the Federal Register, Volume 64, Number 92, Page 26003 et seq., regulations applicable to gasoline manufactured, sold, and offered for sale in this State that limit the sulfur content of gasoline to a concentration equal to or less than the concentration set out in Section 2.1 of this act. If the Governor so determines, the Governor shall issue an Executive Order setting out the date on which Section 2.1 of this act becomes effective, which shall be the date on which the federal regulation becomes effective in this State. Otherwise, Section 2.1 of this act becomes effective 1 January 2004. If the United States Environmental Protection Agency promulgates a regulation that imposes a limit on the concentration of sulfur in gasoline other than that set out in G.S. 119-26.2, as enacted by Section 2.1 of this act, it is the intention of the General Assembly to review the limit established in G.S. 119-26.2. In that event, the Environmental Review

Commission shall review the limit on the concentration of sulfur in gasoline and report its findings and recommendations, if any, to the General Assembly.

Section 2.3. G.S. 119-26.1 reads as rewritten:

"§ **119-26.1. ~~Oxygen content~~
~~standards~~ Content of motor fuels and
reformulated gasoline.**

(a) Rules adopted pursuant to G.S. 143-215.107(a)(9) to regulate the ~~oxygen~~ content of ~~gasoline~~ motor fuels or to require the use of reformulated gasoline shall be implemented by the Department of Agriculture and Consumer Services and the Gasoline and Oil Inspection Board. Such rules shall be implemented within any area specified by the Environmental Management Commission when the Commission certifies to the Commissioner of Agriculture that implementation:

(1) Will improve the ambient air quality within the specified county or counties;

(2) Is necessary to achieve attainment or preclude violations of the National Ambient Air Quality Standards; or

(3) Is otherwise necessary to meet federal requirements.

(b) The Department of Agriculture and Consumer Services and the Gasoline and Oil Inspection Board may adopt rules to implement this section. Rules shall be consistent with the implementation schedule and rules adopted by the Environmental Management Commission.

(c) The Commissioner of Agriculture may assess and collect civil penalties for violations of rules adopted under G.S. 143-215.107(a)(9) or this section in accordance with G.S. 143-215.114A. The Commissioner of Agriculture may institute a civil action for injunctive relief to restrain, abate, or prevent a violation or threatened violation of rules adopted under G.S. 143-215.107(a)(9) or this section in accordance with G.S. 143-215.114C. The assessment of a civil penalty under this section and G.S. 143-215.114A or institution of a civil action under G.S. 143-215.114C and this section shall not relieve any person from any other penalty or remedy authorized under this Article.

(c1) The clear proceeds of civil penalties assessed pursuant to this subsection shall be remitted to the Civil Penalty and Forfeiture Fund in accordance with G.S. 115C-457.2.

(d) The Commissioner of Agriculture may delegate his powers and duties under this subsection to the Director of the Standards Division of the Department of Agriculture and Consumer Services."

PART III. MOTOR VEHICLE EMISSIONS INSPECTION AND MAINTENANCE

Section 3.1. Article 21B of Chapter 143 of the General Statutes is amended by adding a new section to read:

"§ **143-215.107A. Motor vehicle emissions testing and
maintenance program.**

(a) General Provisions. --

(1) G.S. 143-215.107(a)(6) shall be
implemented as provided in this section.

(2) Motor vehicle emissions inspections

shall be performed by a person who holds an emissions inspection mechanic license issued as provided in G.S. 20-183.4A(c) at a station that holds an emissions inspection station license issued under G.S. 20-183.4A(a) or at a place of business that holds an emissions self-inspector license issued as provided in G.S. 20-183.4A(d). Motor vehicle emissions inspections may be performed by a decentralized network of test-and-repair stations as described in 40 Code of Federal Regulations § 51.353 (1 July 1998 Edition). The Commission may not require that motor vehicle emissions inspections be performed by a network of centralized or decentralized test-only stations.

(b) Type of Test Required. -- Motor vehicle emissions inspections shall be performed using the two-mode Acceleration Simulation Mode (ASM) test described in Federal Register, Volume 57, Number 215, (5 November 1992), Pages 52955 to 52996.

(c) Counties Covered. -- Motor vehicle emissions inspections shall be performed only in the following counties: Cabarrus, Durham, Forsyth, Gaston, Guilford, Mecklenburg, Orange, Union, and Wake.

(d) Additional Counties. -- The Commission may require that motor vehicle emissions inspections be performed in counties in addition to those set out in subsection (c) of this section. In determining whether to require that motor vehicle emissions inspections be performed in a county, the Commission may consider the population of, and distribution of population in, the county; the projected change in population of, and distribution of population in, the county; the number of vehicles registered in the county; the projected change in the number of vehicles registered in the county; vehicle miles traveled in the county; the projected change in vehicle miles traveled in the county; current and projected commuting patterns in the county; and the current and projected impact of these factors on attainment of air quality standards in the county and in areas outside the county. The Commission may not require that motor vehicle emissions testing be performed in any county with a population of less than 40,000 based on the most recent population estimates prepared by the State Planning Officer. The Commission may not require that motor vehicle emissions testing be performed in any county in which the number of vehicle miles traveled per day is less than 900,000, based on the most recent estimates prepared by the Department of Transportation. In order to disapprove a rule that requires that motor vehicle emissions inspections be performed in one or more additional counties, a bill introduced pursuant to G.S. 150B-21.3(b) must amend subsection (c) of this section to add one or more other counties in which the total population and vehicle miles traveled per day equal or exceed the total population and vehicle miles traveled in the county or counties listed in the rule that the bill would disapprove."

Section 3.2. The Environmental Management Commission shall adopt rules to implement G.S. 143-215.107A(b), as enacted by Section 3.1 of this act. These rules shall become effective on 1 July 2002. The Environmental Management Commission shall not require that motor vehicle emissions inspections be performed in any county pursuant to G.S. 143-215.107A(d), as enacted by Section 3.1 of this act, prior to 1 July 2006. The Environmental Management Commission shall not require motor vehicle emissions

inspections for diesel powered vehicles prior to 1 July 2001.

Section 3.3. Effective 1 July 2003, G.S. 143-215.7A(c), as enacted by Section 3.1 of this act, reads as rewritten:

"(c) Motor vehicle emissions inspections shall be performed ~~only~~ in the following counties: Cabarrus, Catawba, Cumberland, Davidson, Durham, Forsyth, Gaston, Guilford, Iredell, Johnston, Mecklenburg, Orange, Rowan, Union, and Wake."

Section 3.4. Effective 1 January 2004, G.S. 143-215.7A(c), as enacted by Section 3.1 of this act and amended by Section 3.3 of this act, reads as rewritten:

"(c) Motor vehicle emissions inspections shall be performed in the following counties: Alamance, Cabarrus, Catawba, Chatham, Cumberland, Davidson, Durham, Forsyth, Franklin, Gaston, Guilford, Iredell, Johnston, Lee, Lincoln, Mecklenburg, Moore, Orange, Randolph, Rowan, Stanly, Union, and Wake."

Section 3.5. Effective 1 July 2004, G.S. 143-215.7A(c), as enacted by Section 3.1 of this act and amended by Sections 3.3 and 3.4 of this act, reads as rewritten:

"(c) Motor vehicle emissions inspections shall be performed in the following counties: Alamance, Buncombe, Cabarrus, Catawba, Chatham, Cleveland, Cumberland, Davidson, Durham, Forsyth, Franklin, Gaston, Granville, Guilford, Harnett, Iredell, Johnston, Lee, Lincoln, Mecklenburg, Moore, Orange, Randolph, Rockingham, Rowan, Stanly, Union, and Wake."

Section 3.6. Effective 1 January 2005, G.S. 143-215.7A(c), as enacted by Section 3.1 of this act and amended by Sections 3.3 through 3.5 of this act, reads as rewritten:

"(c) Motor vehicle emissions inspections shall be performed in the following counties: Alamance, Buncombe, Cabarrus, Catawba, Chatham, Cleveland, Cumberland, Davidson, Durham, Edgecombe, Forsyth, Franklin, Gaston, Granville, Guilford, Harnett, Iredell, Johnston, Lee, Lenoir, Lincoln, Mecklenburg, Moore, Nash, Orange, Pitt, Randolph, Robeson, Rockingham, Rowan, Stanly, Union, ~~and Wake.~~ Wake, Wayne, and Wilson."

Section 3.7. Effective 1 July 2005, G.S. 143-215.7A(c), as enacted by Section 3.1 of this act and amended by Sections 3.3 through 3.6 of this act, reads as rewritten:

"(c) Motor vehicle emissions inspections shall be performed in the following counties: Alamance, Buncombe, Burke, Cabarrus, Caldwell, Catawba, Chatham, Cleveland, Cumberland, Davidson, Durham, Edgecombe, Forsyth, Franklin, Gaston, Granville, Guilford, Harnett, Haywood, Henderson, Iredell, Johnston, Lee, Lenoir, Lincoln, Mecklenburg, Moore, Nash, Orange, Pitt, Randolph, Robeson, Rockingham, Rowan, Rutherford, Stanly, Stokes, Surry, Union, Wake, Wayne, Wilkes, and Wilson."

Section 3.8. Effective 1 January 2006, G.S. 143-215.7A(c), as enacted by Section 3.1 of this act and amended by Sections 3.3 through 3.7 of this act, reads as rewritten:

"(c) Motor vehicle emissions inspections shall be performed in the following counties: Alamance, Brunswick, Buncombe, Burke, Cabarrus, Caldwell, Carteret, Catawba, Chatham,

Cleveland, Craven, Cumberland, Davidson, Durham, Edgecombe, Forsyth, Franklin, Gaston, Granville, Guilford, Harnett, Haywood, Henderson, Iredell, Johnston, Lee, Lenoir, Lincoln, Mecklenburg, Moore, Nash, New Hanover, Onslow, Orange, Pitt, Randolph, Robeson, Rockingham, Rowan, Rutherford, Stanly, Stokes, Surry, Union, Wake, Wayne, Wilkes, and Wilson."

Section 3.9. Sections 3.3 through 3.8 of this act become effective only if G.S. 20-183.7 is amended to increase the fee for motor vehicle emissions inspections no later than 31 December 2000. G.S. 143-215.107A(b), as enacted by Section 3.1 of this act, and Section 3.2 of this act are repealed effective 1 January 2001 unless, prior to 1 January 2001, G.S. 20-183.7 has been amended to increase the fee for motor vehicle emissions inspection.

Section 3.10. The Department of Environment and Natural Resources, with the assistance of the Division of Motor Vehicles of the Department of Transportation and the affected parties, shall study issues related to costs associated with the motor vehicle emissions inspection and maintenance program. The Department shall determine what constitutes a reasonable fee for motor vehicle emissions inspections under the current program and under the enhanced program to be implemented pursuant to G.S. 143-215.107A(b), as enacted by Section 3.1 of this act. In determining what constitutes a reasonable fee, the Department shall consider the cost of emissions inspection equipment, the useful life of the equipment, the average period of time during which a purchaser of this equipment is able to amortize this cost, telephone charges incurred in connection with the registration denial program, whether a fee should be charged to reinspect a vehicle that fails an emissions test after repairs to the vehicle have been made, and whether the State should purchase emissions inspection equipment purchased prior to 10 June 1999 for use in the current program but that will be rendered obsolete by the enhanced program. The Department shall report its findings and recommendations to the Environmental Review Commission on or before 1 February 2000. The Environmental Review Commission, with the assistance of the Fiscal Research Division of the Legislative Services Office, shall evaluate these recommendations. The Environmental Review Commission shall recommend legislation to amend G.S. 20-183.7 to increase the fee for motor vehicle emissions inspections to the 2000 Regular Session of the 1999 General Assembly.

Section 3.11. G.S. 20-183.2 reads as rewritten:

"§ 20-183.2. Description of vehicles subject to safety or emissions inspection; definitions.

(a) Safety. -- A motor vehicle is subject to a safety inspection in accordance with this Part if it meets all of the following requirements:

(1) It is subject to registration with the Division under Article 3 of this Chapter.

(2) It is not subject to inspection under 49 C.F.R. Part 396, the federal Motor Carrier Safety Regulations.

(3) It is not a trailer whose gross weight is less than 4,000 pounds or a house trailer.

(b) Emissions. -- A motor vehicle is subject to an emissions inspection in accordance with this Part if it meets all of the following requirements:

(1) It is subject to registration with the Division under Article 3 of this Chapter.

(2) It is not a trailer whose gross weight is less than 4,000 pounds, a house trailer, or a motorcycle.

(3) It is a 1975 or later model.

~~(4) It is powered or
designed so that it could be powered by gasoline.~~

(5) It meets any of the following descriptions:

a. It is required to be registered in an emissions county.

b. It is part of a fleet that is operated primarily in an emissions county.

c. It is offered for rent in an emissions county.

d. It is a used vehicle offered for sale by a dealer in an emissions county.

e. It is operated on a federal installation located in an emissions county and it is not a tactical military vehicle. Vehicles operated on a federal installation include those that are owned or leased by employees of the installation and are used to commute to the installation and those owned or operated by the federal agency that conducts business at the installation.

f. It is otherwise required by 40 C.F.R. Part 51 to be subject to an emissions inspection.

(c) Definitions. -- The following definitions apply in this Part:

(1) Emissions county. -- ~~A county in which the State either is required by federal law to conduct emissions testing or has agreed in its State Implementation Plan submitted to the federal Environmental Protection Agency to conduct emissions testing. The State listed in G.S. 143-215.107A(c) or designated by the Environmental Management Commission establishes the emissions counties pursuant to rules adopted under G.S. 143-215.107(a)(6).~~ pursuant to G.S. 143-215.107A(d) and certified to the Commissioner of Motor Vehicles as a county in which the implementation of a motor vehicle emissions inspection program will improve ambient air quality.

(2) Federal installation. -- An installation that is owned by, leased to, or otherwise regularly used as the place of business of a federal agency."

Section 3.12. G.S. 143-215.107 reads as rewritten:

"§ 143-215.107. Air quality standards and classifications.

(a) Duty to Adopt Plans, Standards, etc. -- The Commission is hereby directed and empowered, as rapidly as possible within the limits of funds and facilities available to it, and subject to the procedural requirements of this Article and Article 21:

(1) To prepare and develop, after proper study, a comprehensive plan or plans for the prevention, abatement and control of air pollution in the State or in any designated area of the State.

(2) To determine by means of field sampling and other studies, including the examination of available data

collected by any local, State or federal agency or any person, the degree of air contamination and air pollution in the State and the several areas of the State.

(3) To develop and adopt, after proper study, air quality standards applicable to the State as a whole or to any designated area of the State as the Commission deems proper in order to promote the policies and purposes of this Article and Article 21 most effectively.

(4) To collect information or to require reporting from classes of sources which, in the judgment of the Environmental Management Commission, may cause or contribute to air pollution. Any person operating or responsible for the operation of air contaminant sources of any class for which the Commission requires reporting shall make reports containing such information as may be required by the Commission concerning location, size, and height of contaminant outlets, processes employed, fuels used, and the nature and time periods or duration of emissions, and such other information as is relevant to air pollution and available or reasonably capable of being assembled.

(5) To develop and adopt emission control standards as in the judgment of the Commission may be necessary to prohibit, abate, or control air pollution commensurate with established air quality standards. ~~The standards may be applied uniformly to the State as a whole or to any area of the State designated by the Commission.~~
This subdivision does not apply to that portion of the National Emission Standards for Hazardous Air Pollutants for asbestos that governs demolition and renovation as set out in 40 C.F.R. § 61.141, 61.145, 61.150, and 61.154 (1 July 1993 edition).

~~(6) To adopt, when necessary and practicable, a program for testing emissions from motor vehicles and to adopt motor vehicle emission standards in compliance with applicable federal regulations.~~
adopt motor vehicle emissions standards; to adopt, when necessary and practicable, a motor vehicle emissions inspection and maintenance program to improve ambient air quality; to require that motor vehicle emissions be monitored while the vehicle is in operation by means of onboard diagnostic equipment (OBD) installed by the vehicle manufacturer; to require manufacturers of motor vehicles to furnish to the Equipment and Tool Institute and, upon request and at a reasonable charge, to any person who maintains or repairs a motor vehicle, all information necessary to fully make use of the onboard diagnostic equipment and the data compiled by that equipment; to certify to the Commissioner of Motor Vehicles that ambient air quality will be improved by the implementation of a motor vehicle emissions inspection and maintenance program in a county. The Commission shall implement this subdivision as provided in G.S. 143-215.107A.

(7) To develop and adopt standards and plans necessary to implement programs for the prevention of significant deterioration and for the attainment of air quality standards in nonattainment areas.

(8) To develop and adopt standards and plans

necessary to implement programs to control acid deposition and to regulate the use of sulfur dioxide allowances and nitrogen oxides (NOx) emissions in accordance with Title IV and implementing regulations adopted by the United States Environmental Protection Agency.

(9) To regulate the ~~oxygen~~ content of ~~gasoline~~, motor fuels, as defined in G.S. 119-16, to require use of reformulated gasoline as the Commission determines necessary, to implement the requirements of Title II and implementing regulations adopted by the United States Environmental Protection Agency, and to develop standards and plans to implement this subdivision. ~~Rules adopted under this subdivision may specify standards for a particular area of the State that differ from standards specified for other areas as may be necessary to improve ambient air quality within a particular area, achieve attainment or preclude violations of the National Ambient Air Quality Standards, or to meet other federal requirements.~~ Rules may authorize the use of marketable oxygen credits for gasoline as provided in federal requirements.

(10) To develop and adopt standards and plans necessary to implement requirements of the federal Clean Air Act and implementing regulations adopted by the United States Environmental Protection Agency.

(11) To develop and adopt economically feasible standards and plans necessary to implement programs to control the emission of odors from animal operations, as defined in G.S. 143-215.10B.

(12) To develop and adopt a program of incentives to promote voluntary reductions of emissions of air contaminants, including, but not limited to, emissions banking and trading and credit for voluntary early reduction of emissions.

(13) To develop and adopt rules governing the certification of persons who inspect vehicle-mounted tanks used to transport motor fuel and to require that inspection of these tanks be performed only by certified personnel.

(14) To develop and adopt rules governing the sale and service of mobile source exhaust emissions analyzers and to require that vendors of these analyzers provide adequate surety to purchasers for the performance of the vendor's contractual or other obligations related to the sale and service of analyzers.

(b) Criteria for Standards. -- In developing air quality and emission control standards, motor vehicle emissions standards, motor vehicle emissions inspection and maintenance requirements, rules governing the content of motor fuels or requiring the use of reformulated gasoline, and other standards and plans to improve ambient air quality, the Commission shall ~~recognize~~ consider varying local conditions and requirements and may prescribe uniform standards and plans throughout the State or different standards and plans for different counties or areas as may be necessary and appropriate to ~~facilitate accomplishment of the stated~~ improve ambient air

quality in the State or within a particular county or area, achieve attainment or preclude violations of state or national ambient air quality standards, meet other federal requirements, or achieve the purposes of this Article and Article 21.

(c) Chapter 150B of the General Statutes governs the adoption and publication of rules under this Article."

Section 3.13. G.S. 20-183.8F reads as rewritten:

"§ 20-183.8F. Requirements for giving certain ~~emissions~~ license holders notice of violations and for taking summary action.

(a) Finding of Violation. -- When an auditor of the Division finds that ~~an emissions~~ a violation has occurred that could result in the suspension or revocation of an ~~emissions~~ inspection station license, ~~an emissions~~ a self-inspector license, or ~~an emissions~~ a mechanic license, the auditor must give the affected license holder written notice of the finding. The notice must be given within five business days after the violation occurred. The notice must state the period of suspension or revocation that could apply to the violation and any monetary penalty that could apply to the violation. The notice must also inform the license holder of the right to a hearing if the Division charges the license holder with the violation.

(b) Notice of Charges. -- When the Division decides to charge an ~~emissions~~ inspection station, ~~an emissions~~ a self-inspector, or ~~an emissions~~ a mechanic with a violation that could result in the suspension or revocation of the person's ~~emissions~~ license, an auditor of the Division must deliver a written statement of the charges to the affected license holder. The statement of charges must inform the license holder of this right, instruct the person on how to obtain a hearing, and inform the license holder of the effect of not requesting a hearing. The license holder has the right to a hearing before the license is suspended or revoked. G.S. 20-183.8E sets out the procedure for obtaining a hearing.

(c) Exception for Summary Action. -- The right granted by subsection (b) of this section to have a hearing before ~~an emissions~~ a license is suspended or revoked does not apply if the Division summarily suspends or revokes the license after a judge has reviewed and authorized the proposed action. A license issued to an ~~emissions~~ inspection station, ~~an emissions~~ a self-inspector, or ~~an emissions~~ a mechanic is a substantial property interest that cannot be summarily suspended or revoked without judicial review."

Section 13.14. G.S. 20-183.8G reads as rewritten:

"§ 20-183.8G. Administrative and judicial review.

(a) Right to Hearing. -- A person who applies for a license or registration under this Part or who has a license or registration issued under this Part has the right to a hearing when any of the following occurs:

(1) The Division denies the person's application for a license or registration.

(2) The Division delivers to the person a written statement of charges of ~~an emissions~~ a violation that could result in the suspension or revocation of the person's ~~emissions~~ license.

(3) The Division summarily suspends or revokes the person's license following review and authorization of the proposed adverse action by a judge.

(4) The Division assesses a civil penalty against the person.

(5) The Division issues a warning letter to the person.

(6) The Division cancels the person's registration.

(b) Hearing After Statement of Charges. -- When ~~an emissions~~ a license holder receives a statement of charges of ~~an emissions~~ a violation that could result in the suspension or revocation of the person's license, the person can obtain a hearing by making a request for a hearing. The person must make the request to the Division within 10 days after receiving the statement of the charges. A person who does not request a hearing within this time limit waives the right to a hearing.

The Division must hold a hearing requested under this subsection within three business days after receiving the request unless the person requesting the hearing asks for additional time to prepare for the hearing. A person may ask for no more than seven additional business days to prepare. If the additional time requested is within this limit, the Division must grant a person the additional time requested. The hearing must be held at the location designated by the Division. Suspension or revocation of the license is stayed until a decision is made following the hearing.

If a person does not request a hearing within the time allowed for making the request, the proposed suspension or revocation becomes effective the day after the time for making the request ends. If a person requests a hearing but does not attend the hearing, the proposed suspension or revocation becomes effective the day after the date set for the hearing.

(c) Hearing After Summary Action. -- When the Division summarily suspends a license issued under this Part after judicial review and authorization of the proposed action, the person whose license was suspended or revoked may obtain a hearing by filing with the Division a written request for a hearing. The request must be filed within 10 days after the person was notified of the summary action. The Division must hold a hearing requested under this subsection within 14 days after receiving the request.

(d) All Other Hearings. -- When this section gives a person the right to a hearing and subsection (b) or (c) of this section does not apply to the hearing, the person may obtain a hearing by filing with the Division a written request for a hearing. The request must be filed within 10 days after the person receives written notice of the action for which a hearing is requested. The Division must hold a hearing within 90 days after the Division receives the request.

(e) Review by Commissioner. -- The Commissioner may conduct a hearing required under this section or may designate a person

to conduct the hearing. When a person designated by the Commissioner holds a hearing and makes a decision, the person who requested the hearing has the right to request the Commissioner to review the decision. The procedure set by the Division governs the review by the Commissioner of a decision made by a person designated by the Commissioner.

(f) Decision. -- A decision made after a hearing on the imposition of a monetary penalty against a motorist for an emissions violation or on a Type I, II, or III emissions violation by an emissions license holder must uphold any monetary penalty, license suspension, license revocation, or warning required by G.S. 20-183.8A or G.S. 20-183.8B, respectively, if the decision contains a finding that the motorist or license holder committed the act for which the monetary penalty, license suspension, license revocation, or warning was imposed. A decision made after a hearing on any other action may uphold or modify the action.

(g) Judicial Review. -- Article 4 of Chapter 150B of the General Statutes governs judicial review of an administrative decision made under this section."

PART IV. STATE AGENCY GOALS, PLANS, DUTIES, AND REPORTS; OTHER PROVISIONS

Section 4.1. As used in this Part, alternative-fueled vehicle means a motor vehicle capable of operating on electricity; natural gas; propane; hydrogen; reformulated gasoline; ethanol; other alcohol fuels, separately or in mixtures of eighty-five percent (85%) or more of alcohol by volume; or fuels, other than alcohol, derived from biological materials. For purposes of this Part, a vehicle that has been converted to operate on a fuel other than the fuel for which it was originally designed is not a new or replacement vehicle.

Section 4.2. It shall be the goal of the State that on and after 1 January 2004 at least seventy-five percent (75%) of the new or replacement light duty cars and trucks purchased by the State will be alternative-fueled vehicles or low emission vehicles. The Department of Administration, the Department of Transportation, and the Department of Environment and Natural Resources shall jointly develop a plan to achieve this goal and to fuel and maintain these vehicles. The Department of Administration shall report on progress in developing and implementing this plan and achieving this goal to the Environmental Review Commission on 1 September of each year beginning 1 September 2000. For purposes of this section, a light duty car or truck is one that is rated at 8,500 pounds or less Gross Vehicle Weight Rating (GVWR).

Section 4.3. The Department of Public Instruction, the Department of Transportation, and the Department of Environment and Natural Resources shall jointly develop a draft plan for the purchase of school buses under which, beginning 1 January 2004, at least fifty percent (50%) of the new and replacement public school buses purchased for use in counties with a population of at least 100,000, based on the most recent population estimates prepared by the Office of State Planning, will be alternative-fueled or low emission vehicles. These departments shall invite interested parties to participate in the development

of the draft plan. The draft plan will consider the infrastructure requirements that would be needed to fuel and maintain these buses and the costs and benefits of implementation of the plan, including the impact on ambient air quality. The Department of Public Instruction shall submit the draft plan to the Environmental Review Commission on or before 1 September 2000.

Section 4.4. The Department of Transportation and the Department of Environment and Natural Resources shall jointly develop a draft plan for the purchase of buses under which, beginning 1 January 2004, at least fifty percent (50%) of the new and replacement buses purchased to provide public transportation in counties in which motor vehicle emissions inspections are required to be performed under subsection (c) or (d) of G.S. 143-215.107A will be alternative-fueled or low emission vehicles. These departments shall invite interested parties to participate in the development of the draft plan. The draft plan will consider the infrastructure requirements that would be needed to fuel and maintain these buses and the costs and benefits of implementation of the plan, including the impact on ambient air quality. The Department of Transportation shall submit the draft plan to the Environmental Review Commission on or before 1 September 2000.

Section 4.5. The Department of Transportation, the Department of Commerce, and the Department of Environment and Natural Resources shall jointly develop recommendations for incentives to increase the use of alternative-fueled and low emission light duty cars and trucks in privately owned fleets. The Department of Environment and Natural Resources shall submit these recommendations to the Environmental Review Commission on or before 1 February 2000. The Department of Environment and Natural Resources shall report on progress in increasing the use of alternative-fueled and low emission light duty cars and trucks in privately owned fleets to the Environmental Review Commission on or before 1 October of each year beginning 1 October 2001.

Section 4.6. The Department of Administration, the Office of State Personnel, the Department of Transportation, and the Department of Environment and Natural Resources shall jointly develop and periodically update a plan to reduce vehicle miles traveled by State employees and vehicle emissions resulting from job-related travel, including commuting to and from work. The plan shall consider the use of carpooling, vanpooling, public transportation, incentives, and other appropriate strategies. The Office of State Personnel shall report on the development and implementation of the plan to the Joint Legislative Transportation Oversight Committee and the Environmental Review Commission on or before 1 October of each year beginning 1 October 2000.

Section 4.7. The Department of Transportation, the Department of Commerce, and the Department of Environment and Natural Resources shall jointly develop and periodically update a plan to reduce vehicle miles traveled by private sector employees and vehicle emissions resulting from job-related travel, including commuting to and from work. The plan shall consider the use of incentives for both private sector employees and employers, carpooling, vanpooling, public transportation, and other appropriate strategies. The Department of Transportation

shall report on the development and implementation of the plan to the Joint Legislative Transportation Oversight Committee and the Environmental Review Commission on or before 1 October of each year beginning 1 October 2000.

Section 4.8. The Office of State Personnel shall implement a policy that promotes telework/telecommuting for State employees as recommended by the report of the State Auditor entitled "Establishing a Formal Telework/Telecommuting Program for State Employees" and dated October 1997. It shall be the goal of the State to reduce State employee vehicle miles traveled in commuting by twenty percent (20%) without reducing total work hours or productivity. The Office of State Personnel shall report on progress in implementing this section to the Environmental Review Commission on or before 1 October of each year beginning 1 October 2000.

Section 4.9. The Environmental Management Commission shall initiate rule making to regulate the emissions of nitrogen oxides (NOx) from complex sources pursuant to G.S. 143-215.109 no later than 1 October 1999. The Environmental Management Commission shall report on the progress of this rule making as a part of each quarterly report the Commission makes to the Environmental Review Commission pursuant to G.S. 143B-282(b).

Section 4.10. Chapter 136 of the General Statutes is amended by adding a new Article to read:

"ARTICLE 16.

"Planning.

"§ 136-200. Definitions.

As used in this Article:

(1) 'Conformity' means the extent to which transportation plans, programs, and projects conform to federal air quality requirements as specified in 40 Code of Federal Regulations, Part 93, Subpart A (1 July 1998 Edition).

(2) 'Department' means the Department of Transportation.

(3) 'Interface' means a relationship between streams of traffic that efficiently and safely maximizes the mobility of people and goods within and through urbanized areas and minimizes transportation-related fuel consumption and air pollution.

(4) 'Metropolitan Planning Organization' or 'MPO' means an agency that is designated as a Metropolitan Planning Organization in accordance with 23 U.S.C. § 134.

(5) 'Regionally significant project' has the same meaning as under 40 Code of Federal Regulations 93.101 (1 July 1998 Edition).

(6) 'Regional travel demand model' means a model of a region, defined in the model, that is approved by the Department and each Metropolitan Planning Organization whose boundaries include any part of the region and that uses socioeconomic data and projections to predict demands on a transportation network.

"§ 136-201. Plan for intermodal interface.

When planning a regionally significant transportation project, the Department shall consider design alternatives that will facilitate the cost-effective interface of the project with

other existing or planned transportation projects, including highway, airport, rail, bus, bicycle, and pedestrian facilities. The Department of Transportation shall record its consideration of these design alternatives in the planning documents for the project.

"§ 136-202. Metropolitan planning organizations.

(a) Each Metropolitan Planning Organization shall base all transportation plans, metropolitan transportation improvement programs, and conformity determinations on the most recently completed regional travel demand model.

(b) Each Metropolitan Planning Organization shall update its transportation plans in accordance with the scheduling requirements stated in 23 Code of Federal Regulations 450.322 (1 April 1999 Edition).

(c) The Department, the metropolitan planning organizations, and the Department of Environment and Natural Resources shall jointly evaluate and adjust the regions defined in each regional travel demand model at least once every five years and no later than 1 October of the year following each decennial federal census. The evaluation and adjustment shall be based on decennial census data and the most recent populations estimates certified by the State Planning Officer. The adjustment of these boundaries shall reflect current and projected patterns of population, employment, travel, congestion, commuting, and public transportation use and the effects of these patterns on air quality.

(d) The Department shall report on the evaluation and adjustment of the boundaries of the area served by each Metropolitan Planning Organization to the Joint Legislative Transportation Oversight Committee and the Environmental Review Commission no later than 1 November of each year in which the regions are evaluated and adjusted.

"§ 136-203. Joint study groups.

The Department and the Department of Environment and Natural Resources shall convene a joint study group to examine options to maximize the positive impacts and minimize the adverse impacts on air quality of transportation investments. A joint study group shall be convened for each major travel corridor in which there has been air quality violations within the previous fiscal year or that affects an area in which there has been air quality violations within the previous fiscal year. Each joint study group shall include at least 10 members, half of whom shall be appointed by the Secretary of Transportation and half of whom shall be appointed by the Secretary of Environment and Natural Resources. Each group shall include representatives from the Department and the Department of Environment and Natural Resources, affected units of local government, private businesses, and nonprofit public interest organizations. The Department and the Department of Environment and Natural Resources shall jointly report on the work, findings, and recommendations of each joint study group to the Joint Legislative Transportation Oversight Committee and the Environmental Review Commission on or before 1 October of each year."

Section 4.11. The Department of Transportation and the Department of Environment and Natural Resources shall make the first joint report required by G.S. 136-203, as enacted by

Section 4.10 of this act, on or before 1 October 2000.

Section 4.12. G.S. 143-215.94T(a) is amended by adding a new subdivision to read:

"(12) Tank tightness testing procedures and certification of persons who conduct tank tightness tests."

Section 4.13. G.S. 143B-282(a)(2)h. reads as rewritten:

"h. Governing underground tanks used for the storage of oil or hazardous substances or oil pursuant to Article 21 or Article 21A Articles 21, 21A, or 21B of Chapter 143 of the General Statutes, including inspection and testing of these tanks and certification of persons who inspect and test tanks."

PART V. MISCELLANEOUS PROVISIONS

Section 5.1. This act shall not be construed to obligate the General Assembly to appropriate any funds to implement the provisions of this act. Every State agency to which this act applies shall implement the provisions of this act from funds otherwise appropriated or available to that agency.

Section 5.2. The headings to the Parts of this act are intended as a convenience to the reader and are for reference only. The headings do not expand, limit, or define the text of this act.

Section 5.3. If any section or provision of this act is declared unconstitutional or invalid by the courts, the unconstitutional or invalid section or provision does not affect the validity of this act as a whole or any part of this act other than the part declared to be unconstitutional or invalid.

Section 5.4. Except as otherwise provided in this act, this act is effective when it becomes law.

In the General Assembly read three times and ratified this the 20th day of July, 1999.

s/ Dennis A. Wicker
President of the Senate

s/ James B. Black
Speaker of the House of Representatives

s/ James B. Hunt, Jr.
Governor

Approved 10:50 a.m. this 21st day of July, 1999

GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2001

SESSION LAW 2002-4
SENATE BILL 1078

AN ACT TO IMPROVE AIR QUALITY IN THE STATE BY IMPOSING LIMITS ON THE EMISSION OF CERTAIN POLLUTANTS FROM CERTAIN FACILITIES THAT BURN COAL TO GENERATE ELECTRICITY AND TO PROVIDE FOR RECOVERY BY ELECTRIC UTILITIES OF THE COSTS OF ACHIEVING COMPLIANCE WITH THOSE LIMITS.

The General Assembly of North Carolina enacts:

SECTION 1. Article 21B of Chapter 143 of the General Statutes is amended by adding a new section to read:

"§ 143-215.107D. Emissions of oxides of nitrogen (NOx) and sulfur dioxide (SO2) from certain coal-fired generating units.

(a) As used in this section:

- (1) 'Coal-fired generating unit' means a coal-fired generating unit, as defined by 40 Code of Federal Regulations § 96.2 (1 July 2001 Edition), that is located in this State and has the capacity to generate 25 or more megawatts of electricity.
- (2) 'Investor-owned public utility' means an investor-owned public utility, as defined in G.S. 62-3.

(b) An investor-owned public utility that owns or operates coal-fired generating units that collectively emitted more than 75,000 tons of oxides of nitrogen (NOx) in calendar year 2000:

- (1) Shall not collectively emit from the coal-fired generating units that it owns or operates more than 35,000 tons of oxides of nitrogen (NOx) in any calendar year beginning 1 January 2007.
- (2) Shall not collectively emit from the coal-fired generating units that it owns or operates more than 31,000 tons of oxides of nitrogen (NOx) in any calendar year beginning 1 January 2009.

(c) An investor-owned public utility that owns or operates coal-fired generating units that collectively emitted 75,000 tons or less of oxides of nitrogen (NOx) in calendar year 2000 shall not collectively emit from the coal-fired generating units that it owns or operates more than 25,000 tons of oxides of nitrogen (NOx) in any calendar year beginning 1 January 2007.

(d) An investor-owned public utility that owns or operates coal-fired generating units that collectively emitted more than 225,000 tons of sulfur dioxide (SO2) in calendar year 2000:

(1) Shall not collectively emit from the coal-fired generating units that it owns or operates more than 150,000 tons of sulfur dioxide (SO2) in any calendar year beginning 1 January 2009.

(2) Shall not collectively emit from the coal-fired generating units that it owns or operates more than 80,000 tons of sulfur dioxide (SO2) in any calendar year beginning 1 January 2013.

(e) An investor-owned public utility that owns or operates coal-fired generating units that collectively emitted 225,000 tons or less of sulfur dioxide (SO2) in calendar year 2000:

(1) Shall not collectively emit from the coal-fired generating units that it owns or operates more than 100,000 tons of sulfur dioxide (SO2) in any calendar year beginning 1 January 2009.

(2) Shall not collectively emit from the coal-fired generating units that it owns or operates more than 50,000 tons of sulfur dioxide (SO2) in any calendar year beginning 1 January 2013.

(f) Each investor-owned public utility to which this section applies may determine how it will achieve the collective emissions limitations imposed by this section. Compliance with the emissions limitations set out in this section does not alter the obligation of any person to comply with any other federal or State law, regulation, or rule related to air quality or visibility. This subsection shall not be construed to limit the authority of the Commission to impose specific limitations on the emission of oxides of nitrogen (NOx) and sulfur dioxide (SO2) from an individual coal-fired generating unit owned or operated by an investor-owned public utility.

(g) A coal-fired generating unit that is subject to the collective emissions limitations set out in this section on 1 July 2002 shall remain subject to the collective emissions limitations whether or not it thereafter continues to be owned or operated by an investor-owned public utility.

(h) The Commission shall require that any permit or modified permit issued for a coal-fired generating unit that is subject to this section include conditions that provide for testing, monitoring, record keeping, and reporting adequate to assure compliance with the requirements of this section.

(i) The Governor may enter into an agreement with an investor-owned public utility under which the investor-owned public utility voluntarily agrees to transfer to the State any emissions allowances acquired or that may be acquired by the investor-owned public utility pursuant to 42 U.S.C. §§ 7651-7651o, as implemented by 40 Code of Federal Regulations §§ 73.1 through 73.90 (1 July 2001 Edition); 42 U.S.C. 7410(a)(2)(D)(i)(I), as implemented by 40 Code of Federal Regulations § 51.121 (1 July 2001 Edition), related federal regulations, and the associated State Implementation Plan; 42 U.S.C. § 7426, as implemented by 40 Code of Federal Regulations

§ 52.34 (1 July 2001 Edition) and related federal regulations; or any similar program established under federal law that result from compliance with the emissions limitations set out in this section. An agreement entered into pursuant to this subsection shall be binding and shall be enforceable by specific performance. If the Governor enters into an agreement that provides for the transfer of emissions allowances to the State, the Governor shall file verified copies of the agreement with the Attorney General, the Secretary of State, the State Treasurer, the Secretary of Environment and Natural Resources, and the Utilities Commission. The State Treasurer shall hold all emissions allowances that are transferred to the State as provided in this subsection in trust for the people of this State and shall sell, trade, transfer, or otherwise dispose of the emissions allowances only as the General Assembly shall provide by law.

(j) An investor-owned public utility that is subject to the emissions limitations set out in this section shall submit to the Utilities Commission and to the Department on or before 1 April of each year a verified statement pursuant to subsection (i) of G.S. 62-133.6."

SECTION 2. G.S. 143-215.108 reads as rewritten:

"§ 143-215.108. Control of sources of air pollution; permits required.

~~(a) After the effective date applicable to any air quality or emission control standards established pursuant to G.S. 143-215.107 and except Except as provided in subsections (a1) and (a2) of this section, no person shall do any of the following things or carry out any of the following activities which contravene or will be likely to contravene such standards established pursuant to G.S. 143-215.107 or set out in G.S. 143-215.107D until or unless such that person shall have applied for and shall have received has obtained from the Commission a permit therefor and shall have has complied with such conditions, if any, as are prescribed by such any conditions of this permit:~~

- ~~(1) Establish or operate any air contaminant source;~~
- ~~(2) Build, erect, use or operate any equipment which may result in the emission of air contaminants or which is likely to cause air pollution;~~
- ~~(3) Alter or change the construction or method of operation of any equipment or process from which air contaminants are or may be emitted;~~
- ~~(4) Enter into an irrevocable contract for the construction and installation of any air-cleaning device, or allow or cause such device to be constructed, installed, or operated.~~

~~(a1) The Commission may by rule establish procedures that meet the requirements of section 502(b)(10) of Title V (42 U.S.C. § 7661a(b)(10)) and 40 Code of Federal Regulations § 70.4(b)(12) (1 July 1993 Edition) to allow a permittee to make changes within a permitted facility without requiring a revision of the permit.~~

~~(a2) The Commission may adopt rules that provide for a minor modification of a permit. At a minimum, rules that provide for a~~

minor modification of a permit shall meet the requirements of 40 Code of Federal Regulations § 70.7(e)(2) (1 July 1993 Edition). If the Commission adopts rules that provide for a minor modification of a permit, a permittee shall not make a change in the permitted facility while the application for the minor modification is under review unless the change is authorized under the rules adopted by the Commission.

(b) The Commission shall act upon all applications for permits so as to effectuate the ~~purpose~~ purposes of this section, ~~Article~~ by reducing existing air pollution and preventing, so far as reasonably possible, any increased pollution of the air from any additional or enlarged sources.

(c) The Commission shall have the power:

(1) To grant and renew a permit with ~~such~~ any conditions attached as ~~that~~ the Commission believes necessary to achieve the purposes of this ~~section~~ Article or the requirements of the Clean Air Act and implementing regulations adopted by the United States Environmental Protection Agency;

...."

SECTION 3. G.S. 143-215.107(a)(8) reads as rewritten:

"(8) To develop and adopt standards and plans necessary to implement programs to control acid deposition and to regulate the use of sulfur dioxide (SO₂) ~~allowances and nitrogen oxides~~ of nitrogen (NO_x) emissions in accordance with Title IV and implementing regulations adopted by the United States Environmental Protection Agency."

SECTION 4. G.S. 143-215.114A(a) reads as rewritten:

"(a) A civil penalty of not more than ten thousand dollars (\$10,000) may be assessed by the Secretary against any person who:

- (1) Violates any classification, standard or limitation established pursuant to ~~G.S. 143-215.107~~ G.S. 143-215.107.
- (2) Is required but fails to apply for or to secure a permit required by G.S. 143-215.108 or who violates or fails to act in accordance with the terms, conditions, or requirements of such ~~permit~~ permit.
- (3) Violates or fails to act in accordance with the terms, conditions, or requirements of any special order or other appropriate document issued pursuant to ~~G.S. 143-215.110~~ G.S. 143-215.110.
- (4) Fails to file, submit, or make available, as the case may be, any documents, data or reports required by this Article or Parts 1 or 7 of Article 21 of this ~~Chapter~~ Chapter.
- (5) Violates a rule of the Commission or a local governing body implementing this Article or Parts 1

or 7 of ~~Article 21~~; Article 21.

(6) Violates the offenses set out in G.S. 143-215.114B.

(7) Violates the emissions limitations set out in G.S. 143-215.107D."

SECTION 5. G.S. 143-215-114A is amended by adding a new subsection to read:

"(b1)The Secretary may assess a civil penalty of not more than ten thousand dollars (\$10,000) per day for a violation of the emissions limitations set out in G.S. 143-215.107D as provided in this subsection. If at the end of any calendar year, an investor-owned public utility has violated an emissions limitation set out in G.S. 143-215.107D, the violation shall be considered to be continuous from the day that the collective emissions first exceeded the emissions limitation set out in G.S. 143-215.107D through the end of the calendar year and the Secretary may assess a separate civil penalty for each day."

SECTION 6. G.S. 143-215.114B(f) reads as rewritten:

"(f)Any person who negligently violates any classification, standard or limitation established pursuant to ~~G.S. 143-215.107~~; G.S. 143-215.107 or by G.S. 143-215.107D any term, condition, or requirement of a permit issued pursuant to G.S. 143-215.108 or of a special order or other appropriate document issued pursuant to G.S. 143-215.110 or any rule of the Commission implementing any of the said section, shall be guilty of a Class 2 misdemeanor which may include a fine not to exceed fifteen thousand dollars (\$15,000) per day of violation, provided that such fine shall not exceed a cumulative total of two hundred thousand dollars (\$200,000) for each period of 30 days during which a violation continues."

SECTION 7. G.S. 143-215.114B(g) reads as rewritten:

"(g)Any person who knowingly and willfully violates any classification, standard, or limitation established in the rules of the Commission pursuant to ~~G.S. 143-215.107 or G.S. 143-215.107~~; the emissions limitations set out in G.S. 143-215.107D; any term, condition, or requirement of a permit issued pursuant to ~~G.S. 143-215.108~~ G.S. 143-215.108; or of a special order or other appropriate document issued pursuant to G.S. 143-215.110, shall be guilty of a Class H felony, which may include a fine not to exceed one hundred thousand dollars (\$100,000) per day of violation, provided that this fine shall not exceed a cumulative total of five hundred thousand dollars (\$500,000) for each period of 30 days during which a violation continues. For the purposes of this subsection, the phrase "knowingly and willfully" shall mean intentionally and consciously as the courts of this State, according to the principles of common law, interpret the phrase in the light of reason and experience."

SECTION 8. G.S. 143-215.114B(h)(1) reads as rewritten:

"(1) Any person who knowingly violates any classification, standard, or limitation established in the rules of the Commission pursuant to ~~G.S. 143-215.107 or G.S. 143-~~

215.107; the emissions limitations set out in G.S. 143-215.107D; any term, condition, or requirement of a permit issued pursuant to G.S. ~~143-215.108~~ G.S. 143-215.108; or of a special order or other appropriate document issued pursuant to G.S. 143-215.110 and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury shall be guilty of a Class C felony, which may include a fine not to exceed two hundred fifty thousand dollars (\$250,000) per day of violation, provided that this fine shall not exceed a cumulative total of one million dollars (\$1,000,000) for each period of 30 days during which a violation continues."

SECTION 9. Article 7 of Chapter 62 of the General Statutes is amended by adding a new section to read:

"§ 62-133.6. Environmental compliance costs recovery.

(a) As used in this section:

(1) 'Coal-fired generating unit' means a coal-fired generating unit, as defined by 40 Code of Federal Regulations § 96.2 (1 July 2001 Edition), that is located in this State and has the capacity to generate 25 or more megawatts of electricity.

(2) 'Environmental compliance costs' means only those capital costs incurred by an investor-owned public utility to comply with the emissions limitations set out in G.S. 143-215.107D that exceed the costs required to comply with 42 U.S.C. § 7410(a)(2)(D)(i)(I), as implemented by 40 Code of Federal Regulations § 51.121 (1 July 2001 Edition), related federal regulations, and the associated State or Federal Implementation Plan, or with 42 U.S.C. § 7426, as implemented by 40 Code of Federal Regulations § 52.34 (1 July 2001 Edition) and related federal regulations. The term 'environmental compliance costs' does not include:

a. Costs required to comply with a final order or judgment rendered by a state or federal court under which an investor-owned public utility is found liable for a failure to comply with any federal or state law, rule, or regulation for the protection of the environment or public health.

b. The net increase in costs, above those proposed by the investor-owned public utility as part of its plan to achieve compliance with the emissions limitations set out in G.S. 143-215.107D, that are necessary to comply with a settlement agreement, consent decree, or similar resolution of litigation arising from any alleged failure to comply with any federal or state law, rule, or regulation for the protection of the environment or public health.

c. Any criminal or civil fine or penalty, including court costs imposed or assessed for a violation by an investor-owned public utility of any federal or state law, rule, or regulation for the protection of the environment or public health.

d. The net increase in costs, above those proposed by the investor-owned public utility as part of its plan to achieve the emissions limitations set out in G.S. 143-215.107D, that are necessary to comply with any limitation on emissions of oxides of nitrogen (NOx) or sulfur dioxide (SO2) that are imposed on an individual coal-fired generating unit by the Environmental Management Commission or the Department of Environment and Natural Resources to address any nonattainment of an air quality standard in any area of the State.

(3) 'Investor-owned public utility' means an investor-owned public utility, as defined in G.S. 62-3.

(b) The investor-owned public utilities shall be allowed to accelerate the cost recovery of their estimated environmental compliance costs over a seven-year period, beginning 1 January 2003 and ending 31 December 2009. For purposes of this subsection, an investor-owned public utility subject to the provisions of subsections (b) and (d) of G.S. 143-215.107D shall amortize environmental compliance costs in the amount of one billion five hundred million dollars (\$1,500,000,000) and an investor-owned public utility subject to the provisions of subsections (c) and (e) of G.S. 143-215.107D shall amortize environmental compliance costs in the amount of eight hundred thirteen million dollars (\$813,000,000). During the rate freeze period established in subsection (e) of this section, the investor-owned public utilities shall, at a minimum, recover through amortization seventy percent (70%) of the environmental compliance costs set out in this subsection. The maximum amount for each investor-owned public utility's annual accelerated cost recovery during the rate freeze period shall not exceed one hundred fifty percent (150%) of the annual levelized environmental compliance costs set out in this subsection. The amounts to be amortized pursuant to this subsection are estimates of the environmental compliance costs that may be adjusted as provided in this section. The General Assembly makes no judgment as to whether the actual environmental compliance costs will be greater than, less than, or equal to these estimated amounts. These estimated amounts do not define or limit the scope of the expenditures that may be necessary to comply with the emissions limitations set out in G.S. 143-215.107D.

(c) The investor-owned public utilities shall file their compliance plans, including initial cost estimates, with the Commission and the Department of Environment and Natural Resources not later than 10 days after the date on which this section becomes effective. The Commission shall consult with the Secretary of Environment and Natural Resources and shall

consider the advice of the Secretary as to whether an investor-owned public utility's proposed compliance plan is adequate to achieve the emissions limitations set out in G.S. 143-215.107D.

(d) Subject to the provisions of subsection (f) of this section, the Commission shall hold a hearing to review the environmental compliance costs set out in subsection (b) of this section. The Commission may modify and revise those costs as necessary to ensure that they are just, reasonable, and prudent based on the most recent cost information available and determine the annual cost recovery amounts that each investor-owned public utility shall be required to record and recover during calendar years 2008 and 2009. In making its decisions pursuant to this subsection, the Commission shall consult with the Secretary of Environment and Natural Resources to receive advice as to whether the investor-owned public utility's actual and proposed modifications and permitting and construction schedule are adequate to achieve the emissions limitations set out in G.S. 143-215.107D. The Commission shall issue an order pursuant to this subsection no later than 31 December 2007.

(e) Notwithstanding G.S. 62-130(d) and G.S. 62-136(a), the base rates of the investor-owned public utilities shall remain unchanged from the date on which this section becomes effective through 31 December 2007. The Commission may, however, consistent with the public interest:

- (1) Allow adjustments to base rates, or deferral of costs or revenues, due to one or more of the following conditions occurring during the rate freeze period:
 - a. Governmental action resulting in significant cost reductions or requiring major expenditures including, but not limited to, the cost of compliance with any law, regulation, or rule for the protection of the environment or public health, other than environmental compliance costs.
 - b. Major expenditures to restore or replace property damaged or destroyed by force majeure.
 - c. A severe threat to the financial stability of the investor-owned public utility resulting from other extraordinary causes beyond the reasonable control of the investor-owned public utility.
 - d. The investor-owned public utility persistently earns a return substantially in excess of the rate of return established and found reasonable by the Commission in the investor-owned public utility's last general rate case.

- (2) Approve any reduction in a rate or rates applicable to a customer or class of customers during the rate freeze period, if requested to do so by an investor-owned public utility that is subject to the emissions limitations set out in G.S. 143-215.107D.

- (f) In any general rate case initiated to adjust

base rates effective on or after 1 January 2008, the investor-owned public utility shall be allowed to recover its actual environmental compliance costs in accordance with Article 7 of this Chapter less the cumulative amount of accelerated cost recovery recorded pursuant to subsection (b) of this section.

(g) Consistent with the public interest, the Commission is authorized to approve proposals submitted by an investor-owned public utility to implement optional, market-based rates and services, provided the proposal does not increase base rates during the period of time referred to in subsection (e) of this section.

(h) Nothing in this section shall prohibit the Commission from taking any actions otherwise appropriate to enforce investor-owned public utility compliance with applicable statutes or Commission rules or to order any appropriate remedy for such noncompliance allowed by law.

(i) An investor-owned public utility that is subject to the emissions limitations set out in G.S. 143-215.107D shall submit to the Commission and to the Department of Environment and Natural Resources on or before 1 April of each year a verified statement that contains all of the following:

- (1) A detailed report on the investor-owned public utility's plans for meeting the emissions limitations set out in G.S. 143-215.107D.
- (2) The actual environmental compliance costs incurred by the investor-owned public utility in the previous calendar year, including a description of the construction undertaken and completed during that year.
- (3) The amount of the investor-owned public utility's environmental compliance costs amortized in the previous calendar year.
- (4) An estimate of the investor-owned public utility's environmental compliance costs and the basis for any revisions of those estimates when compared to the estimates submitted during the previous year.
- (5) A description of all permits required in order to comply with the provisions of G.S. 143-215.107D for which the investor-owned public utility has applied and the status of those permits or permit applications.
- (6) A description of the construction related to compliance with the provisions of G.S. 143-215.107D that is anticipated during the following year.
- (7) A description of the applications for permits required in order to comply with the provisions of G.S. 143-215.107D that are anticipated during the following year.
- (8) The results of equipment testing related to compliance with G.S. 143-215.107D.
- (9) The number of tons of oxides of nitrogen (NOx) and sulfur dioxide (SO2) emitted

during the previous calendar year from the coal-fired generating units that are subject to the emissions limitations set out in G.S. 143-215.107D.

(10) The emissions allowances described in G.S. 143-215.107D(i) that are acquired by the investor-owned public utility that result from compliance with the emissions limitations set out in G.S. 143-215.107D.

(11) Any other information requested by the Commission or the Department of Environment and Natural Resources.

(j) The Secretary shall review the information submitted pursuant to subsection (i) of this section and determine whether the investor-owned public utility's actual and proposed modifications and permitting and construction schedule are adequate to achieve the emissions limitations set out in G.S. 143-215.107D and shall advise the Commission as to the Secretary's findings and recommendations.

(k) Any information, advice, findings, recommendations, or determinations provided by the Secretary pursuant to this section shall not constitute a final agency decision within the meaning of Chapter 150B of the General Statutes and shall not be subject to review under that Chapter."

SECTION 10. It is the intent of the General Assembly that the State use all available resources and means, including negotiation, participation in interstate compacts and multistate and interagency agreements, petitions pursuant to 42 U.S.C. § 7426, and litigation to induce other states and entities, including the Tennessee Valley Authority, to achieve reductions in emissions of oxides of nitrogen (NOx) and sulfur dioxide (SO2) comparable to those required by G.S. 143-215.107D, as enacted by Section 1 of this act, on a comparable schedule. The State shall give particular attention to those states and other entities whose emissions negatively impact air quality in North Carolina or whose failure to achieve comparable reductions would place the economy of North Carolina at a competitive disadvantage.

SECTION 11. The Environmental Management Commission shall study the desirability of requiring and the feasibility of obtaining reductions in emissions of oxides of nitrogen (NOx) and sulfur dioxide (SO2) beyond those required by G.S. 143-215.107D, as enacted by Section 1 of this act. The Environmental Management Commission shall consider the availability of emissions reduction technologies, increased cost to consumers of electric power, reliability of electric power supply, actions to reduce emissions of oxides of nitrogen (NOx) and sulfur dioxide (SO2) taken by states and other entities whose emissions negatively impact air quality in North Carolina or whose failure to achieve comparable reductions would place the economy of North Carolina at a competitive disadvantage, and the effects that these reductions would have on public health, the environment, and natural resources, including visibility. In its conduct of this study, the Environmental Management Commission may consult with the Utilities Commission and the Public Staff. The Environmental Management Commission shall

report its findings and recommendations to the General Assembly and the Environmental Review Commission annually beginning 1 September 2005.

SECTION 12. The General Assembly anticipates that measures implemented to achieve the reductions in emissions of oxides of nitrogen (NO_x) and sulfur dioxide (SO₂) required by G.S. 143-215.107D, as enacted by Section 1 of this act, will also result in significant reductions in the emissions of mercury from coal-fired generating units. The Division of Air Quality of the Department of Environment and Natural Resources shall study issues related to monitoring emissions of mercury and the development and implementation of standards and plans to implement programs to control emissions of mercury from coal-fired generating units. The Division shall evaluate available control technologies and shall estimate the benefits and costs of alternative strategies to reduce emissions of mercury. The Division shall annually report its interim findings and recommendations to the Environmental Management Commission and the Environmental Review Commission beginning 1 September 2003. The Division shall report its final findings and recommendations to the Environmental Management Commission and the Environmental Review Commission no later than 1 September 2005. The costs of implementing any air quality standards and plans to reduce the emission of mercury from coal-fired generating units below the standards in effect on the date this act becomes effective, except to the extent that the emission of mercury is reduced as a result of the reductions in the emissions of oxides of nitrogen (NO_x) and sulfur dioxide (SO₂) required to achieve the emissions limitations set out in G.S. 143-215.107D, as enacted by Section 1 of this act, shall not be recoverable pursuant to G.S. 62-133.6, as enacted by Section 9 of this act.

SECTION 13. The Division of Air Quality of the Department of Environment and Natural Resources shall study issues related to the development and implementation of standards and plans to implement programs to control emissions of carbon dioxide (CO₂) from coal-fired generating units and other stationary sources of air pollution. The Division shall evaluate available control technologies and shall estimate the benefits and costs of alternative strategies to reduce emissions of carbon dioxide (CO₂). The Division shall annually report its interim findings and recommendations to the Environmental Management Commission and the Environmental Review Commission beginning 1 September 2003. The Division shall report its final findings and recommendations to the Environmental Management Commission and the Environmental Review Commission no later than 1 September 2005. The costs of implementing any air quality standards and plans to reduce the emission of carbon dioxide (CO₂) from coal-fired generating units below the standards in effect on the date this act becomes effective, except to the extent that the emission of carbon dioxide (CO₂) is reduced as a result of the reductions in the emissions of oxides of nitrogen (NO_x) and sulfur dioxide (SO₂) required to achieve the emissions limitations set out in G.S. 143-215.107D, as enacted by Section 1 of this act, shall not be recoverable pursuant to G.S. 62-133.6, as enacted by Section 9 of this act.

SECTION 14. On or before 1 June of each year,

the Department of Environment and Natural Resources and the Utilities Commission shall report on the implementation of this act to the Environmental Review Commission and the Joint Legislative Utility Review Committee. The first report required by this section shall be submitted no later than 1 June 2003.

SECTION 15. If any section or provision of this act is declared unconstitutional or invalid by the courts, the unconstitutional or invalid section or provision does not affect the validity of this act as a whole or any part of this act other than the part declared to be unconstitutional or invalid.

SECTION 16. This act is effective when it becomes law except that G.S. 143-215.107D(i), as enacted by Section 1 of this act, is effective retroactively to 1 June 2002.

In the General Assembly read three times and ratified this the 19th day of June, 2002.

Senate
s/ Marc Basnight
President Pro Tempore of the

Representatives
s/ James B. Black
Speaker of the House of

s/ Michael F. Easley
Governor

Approved 11:30 a.m. this 20th day of June, 2002



DUKE ENERGY CAROLINAS, LLC

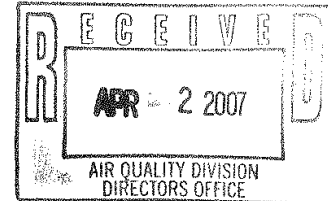
225 Hillsborough Street, Suite 160
Raleigh, NC 27603

919 235 0995

919 828 5240 fax

March 30, 2007

Mr. William G. Ross, Jr., Secretary
North Carolina Department of Environment and Natural Resources
1601 Mail Service Center
Raleigh, NC 27699-1601



Subject: Duke Energy Carolinas NO_x and SO₂ Compliance Plan Annual Update

Record No. NC CAP 006

Dear Mr. Ross:

Duke Energy Carolinas is required by Senate Bill 1078 to file information on or before 1 April of each year to update the Department of Environment and Natural Resources on progress to date, upcoming activities and expected plans to achieve the emissions limitations set out in G.S. 143-215.107D. Enclosed for filing is an original copy of Duke Energy Carolinas' Compliance Plan Annual Update for 2007 that fully describe the company's efforts to comply with this clean air legislation.

The current plan to meet the emission requirements for NO_x and SO₂ includes:

NO_x Control – The installation of Selective Catalytic Reduction (SCR) on Cliffside Steam Station Unit 5 and Belews Creek Steam Station Units 1&2 has been completed. Our NO_x plans continue to include the installation of Selective Non-Catalytic Reduction (SNCR) on 15 units and burner work at our remaining smaller units with the exception of Cliffside Units 1-4. With these installations, the company can demonstrate compliance with the 2007 and 2009 NO_x caps under Senate Bill 1078.

SO₂ Control – The installation of wet scrubbers on our twelve largest generating units continues to be our plan for compliance with the 2009 and 2013 SO₂ caps under Senate Bill 1078. The company continues to work under an accelerated schedule with respect to the Allen scrubber project to maintain design and construction continuity throughout the scrubber program and also assure compliance with the federal Clean Air Interstate Rule. Estimated costs for the scrubber projects at Cliffside Unit 5 and Plant Allen continue to rise due to escalation of labor and commodity prices as well as the continued run up of costs in the power generation and environmental retrofit construction market.

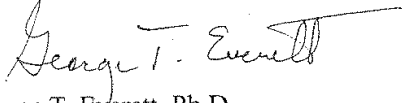
Exhibits A and B outline current unit specific technology selections, projected operational dates, expected emission rates, and the corresponding tons of emissions that demonstrate compliance with the legislative requirements to the best of Duke Energy Carolinas' knowledge at this time.

www.duke-energy.com

The current estimate of 'environmental compliance costs' for these pollution control projects are included in Exhibit C.

Duke Energy Carolinas will continue to examine the technology selection, implementation schedule and associated costs. Annual updates will be provided to the NC Department of Environment and Natural Resources as required. If you have questions regarding any aspect of our plan, please do not hesitate to contact my office at 919-235-0955.

Sincerely,



George T. Everett, Ph.D.
Director, Environmental/Legislative Affairs
Duke Energy Carolinas

Enclosures

cc: B. Keith Overcash, Director
North Carolina Division of Air Quality
1641 Mail Service Center
Raleigh, NC 27699-1641

VERIFICATION

I, George T. Everett, state and attest that the attached information updating the North Carolina Utilities Commission on progress to date, upcoming activities, and expected strategies to achieve the emissions limitations set out in N.C.G.S. 143-215.107.D (Annual Update) is filed on behalf of Duke Energy Carolinas, LLC; that I have reviewed said Annual Update and, in the exercise of due diligence, have made reasonable inquiry into the accuracy of the information provided therein; and that, to the best of my knowledge, information, and belief, all of the information contained therein is accurate and true, and no material information or fact has been knowingly omitted or misstated therein.

George T. Everett

George T. Everett, Ph.D.
Director, Environmental and Legislative Affairs

March 30, 2007

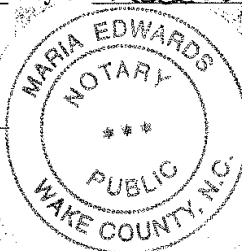
Date

Subscribed and sworn before me this the 30th day of March, 2007.

Maria Edwards

Notary Public

My commission expires 3/2/2008



Duke Energy Carolinas, LLC
General Assembly of North Carolina Session 2001
Senate Bill 1078 – Improve Air Quality/Electric Utilities (NC Clean Air Legislation)
2007 Annual Data Submittal

1. A detailed report on the investor-owned public utility's plans for meeting the emissions limitations set out in G.S. 143-215.107D.

Exhibits A and B outline the plan as of this date for technology selections by facility and unit, projected operational dates, expected emission rates, and the corresponding tons of emissions that demonstrate compliance with the provisions of G.S. 143-215.107D. Changes to the expected plan for meeting these emissions limitations as compared to past compliance plans are described below:

NO_x Compliance

- Emission Rate Changes – Expected rates have been adjusted in this 2007 update based on 2006 operational performance:
 - Emission rates for the Allen units were adjusted based on 2006 ozone season performance of the Units 1, 3 & 4 SNCR equipment. Expected rates were increased by 0.01 for Units 1 & 2 and 0.02 for Units 3, 4 & 5.
 - The Belews Creek Unit 1 expected rate was increased by 0.01 based on 2006 operational results.
 - The Buck Units 3 & 4 expected rates in 2009 were increased by 0.01 based on operation of the similar Dan River Unit 2 with new Separated Over-fired Air (SOFA) burner equipment in early 2007. The Buck Unit 3 expected rate in 2007 was decreased by 0.02 based on the timing of the SOFA installation.
 - The Buck Units 5 & 6 expected rates were increased by 0.02 based on the early 2007 performance of the recently installed SNCR equipment.
 - Cliffside Units 1 - 4 expected rates were changed based on 2006 performance.
 - The Dan River Units 1 & 2 expected rates were increased slightly based on operations of the SOFA equipment on Unit 2 in early 2007.
 - The Marshall Units 1 - 4 expected rates were increased by 0.01 based on operation in 2006 and the effect on baseline NO_x of the coals used with the scrubber.
 - The 2009 expected rate for Marshall Unit 3 was decreased significantly based on the expected addition of SCR equipment. This SCR addition is expected to be operational in 2009 primarily in support of the 8-hour ozone attainment demonstration for the Charlotte region. Increased mercury removal in support of the federal Clean Air Mercury Rule (CAMR) and improved ability to support existing NO_x emission limitations are added benefits associated with this project. Similar to other SCR additions attributed primarily to compliance with regulations other than the North Carolina Clean Air Legislation, costs associated with this Marshall Unit 3 SCR project are not "environmental compliance costs" within the meaning of that term as used in the North Carolina Clean Air Legislation.
 - The Riverbend Units 4 – 7 expected rates were changed based on 2006 and early 2007 operational results.

SO₂ Compliance

- New Pulverized Coal (PC) Unit – This 2007 update assumes the addition of one new 800 MW coal unit at the Cliffside Steam Station. The 2013 expected compliance plan includes this unit along with the corresponding retirement of Cliffside Units 1-4.
- Schedule Changes – Optimization of the 2009 scrubber tie-in outages for the Allen Units 1 – 5 has resulted in some minor changes to the expected emission rates for the 2009 year.
- Emission Rate Changes – Expected rate changes have been adjusted in this 2007 update for the Buck and Cliffside stations:
 - The Buck Units 3 – 6 expected rates were increased. These new rates assume that the use of lower sulfur Colombian coal is discontinued given that it is not cost competitive in the current market. Forecasted prices for this coal do not currently provide a cost effective solution as compared to domestic options.
 - The Cliffside Units 1 – 5 rates were adjusted based on the expected sulfur content in the coal.

2. The actual environmental compliance costs incurred by the investor-owned public utility in the previous calendar year, including a description of the construction undertaken and completed during that year.

In the 2006 calendar year, Duke Energy Carolinas spent **\$427,984,400** on activities in support of compliance with the provisions of G.S. 143-215.107D. Exact amounts associated with each project are provided in Exhibit C, and a description of the associated activities is provided below:

Allen Steam Station FGD

- Provided Limited Notice to Proceed (LNTP) to EPC Contractor 4/3/06
- Provided Full Notice to Proceed (FNTP) to EPC Contractor 8/31/06
- Awarded Wastewater Treatment engineering contract 3/1/06
- Awarded Wastewater Treatment construction contract 12/22/06
- Awarded Stack construction contract 5/16/06
- Completed relocation of 230kV Transmission Line 8/1/06
- Started site clearing, grubbing and earthwork
- Completed relocation of ash line 12/22/06
- Completed relocation of coal handling railroad spurs 11/29/06
- Placed purchase orders for all major electrical and mechanical equipment

Belews Creek Steam Station FGD

- Completed construction of the major foundations for the FGD System
- Completed construction of the concrete shell for the two new chimneys
- Completed 95% of construction for the Constructed Wetlands (part of the waste water treatment system)
- Achieved a completion status of 72% on the overall project (54% of construction activities)

Cliffside Steam Station Unit 5 FGD

- Continued preliminary construction planning and development of conceptual site layout

Marshall Steam Station FGD

- Completed tie-in of the Unit 4 Absorber; began initial operations of Unit 4 and common equipment on 10/30/06; achieved substantial completion on 12/20/06
- Completed initial tie-in of the Unit 3 ductwork and installation of blanking plate
- Completed setting all ductwork with the exception of Unit 1 and Unit 2 tie-in sections
- Completed lining of FGD gypsum landfill
- Completed engineered wetlands installation
- Completed Unit 4 CEMS RATA testing and certification
- Completed NSPS testing of material handling systems per air permit

Allen Steam Station SNCR, Unit 2

- Completed detailed engineering
- Completed procurement, installation and commissioning associated with the site's reagent storage equipment

Allen Steam Station SNCR, Unit 3

- Completed remaining small close-out activities

Allen Steam Station SNCR, Unit 4

- Completed material delivery and installation of the Unit 4 SNCR equipment including supporting plant air and dilution water equipment

Allen Steam Station SNCR, Unit 5

- No significant activity completed in 2006

Buck Steam Station Burners, Unit 3

- Completed detailed engineering and material procurement in preparation for 2007 installation

Buck Steam Station Burners, Unit 4

- Completed detailed engineering and material procurement in preparation for 2007 installation

Buck Steam Station SNCR, Unit 5

- Completed detailed engineering
- Completed material delivery and installation of the Unit 5 SNCR equipment including plant air, dilution water and reagent storage equipment required for SNCR operation

Buck Steam Station SNCR, Unit 6

- Completed detailed engineering, material delivery and installation of the Unit 6 SNCR equipment

Dan River Steam Station Burners, Unit 2

- Completed installation of burners in fall of 2006

Dan River Steam Station Burners, Unit 3

- Completed installation of burners in fall of 2006

Marshall Steam Station SNCR, Unit 1

- Completed installation of the Unit 1 SNCR equipment

Marshall Steam Station SNCR, Unit 2

- Completed material procurement and delivery in preparation for 2007 installation
- Completed procurement, installation and commissioning associated with the site's reagent storage equipment

Marshall Steam Station SNCR, Unit 3

- Completed remaining small close-out activities

Marshall Steam Station SNCR, Unit 4

- Completed detailed engineering, material procurement and delivery, and installation of the Unit 4 SNCR equipment

Riverbend Steam Station SNCR, Unit 4

- Completed detailed engineering, material procurement and delivery in preparation for 2007 installation

Riverbend Steam Station SNCR, Unit 5

- Completed detailed engineering, material procurement and delivery in preparation for 2007 installation

Riverbend Steam Station SNCR, Unit 6

- Completed detailed engineering, material procurement and delivery, and installation of the Unit 6 SNCR equipment
- Completed procurement, installation and commissioning associated with the site's reagent storage equipment

Riverbend Steam Station SNCR, Unit 7

- Completed detailed engineering, material procurement and delivery, and installation of the Unit 7 SNCR equipment
- Completed installation of plant air and dilution water equipment required for SNCR operation

3. The amount of the investor-owned public utility's environmental compliance costs amortized in the previous calendar year.

In the 2006 calendar year, **\$225,236,000** was amortized related to construction work activity in support of compliance with the provisions of G.S. 143-215.107D. **\$862,665,143** has now been amortized in total for the program through year-end 2006.

4. An estimate of the investor-owned public utility's environmental compliance costs and the basis for any revisions of those estimates when compared to the estimates submitted during the previous year.

The estimated 'environmental compliance costs' as defined in G.S. 143-215.107D are provided in Exhibit C. Changes to the expected costs as compared to past compliance plans are described below:

- Allen FGD Project – The Allen FGD estimate has increased since the previous 2006 filing and is attributable to continued ramp up in the power generation and/or environmental retrofit construction market, and continued escalation of labor and commodity costs.
- Cliffside Unit 5 FGD Project – Like Allen, the Cliffside 5 FGD estimate is primarily affected by labor, commodity and market escalation and thus shows an increase in total forecasted cost as compared to the estimate included in the 2006 filing. In addition, the current estimate now includes a larger portion of the costs associated with common FGD equipment and infrastructure assuming only one new Cliffside unit is built, versus assuming two new units are built as in the previous year's plan.
- SNCR & Burner Projects – While there has been no significant change to the scope or timing of the NO_x related projects remaining to be installed, all of the current forecasts have increased as compared to the 2006 filing. In each case, these increases approach 10% as compared to prior estimates and take into account the continued escalation of labor costs and ramp up in the environmental retrofit construction market as noted for the larger projects.
- Marshall Unit 4 SNCR Project – The Marshall Unit 4 SNCR equipment was installed in late 2006 at a cost significantly less than estimated in the previous year's plan. The decision to add the SCR technology to Marshall Unit 3 allowed for this reduction in costs as selected SNCR equipment in service on Unit 3 was redeployed to Unit 4.

5. A description of all permits required in order to comply with the provisions of G.S. 143-215.107D for which the investor-owned public utility has applied and the status of those permits or permit applications.

Allen Steam Station FGD

- Request to revise NPDES Permit to include FGD wastewater – Submitted 1/24/06; received revision 9/11/06
- Submittal to DENR/ACOE regarding stream crossing of entrance road – Received permits 5/25/06
- Air Permit Application – Submitted 4/10/06; received Permit 6/30/06

- Authorization to Construct (ATC) application for Wastewater Treatment System – Submitted 9/14/06; received Permit to Construct 12/15/06
- NOTE: all erosion control permits are in EPC contractor's scope for the Allen FGD Project and were received in 2006 (7/13/06 and 12/18/06). EPC contractor has also applied for air permit associated with flue liner fabrication on 11/1/06 and expects to receive permit in early 2007.

Belews Creek Steam Station FGD

- Request to revise NPDES Permit to include FGD wastewater – Submitted 6/30/04; received Permit Revision 5/16/05
- Initial Erosion Control Permit – Submitted 2/4/05; received Permit 3/7/05
- Landfill Site Suitability Application – Submitted 3/30/05; received Site Suitability Approval Letter 6/19/06
- Air Permit Application for Belews Creek FGD project – Submitted 4/18/05; received Air Permit 2/6/06
- Authorization to Construct (ATC) application for Wastewater Treatment System – Submitted 7/21/05; received Permit to Construct 12/27/05
- Authorization to Construct (ATC) application for Constructed Wetlands – Submitted 7/21/05; received Permit to Construct 12/27/05
- Revised Landfill Construction Plan Application – Submitted 9/30/05; received Permit to Construct 6/29/06
- Air Permit – Notice of Intent to Construct – Submitted 10/11/05; received Permit to Construct 10/24/05
- Authorization to Construct Sanitary Waste Lagoon – Submitted 3/23/06; received Permit to Construct 9/1/06
- Existing Sewage Lagoon Approval to Decommission – Submitted 10/31/06; received permit 1/25/07
- NOTE: Revisions to Erosion Control Permit submitted on various dates; most recent revised permit received 3/30/06

Cliffside Steam Station Unit 5 FGD

- Air Permit Application – Submitted 12/16/05; received 12/15/06

Marshall Steam Station FGD

- Landfill Construction Plan Application – Submitted 4/1/04; received 2/4/05
- Sedimentation and Erosion Control Plan Permits
 - Limestone/Gypsum Conveyor – Submitted 6/17/04; received 7/9/04
 - Limestone/Gypsum Conveyor Expansion – Submitted 12/15/04; received 12/30/04
 - Constructed Wetland Treatment System – Submitted 7/26/04; received 8/18/04
 - Gypsum Landfill – Submitted 3/31/04; received 4/21/04
- Authorization to Construct (ATC) application for Solids Removal System – Submitted 11/19/04; received 12/22/04
- Authorization to Construct (ATC) application for Constructed Wetlands – Submitted 5/21/04; received 8/10/04

- Air Permit Revisions (for material handling issues) – Submitted 9/2/05; received 12/7/05
- Landfill Permit Documents (to line landfill) – Submitted 12/15/05; received 6/5/06
- Permit to Operate Marshall FGD Landfill – Submitted 10/27/06; received 11/21/06

Allen Steam Station SNCR, Unit 2

- Air Permit Application – Submitted 4/24/06; Received 6/30/06

Allen Steam Station SNCR, Unit 3

- Air Permit Application – Submitted 7/15/04; Received 2/5/05

Allen Steam Station SNCR, Unit 4

- Air Permit Application – Submitted 7/15/05; Received 1/15/06
- Building/Plumbing permit from Gaston County Building and Standards – Received 4/27/06 for municipal water tie-ins

Allen Steam Station SNCR, Unit 5

- Air Permit Application – Submitted 4/24/06; Received 6/30/06

Buck Steam Station Burners, Unit 3

- Air Permit Application – Submitted 9/15/06; Received 2/15/07

Buck Steam Station Burners, Unit 4

- Air Permit Application – Submitted 9/15/06; Received 2/15/07

Buck Steam Station SNCR, Unit 5

- Air Permit Application – Submitted 3/10/06; Received 5/16/06

Buck Steam Station SNCR, Unit 6

- Air Permit Application – Submitted 3/10/06; Received 5/16/06

Dan River Steam Station Burners, Unit 1

- Air Permit Application – Submitted 2/23/06; Received 9/11/06

Dan River Steam Station Burners, Unit 2

- Air Permit Application – Submitted 2/23/06; Received 9/11/06

Dan River Steam Station Burners, Unit 3

- Air Permit Application – Submitted 2/23/06; Received 9/11/06

Marshall Steam Station SNCR, Unit 1

- Air Permit Application – Submitted 9/18/05; Received 12/20/05

Marshall Steam Station SNCR, Unit 2

- Air Permit Application – Submitted 9/18/05; Received 12/20/05

Marshall Steam Station SNCR, Unit 3

- Air Permit Application – Submitted 5/14/04; Received 10/13/04

Marshall Steam Station SNCR, Unit 4

- Air Permit Application – Submitted 4/28/06; Received 9/12/06

Riverbend Steam Station SNCR, Unit 4

- Air Permit Application – Submitted 3/20/05; Received 8/1/05

Riverbend Steam Station Burners, Unit 5

- Air Permit Application – Submitted 4/2/04; Received 4/30/04

Riverbend Steam Station SNCR, Unit 5

- Air Permit Application – Submitted 3/20/05; Received 8/1/05

Riverbend Steam Station Burners, Unit 6

- Air Permit Application – Submitted 5/14/03; Received September 2003

Riverbend Steam Station SNCR, Unit 6

- Air Permit Application – Submitted 11/5/05; Received 1/1/06

Riverbend Steam Station SNCR, Unit 7

- Air Permit Application – Submitted 11/5/05; Received 1/1/06

6. A description of the construction related to compliance with the provisions of G.S. 143-215.107D that is anticipated during the following year.

Allen Steam Station FGD

- Complete relocation of fuel oil tank and transfer system
- Complete construction of stack shell
- Complete construction of new access driveway
- Complete all major building foundations and steel erection
- Complete initial duct tie-in outages for Units 1-5
- Complete all major equipment foundations
- Mobilize FRP liner fabrication facility
- Complete major process equipment procurement
- Receive auxiliary transformer on site

Belews Creek Steam Station FGD

- Complete construction and commissioning of all FGD Systems
- Place new Sanitary Waste System into operation
- Achieve Unit 1 FGD Substantial Completion - Expect in February 2008

Cliffside Steam Station Unit 5 FGD

- Complete clearing and grubbing required to begin FGD construction
- Begin earthwork excavation, blasting and hauling activities

- Begin structural/foundation work for FGD equipment
- Complete Unit 5 chimney foundation

Marshall Steam Station FGD

- Complete construction, turnover and commissioning of Unit 3 FGD systems
- Complete final tie-in of Unit 3 ductwork; remove blanking plate; and begin operations, testing and tuning of Unit 3 FGD systems
- Achieve substantial completion for Unit 3
- Complete construction, turnover and commissioning of Unit 1/2 FGD systems
- Complete final tie-in of Unit 2 ductwork and begin operations, testing and tuning of Unit 1/2 FGD systems
- Complete final tie-in of Unit 1 ductwork
- Achieve Substantial Completion for Unit 1/2
- Achieve Marshall FGD Project Completion

Allen Steam Station SNCR, Unit 2

- Complete material procurement, installation and commissioning of SNCR equipment in time to support operation in summer 2007

Allen Steam Station SNCR, Unit 5

- Complete detailed engineering and material procurement activities
- Begin equipment installation activities in support of a 2008 project completion date

Buck Steam Station Burners, Unit 3

- Complete installation of burners in early 2007

Buck Steam Station Classifiers, Unit 3

- Complete installation of classifiers in early 2007

Buck Steam Station Burners, Unit 4

- Complete installation of burners in early 2007

Buck Steam Station Classifiers, Unit 4

- Complete installation of classifiers in early 2007

Dan River Steam Station Burners, Unit 1

- Complete detailed engineering and material procurement activities
- Complete installation of burners in late 2007

Dan River Steam Station Classifiers, Unit 1

- Complete installation of classifiers in late 2007

Marshall Steam Station SNCR, Unit 2

- Complete installation and commissioning of SNCR equipment in preparation for operation in summer 2007

Riverbend Steam Station SNCR, Unit 4

- Complete installation and commissioning of SNCR equipment in preparation for operation in summer 2007

Riverbend Steam Station SNCR, Unit 5

- Complete installation and commissioning of SNCR equipment in late 2007

Riverbend Steam Station SNCR, Unit 6

- Complete commissioning and small project close-out activities

Riverbend Steam Station SNCR, Unit 7

- Complete commissioning and small project close-out activities

7. A description of the applications for permits required in order to comply with the provisions of G.S. 143-215.107D that are anticipated during the following year.

Belews Creek Steam Station FGD

- Permit to operate the FGD Residue Landfill - Submit Certification Report 8/13/07, Expect permit to operate by 10/23/07

Cliffside Steam Station Unit 5 FGD

- Authorization to Construct (ATC) application anticipated September 2007

8. The results of equipment testing related to compliance with G.S. 143-215.107D.

No additional equipment related testing occurred in 2006. The SNCR and SCR tests that occurred in prior years that were used in evaluating technology selections are repeated in this 2007 report for reference.

Allen Steam Station SNCR, Unit 1

- SNCR Equipment installation was completed in May 2003 followed by equipment acceptance testing in late 2003. During this test run, it was determined that the SNCR system met all commercial performance guarantees with approximately a 25% reduction in NO_x with ammonia slip of less than 5 ppm at full load.
- During the 2004 ozone season, Allen Unit 1 achieved a 0.162# NO_x/MMBTU outlet rate, 5% better than the 0.17#/MMBTU target established for the unit.

Belews Creek Steam Station SCR

- SCR Equipment installation was completed in 2003 in support of the EPA/SIP Call requirements for NO_x reduction. While Belews Creek had operational problems in the first half of the 2004 ozone season, many of these issues were addressed on Belews Creek Unit 1 by August, 2004. Subsequently, tests performed during the months of August and September showed that when the SCR Equipment was in service during this time, emissions averaged 0.07# NO_x/MMBTU

- 9. The number of tons of oxides of nitrogen (NO_x) and sulfur dioxide (SO₂) emitted during the previous calendar year from the coal-fired generating units that are subject to the emissions limitations set out in G.S. 143-215.107D.**

In the 2006 calendar year, **54,335.5** tons of NO_x and **286,639.2** tons of SO₂ were emitted from the North Carolina based Duke Energy Carolinas coal-fired units located in North Carolina and subject to the emissions limitations set out in G.S. 143-215.107D.

- 10. The emissions allowances described in G.S. 143-215.107D(i) that are acquired by the investor-owned public utility that result from compliance with the emissions limitations set out in G.S. 143-215.107D.**

No emissions allowances have been acquired by Duke Energy Carolinas resulting from compliance with the emissions limitations set out in G.S. 143-215.107D.

- 11. Any other information requested by the Commission or Department of Environment and Natural Resources.**

No additional information has been requested to be included in this annual data submittal.

Expected Duke Energy Carolinas Compliance for NC Clean Air Plan as of 4/1/2007
(Exhibit A)

NO _x							
2007 Compliance				2009 Compliance			
Facility	Unit	Technology	Operational Date	Expected Rate #/MMBTUs	Tons	Expected Rate #/MMBTUs	Tons
Allen	1	SNCR	2003	0.170	885	0.170	898
Allen	2	SNCR	2007	0.180	773	0.170	826
Allen	3	SNCR	2005	0.180	1,450	0.180	1,484
Allen	4	SNCR	2006	0.180	1,592	0.180	1,632
Allen	5	SNCR	2008	0.230	2,004	0.180	1,542
Bellevue Creek	1	SCR	2003	0.070	2,045	0.070	2,628
Bellevue Creek	2	SCR&Burners	2004	0.060	2,234	0.060	1,754
Buck	3	Burners	2007	0.260	338	0.230	346
Buck	4	Burners	2007	0.280	216	0.230	190
Buck	5	SNCR	2006	0.170	670	0.170	711
Buck	6	SNCR	2006	0.170	671	0.170	704
Cliffside	1	Tuning Only	2004	0.400	262	0.400	242
Cliffside	2	Tuning Only	2004	0.400	259	0.400	239
Cliffside	3	Tuning Only	2004	0.390	505	0.380	529
Cliffside	4	Tuning Only	2004	0.390	534	0.380	527
Cliffside	5	SCR	2002	0.062	1,184	0.062	1,239
Dan River	1	Burners	2008	0.370	483	0.225	353
Dan River	2	Burners	2006	0.240	394	0.240	407
Dan River	3	Burners	2006	0.216	796	0.216	812
Marshall	1	SNCR	2006	0.180	2,360	0.179	2,279
Marshall	2	SNCR	2007	0.200	2,151	0.179	2,283
Marshall	3	SNCR/SCR ¹	2005/2009	0.200	4,527	0.061	1,421
Marshall	4	SNCR	2007	0.200	4,408	0.200	4,321
Riverbend	4	SNCR	2007	0.189	432	0.178	428
Riverbend	5	SNCR&Burners	2008	0.230	501	0.179	439
Riverbend	6	SNCR&Burners	2006	0.180	664	0.165	636
Riverbend	7	SNCR	2006	0.165	622	0.165	664
Expected Total:					32,961		29,534
Compliance Limit:					35,000		31,000

¹ SNCR Technology in service on Marshall Unit 3 expected to be replaced by SCR Technology in 2009 in support of 8-hour ozone attainment demonstration in the Charlotte region. Similar to other SCR additions to comply with other laws besides the North Carolina Clean Air Legislation, costs associated with this Marshall Unit 3 SCR project are not "environmental compliance costs" within the meaning of that term as used in the North Carolina Clean Air Legislation.

Technology

Burners -- Overfired Air or Separated Overfired Air with associated Mill Classifier installations

SCR -- Selective Catalytic Reduction

SNCR -- Selective Non-Catalytic Reduction

Expected Duke Energy Carolinas Compliance for NC Clean Air Plan as of 4/1/2007
(Exhibit B)

SO ₂							
2009 Compliance				2013 Compliance			
Facility	Unit	Technology	Operational Date	Expected Rate #MMBTUs	Tons	Expected Rate #MMBTUs	Tons
Allen	1	Scrubber	2009	0.300	1,585	0.150	719
Allen	2	Scrubber	2009	0.250	1,215	0.150	653
Allen	3	Scrubber	2009	1.400	11,543	0.150	1,167
Allen	4	Scrubber	2009	1.300	11,789	0.150	1,312
Allen	5	Scrubber	2009	0.700	5,996	0.150	1,181
Belews Creek	1	Scrubber	2008	0.150	5,632	0.150	5,596
Belews Creek	2	Scrubber	2008	0.150	4,385	0.150	5,368
Buck	3			1.400	2,107	1.400	1,631
Buck	4			1.400	1,157	1.400	934
Buck	5			1.400	5,852	1.400	5,453
Buck	6			1.400	5,794	1.400	5,161
Cliffside	1			1.600	969	0.000	0
Cliffside	2			1.600	954	0.000	0
Cliffside	3			1.600	2,228	0.000	0
Cliffside	4			1.600	2,221	0.000	0
Cliffside	5	Scrubber	2010	1.600	32,151	0.150	2,817
Cliffside	6	Scrubber	2011	0.000	0	0.080	2,133
Dan River	1			1.400	2,196	1.400	1,895
Dan River	2			1.400	2,374	1.400	2,009
Dan River	3			1.400	5,262	1.400	4,813
Marshall	1	Scrubber	2007	0.150	1,909	0.150	1,938
Marshall	2	Scrubber	2007	0.150	1,916	0.150	1,667
Marshall	3	Scrubber	2007	0.150	3,495	0.150	3,427
Marshall	4	Scrubber	2006	0.150	3,241	0.150	3,534
Riverbend	4			1.550	3,717	1.550	2,596
Riverbend	5			1.550	3,799	1.550	3,033
Riverbend	6			1.550	5,965	1.550	5,267
Riverbend	7			1.550	6,229	1.550	5,446
Expected Total:					135,681		69,750
Compliance Limit:					150,000		80,000

Expected Duke Energy Carolinas Compliance Costs for NC Clean Air Plan as of 4/1/2007
(Exhibit C)

Facility	Unit(s)	Technology	Operational Date	Spent to Date						Remaining		Project Total (\$000)
				2001 (\$000)	2002 (\$000)	2003 (\$000)	2004 (\$000)	2005 (\$000)	2006 (\$000)	2007-2010 (\$000)	2007-2010 (\$000)	
Allen	1-5	Scrubber	2009	\$0.9	(\$0.9)	\$1,099.6	(\$11.8)	\$5,348.3	\$62,752.8	\$433,777.7	\$433,777.7	\$502,966.8
Belevs Creek	1-2	Scrubber	2008	\$0.0	\$0.0	\$1,121.3	\$5,999.1	\$106,433.5	\$250,648.5	\$179,399.0	\$179,399.0	\$543,601.4
Cliffside	5	Scrubber	2010	\$0.0	\$0.0	\$0.0	\$287.5	\$112.0	\$3,175.2	\$394,446.9	\$394,446.9	\$399,000.0
Marshall	1-4	Scrubber	2007	\$0.0	\$0.0	\$10,213.7	\$92,096.3	\$218,129.8	\$74,162.8	\$26,939.1	\$26,939.1	\$421,541.7
Allen	1	SNCR	2003	\$177.3	\$162.4	\$2,884.1	\$364.9	\$0.0	\$0.0	\$0.0	\$0.0	\$3,588.7
Allen	2	SNCR	2007	\$0.0	\$0.0	\$0.0	\$0.0	\$239.3	\$2,710.6	\$2,772.8	\$2,772.8	\$5,722.7
Allen	3	SNCR	2005	\$0.0	\$0.0	\$215.7	\$2,594.1	\$4,091.5	\$32.5	\$0.0	\$0.0	\$6,923.9
Allen	4	SNCR	2006	\$0.0	\$0.0	\$0.0	\$217.9	\$1,122.2	\$4,258.0	\$224.3	\$224.3	\$5,822.4
Allen	5	SNCR	2008	\$0.0	\$0.0	\$98.9	\$164.6	\$122.3	\$22.7	\$5,383.9	\$5,383.9	\$5,792.4
Buck	3	Burner	2007	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$614.5	\$3,604.3	\$3,604.3	\$4,218.8
Buck	3	Classifier	2007	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$309.9	\$309.9	\$309.9
Buck	4	Burner	2007	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$358.3	\$2,458.5	\$2,458.5	\$2,816.8
Buck	4	Classifier	2007	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$165.0	\$165.0	\$165.0
Buck	5	SNCR	2006	\$0.0	\$0.0	\$0.0	\$268.2	\$345.9	\$4,836.8	\$549.1	\$549.1	\$6,000.0
Buck	5	SNCR	2006	\$0.0	\$0.0	\$0.0	\$265.8	\$335.3	\$3,814.2	(\$533.6)	(\$533.6)	\$3,881.7
Buck	6	SNCR	2006	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2,762.6	\$2,762.6	\$2,762.6
Dan River	1	Burner	2008	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$182.1	\$182.1	\$182.1
Dan River	1	Classifier	2008	\$0.0	\$0.0	\$0.0	\$0.0	\$775.4	\$1,693.6	\$255.9	\$255.9	\$2,725.0
Dan River	2	Burner	2006	\$0.0	\$0.0	\$0.0	\$0.0	\$130.8	\$0.0	\$0.0	\$0.0	\$130.8
Dan River	2	Classifier	2005	\$0.0	\$0.0	\$0.0	\$0.0	\$679.0	\$1,441.4	\$254.7	\$254.7	\$3,080.0
Dan River	3	Burner	2006	\$7.5	\$162.3	\$22.2	\$512.8	\$184.3	\$0.0	\$0.0	\$0.0	\$184.3
Dan River	3	Classifier	2005	\$0.0	\$0.0	\$0.0	\$0.0	\$141.8	\$2,106.3	\$157.2	\$157.2	\$3,849.9
Marshall	1	SNCR	2006	\$0.0	\$0.0	\$0.8	\$167.2	\$1,418.4	\$2,760.7	\$2,328.1	\$2,328.1	\$6,250.1
Marshall	2	SNCR	2007	\$0.0	\$0.0	\$197.6	\$185.4	\$778.3	\$2,760.7	\$0.0	\$0.0	\$4,303.8
Marshall	3	SNCR	2005	\$0.0	\$0.0	\$1,577.4	\$652.1	\$2,042.4	\$32.0	\$543.4	\$543.4	\$3,200.2
Marshall	4	SNCR	2007	\$0.0	\$0.0	\$0.0	\$0.0	\$43.3	\$2,613.6	\$2,681.3	\$2,681.3	\$4,283.4
Riverbend	4	SNCR	2007	\$0.0	\$0.0	\$0.0	\$45.6	\$474.3	\$1,082.2	\$0.0	\$0.0	\$3,143.3
Riverbend	5	SNCR	2005	\$362.8	\$284.3	\$2.8	\$2,313.4	\$180.0	\$0.0	\$0.0	\$0.0	\$1,591.6
Riverbend	5	Burner	2005	\$0.0	\$0.0	\$0.0	\$159.6	\$0.0	\$0.0	\$0.0	\$0.0	\$159.6
Riverbend	5	Classifier	2005	\$0.0	\$0.0	\$0.0	\$1.5	\$321.7	\$1,474.6	\$3,194.5	\$3,194.5	\$4,992.3
Riverbend	6	SNCR	2008	\$144.0	\$416.1	\$12.2	\$510.4	\$2,096.4	\$0.0	\$0.0	\$0.0	\$3,179.1
Riverbend	6	Burner	2005	\$0.0	\$0.0	\$0.0	\$0.0	\$189.4	\$0.0	\$0.0	\$0.0	\$189.4
Riverbend	6	Classifier	2005	\$0.0	\$0.0	\$0.0	\$0.0	\$340.3	\$3,454.1	\$1,173.8	\$1,173.8	\$4,969.8
Riverbend	6	SNCR	2006	\$0.0	\$0.0	\$0.0	\$1.5	\$0.0	\$3,939.0	\$849.3	\$849.3	\$5,322.5
Riverbend	7	SNCR	2006	\$0.0	\$0.0	\$0.0	\$48.5	\$485.8	\$3,939.0	\$0.0	\$0.0	\$5,322.5
Subtotals:				\$692.4	\$1,024.2	\$18,424.9	\$106,834.5	\$346,420.0	\$427,984.4	\$1,063,879.7	\$1,063,879.7	\$1,965,260.2
NC-CAP Program Total ¹ :												\$1,965,260.2

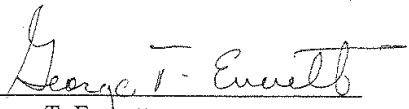
¹ The NC-CAP Program forecast excludes AFUDC associated with capital expenditures yet to be amortized

CERTIFICATE OF SERVICE

I certify that a copy of Duke Energy Carolinas, LLC's NO_x and SO₂ Compliance Plan Annual Update in Docket No. E-7, Sub 718, has been served by electronic mail (e-mail), hand delivery or by depositing a copy in the United States Mail, first class postage prepaid, properly addressed to parties of record.

This the 30^h day of March, 2007.

BY:


George T. Everett
Director Environmental/Legislative Affairs



March 30, 2007

Mr. William G. Ross, Jr.
Secretary
North Carolina Department of Environment and Natural Resources
1601 Mail Service Center
Raleigh, NC 27699-1601

Dear Secretary Ross: *Bill*

Progress Energy Carolinas, Inc. (PEC, Company) submits the attached report for calendar year 2006 regarding the compliance status with the provisions of the North Carolina Clean Smokestacks Act (Act).

As you know, 2007 is a significant year for the Clean Smokestacks Act – the first year in which the nitrogen oxides (NO_x) emissions cap is effective. Beginning this year, the Company's annual NO_x emissions from its coal units in North Carolina cannot exceed 25,000 tons. We have developed plans and processes to assure we meet the requirement, and we are on track to achieve this milestone.

While the Act established stringent NO_x and sulfur dioxide (SO₂) emissions limits from coal-fired power plants, it also allowed the affected utilities to determine how to meet the emissions limitations. We regularly review and refine our compliance strategy, weighing a number of factors such as system load projections, expected fuel selection, available control equipment, and anticipated performance and costs of emissions controls. For example, since our last filing, we have continued our evaluation of Furnace Sorbent Injection (FSI) technology. FSI may offer a more cost-effective compliance solution for our Cape Fear Plant than the original plan to use scrubbers. We plan to test the FSI technology at our Robinson Plant in Florence, S.C., in fall 2007. Since Robinson Unit 1 is similar in design to the Cape Fear units, we believe that the FSI test will indicate whether this technology will be effective at Cape Fear. We are happy to provide you and your staff more detail about our plans and the test results.

Progress Energy Service Company, LLC
P.O. Box 1551
Raleigh, NC 27602

We appreciate the excellent work of the Department staff, particularly those in the Air Quality and Water Quality divisions, who support our efforts to complete the projects in a timely manner to assure compliance with the Act's requirements. We look forward to continuing our positive working relationship to facilitate fulfillment of the Company's obligations with this important law.

Please don't hesitate to contact me at (919) 546-3775 if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Caroline Choi", with a stylized flourish at the end.

Caroline Choi
Director, Energy Policy and Strategy


c: North Carolina Utilities Commission
Keith Overcash, DAQ
Alan Klimek, DWQ

VERIFICATION

STATE OF NORTH CAROLINA)
)
COUNTY OF WAKE)

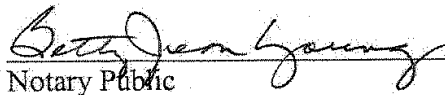
NOW, BEFORE ME, the undersigned, personally came and appeared,
E. Michael Williams, who first duly sworn by me, did depose and say:

That he is E. Michael Williams, Senior Vice President-Power
Operations of Carolina Power & Light Company, d/b/a Progress Energy
Carolinas, Inc.; he has the authority to verify the foregoing Progress Energy
Carolinas, Inc. North Carolina Clean Smokestacks Act Calendar Year 2006
Progress Report; that he has read said Report and knows the contents
thereof; are true and correct to the best of his knowledge and beliefs.



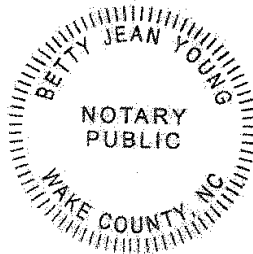
E. Michael Williams
Senior Vice President-Power Operations
Progress Energy Carolinas, Inc.

Subscribed and sworn to me
this 28th day of March, 2007.



Notary Public

*My Commission expires:
October 5, 2008*



246373

Progress Energy Carolinas, Inc. (PEC)
North Carolina Clean Smokestacks Act
Calendar Year 2006 Progress Report

On June 20, 2002, North Carolina Senate Bill 1078, also known as the "Clean Smokestacks Act," was signed into effect. This law requires significant reductions in the emissions of nitrogen oxides (NOx) and sulfur dioxide (SO₂) from utility owned coal-fired power plants located in North Carolina. Section 9(i), which is now incorporated as Section 62-133.6(i) of the North Carolina General Statutes, requires that an annual progress report regarding compliance with the Clean Smokestacks Act be submitted on or before April 1 of each year. The report must contain the following elements, taken verbatim from the statute:

1. A detailed report on the investor-owned public utility's plans for meeting the emissions limitations set out in G.S. 143-215.107D.
2. The actual environmental compliance costs incurred by the investor-owned public utility in the previous calendar year, including a description of the construction undertaken and completed that year.
3. The amount of the investor-owned public utility's environmental compliance costs amortized in the previous calendar year.
4. An estimate of the investor-owned public utility's environmental compliance costs and the basis for any revisions of those estimates when compared to the estimates submitted during the previous year.
5. A description of all permits required in order to comply with the provisions of G.S. 143-215.107D for which the investor-owned public utility has applied and the status of those permits or permit applications.
6. A description of the construction related to compliance with the provisions of G.S. 143-215.107D that is anticipated during the following year.
7. A description of the applications for permits required in order to comply with the provisions of G.S. 143-215.107D that are anticipated during the following year.
8. The results of equipment testing related to compliance with G.S. 143-215.107D.
9. The number of tons of oxides of nitrogen (NOx) and sulfur dioxide (SO₂) emitted during the previous calendar year from the coal-fired generating units that are subject to the emissions limitations set out in G.S. 143-215.107D.
10. The emissions allowances described in G.S. 143-215.107D(i) that are acquired by the investor-owned public utility that result from compliance with the emissions limitations set out in G.S. 143-215.107D.
11. Any other information requested by the Commission or the Department of Environment and Natural Resources.

Information responsive to each of these report elements follows. The responses are given by item number in the order in which they are presented above.

1. A detailed report on the investor-owned public utility's plans for meeting the emissions limitations set out in G.S. 143-215.107D.

Under G.S. § 143-215.107D(f), "each investor-owned public utility...may determine how it will achieve the collective emissions limitations imposed by this section." PEC originally submitted its compliance plan on July 29, 2002. Appendix A contains an updated version of this plan, effective April 1, 2007. We continue to evaluate various design, technology and generation options that could affect our future compliance plans.

2. The actual environmental compliance costs incurred by the investor-owned public utility in the previous calendar year, including a description of the construction undertaken and completed that year.

In 2006, Progress Energy Carolinas, Inc. incurred actual capital costs of \$272,819,000.

Asheville

We successfully placed in service the wet scrubber on Asheville Unit 2 in May 2006. A significant amount of work was performed at the Asheville plant in 2005 and 2006 in order to accomplish this milestone. This work included the installation of electrical power and control cables and circuits, piping, pumps, valves, oxidation air compressors, instruments and controls, agitators, absorber tower outlet hood, spray headers, trays and other tower internals. Work efforts also included completing ductwork from the precipitator to the scrubber tower and from the scrubber tower to the stack. The stack liner was connected in 2006. Mechanical and electrical work for the Unit 1 SCR was completed in preparation for placing the SCR into service in spring 2007.

Lee

We completed procurement and installation of the low-NOx burners for Unit 2, placing them in service in 2006. We also completed design, procurement and installation of the Rotamix equipment for NOx control at Unit 3. Construction activities related to Unit 3 Rotamix concluded in 2006, with operational status expected in early 2007.

Mayo

Contracts for the absorber tower and chimney were executed, along with contracts for the overall engineering and construction. Engineering and design work continued throughout the year, and in mid-October contractors mobilized and began construction activities. Long-lead procurement activities continued in order to ensure timely receipt of equipment on-site in support of a spring 2009 in-service date. During the fourth quarter of 2006, on-site activities focused on excavation and backfill of the scrubber island area, installation of rebar, and placement of base slabs for the auxiliary and startup transformers and bus supports.

Roxboro

Construction work for the scrubber project continued on the four units in 2006. In the Common area, installation of the pipe bridge was completed as well as installation of the equipment in the limestone prep building and gypsum dewatering building. The limestone unloading pit was completed, and work was started on installation of conveyors. The limestone slurry storage tanks, vacuum filter feed tanks, filtrate tanks, service water tanks, blow-down tank, and emergency storage tank were completed as well as the electrical equipment building and the oxidation air blower building. Commissioning began on most of the common systems in support of the Unit 2 outage scheduled for spring 2007. Specific unit construction activities completed include the following:

Unit 1

Significant construction included completion of foundations for the absorber, recycle pump house, primary hydro cyclone tank, and electrical building.

Unit 2

Significant construction included completion of the recycle pump house, final assembly of the absorber discharge to the stack, installation of the induced draft fans and associated flue gas ducting, installation of the hydro cyclone tank, and installation of the transformers. In addition, we started commissioning Unit 2 systems in preparation for the spring 2007 outage during which time the final scrubber tie-in will be completed and the scrubber placed into service.

Unit 3

Significant construction included starting installation of ducting from the existing stack to the new induced draft fans. Construction was started on foundations for duct support steel from the new induced draft fans to the absorber. We continued installation of the absorber and started assembly of the booster fan. Work also started on fabrication of the new flue gas ducting.

Unit 4

Significant construction included completion of the absorber and the start of erection of the recycle pump house and primary hydro cyclone tank.

Wastewater Project

Significant construction activity included starting the wastewater settlement and flush ponds which are scheduled for completion in early 2007. In December, we issued a request for bids on construction of the bioreactor facilities.

Sutton

We completed procurement and installation of the low-NOx burners for Unit 2 and placed them in service during 2006.

3. The amount of the investor-owned public utility's environmental compliance costs amortized in the previous calendar year.

Progress Energy Carolinas, Inc. amortized \$140 million in 2006.

4. An estimate of the investor-owned public utility's environmental compliance costs and the basis for any revisions of those estimates when compared to the estimates submitted during the previous year.

Appendix B contains the capital costs incurred toward compliance with G.S. § 143-215.107D through 2006 and the projected costs for future years through 2013. The costs shown are the net costs to PEC, excluding the portion for which the Power Agency is responsible. The estimated total capital costs, including escalation, are currently projected to be between \$1.1 and \$1.4 billion. The current point estimate is \$1.355 billion, a slight decrease from the 2006 cost estimate of \$1.362 billion. Prior reports have discussed the cost impact of project scope changes and the impact of significant increases in the cost of materials and labor which have impacted construction projects across the Southeast. These factors continued to impact the cost of the projects during 2006 as indicated by the current estimates for Roxboro, Mayo, and Sutton.

The current estimates also reflect updates to PEC's compliance plan based on the expected performance of the scrubbers at Asheville, Roxboro, and Mayo, current resource plans, current fuel forecasts, and advancements in SO₂ removal technology. Under G.S. § 143-215.107D(f), "each investor-owned public utility...may determine how it will achieve the collective emissions limitations imposed by this section." We regularly review and refine our compliance strategy, weighing a number of factors such as system load projections, expected fuel selection, available control equipment, anticipated performance and costs of emissions controls, and knowledge of and experience with emissions control options.

For example, since our last filing, PEC has continued its evaluation of the potential to use Furnace Sorbent Injection (FSI) technology at our Cape Fear Plant. FSI technology may offer a more cost-effective compliance solution for Cape Fear Plant than the original plan to use scrubber technology. Use of the FSI technology also eliminates the need for a costly wastewater treatment system. We plan to test the FSI technology at PEC's Robinson Unit 1 in fall 2007. Since Robinson Unit 1 is similar in design to the Cape Fear units, the Robinson test will indicate whether the use of this technology will be effective at Cape Fear.

The current compliance plan also contemplates the use of a dry scrubber at Sutton Unit 3. A dry scrubber at that unit represents a more cost effective compliance solution and also eliminates the need for a costly wastewater treatment system.

Lastly, the compliance plan calls for the use of Rotamix technology with combustion optimization at Lee 3 for NO_x control. Prior plans had contemplated the use of rotating opposed-fired air (ROFA) and Rotamix technology at that unit. Engineering studies

completed in early 2006 indicated that combustion optimization combined with the existing Low-NOx burners with overfired-air would provide benefits equivalent to the ROFA and at less cost.

5. A description of all permits required in order to comply with the provisions of G.S. 143-215.107D for which the investor-owned public utility has applied and the status of those permits or permit applications.

Progress Energy Carolinas, Inc. applied for the following permits in 2006:

Asheville Plant

Air Permit

- Notification of 502(b)(10) permit change for SO₃ mitigation system submitted April 5, 2006. Notification that the permit change will be treated as an "off permit change" rather than a 502(b)(10) received June 30, 2006.

Erosion and Sedimentation Control Plan

- Several updates were submitted. Rev J for the construction of the de-mineralized pipe, pump and duct bank was approved in January 2006.

Roxboro Plant

Air Permit

- An update for coal handling and limestone handling was issued on February 9, 2006. An additional update was requested on November 10, 2006. The revised air permit incorporating this revision was issued on March 15, 2007.
- Revisions to address fugitive emissions of hydrogen sulfide from the wastewater treatment system were approved June 23, 2006.

NPDES Permit

- An Authorization to Construct (ATC) for the gypsum settling pond was received March 3, 2006.
- An ATC for the bioreactor was received July 5, 2006.

Erosion and Sedimentation Control Plan

Several updates were submitted:

- Rev K for the haul road, transformer, main plant area wastewater pipe trench and gypsum conveyor foundations was submitted January 18, 2006, and approved February 10, 2006.
- Rev L for burying the wastewater pipeline was submitted April 19, 2006, and approved May 2, 2006.
- Rev M for increased disturbed areas for wastewater pond construction borrow and stockpile area, construction parking area, and construction road widening was submitted June 7, 2006, and approved June 26, 2006.

Mayo Plant

Air Permit

- Construction permit application for the flue gas desulfurization system was submitted May 25, 2006, and the permit was issued July 28, 2006.

NPDES Permit

- Permit modification for wastewater treatment system was received September 14, 2006.

Erosion and Sediment Control Plan

- Rev D for the installation of the flue gas desulfurization system was approved November 9, 2006.

Lee Plant

Air Permit

- A prevention of significant deterioration (PSD) permit for the installation of low NOx burners was approved March 21, 2006.
- Construction permit application for the installation of the Rotamix System for NOx control was submitted April 5, 2006, and was approved June 30, 2006.

NPDES Permit

- A permit application amendment for the Rotamix Urea Injection System on Unit 3 was submitted May 15, 2006. A revised amendment was then submitted October 24, 2006, and approved December 18, 2006.

6. A description of the construction related to compliance with the provisions of G.S. 143-215.107D that is anticipated during the following year.

Asheville

Construction activities will continue in 2007 for the Asheville Unit 1 SCR. Construction activities related to installation of electrical power, control cables and circuits, piping, instruments and controls will occur. Installation of the additional urea-to-ammonia system modifications for Unit 1 SCR is planned. The Unit 1 SCR is scheduled to be operational in spring 2007.

Lee

For Unit 3, we will complete tuning of the Rotamix equipment for NOx emissions control and place the system in service in early 2007.

Mayo

During 2007, construction activities will focus on completion of the chimney and absorber foundations and subsequent erection of the absorber and chimney structures. Concurrently, equipment such as pumps, ball mills, induced draft fans, and conveyors will begin to arrive on-site. In support of major equipment installation, numerous foundations will be placed during 2007 including foundations for the recycle pump house, limestone prep and dewatering buildings. Engineering activities will continue during 2007, with the focus during the latter half of the year shifting from scrubber to wastewater treatment process flows and equipment.

Roxboro

For 2007, significant construction activities planned in the Common area include completion of the limestone conveyors. Specific unit activities are described below:

Unit 1

Significant construction activities planned include construction of Unit 1 absorber, electrical building, primary hydro-cyclone tank, recycle pump house, and induced draft fan foundations.

Unit 2

Significant activities planned include completion of commissioning and startup activities to support the tie-in of the new flue gas duct to the absorber. The scrubber will be placed in service in spring 2007.

Unit 3

Significant construction activities planned include completing the installation of the booster fans, final assembly of flue gas duct from the existing stack to the absorber, and the start of duct insulation. Additionally, work on the foundation for the recycle pump house will start in spring 2007. The expected start-up of the scrubber is spring 2008.

Unit 4

Significant construction activities planned include completion of the absorber internals, installation of all equipment associated with the recycle pump house, and installation of booster fans and associated flue gas ducting from the existing stack to the absorber. Commissioning of Unit 4 equipment in support of scrubber start-up planned for fall 2007 will be completed as well.

Wastewater

Significant construction activities planned for wastewater include completion of the wastewater settlement and flush ponds, construction and commissioning of the bioreactor facilities, and completion of the wastewater piping from the plant.

7. A description of the applications for permits required in order to comply with the provisions of G.S. 143-215.107D that are anticipated during the following year.

We appreciate the collaborative efforts the DAQ and DWQ staff has made to assure our construction and installation schedules remain on track. However, the potential for longer permit processing times continues to be a serious concern for future projects. PEC wishes to work collaboratively with the Department to prevent delays from occurring.

The following permit applications and permit approvals are anticipated for 2007:

Asheville Plant

Air Permit

- Current opacity rules pre-date saturated gas streams from wet scrubbers and require representative measurements where condensed water vapor is not present. We will request revisions to the permit and underlying rules for opacity monitoring to include references to current federal regulations that exempt units with wet scrubbers from continuous opacity monitoring requirements.

NPDES Permit

- A request for Sampling Reduction at the internal Outfall 005 (treated FGD wet scrubber wastewater) was submitted January 25, 2007. A response is expected by end of first quarter.

Roxboro Plant

Air Permit

- A permit application for the emergency fire water diesel engine was submitted in January 2007. Authorization to construct the fire water diesel engine has been received; however, the operating permit must be received to support operation of the Unit 2 scrubber during the second quarter 2007.
- Current opacity rules pre-date saturated gas streams from wet scrubbers and require representative measurements where condensed water vapor is not present. We will request revisions to the permit and underlying rules for opacity monitoring to include references to current federal regulations that exempt units with wet scrubbers from continuous opacity monitoring requirements.

Mayo Plant

NPDES Permit

- An ATC request for the wastewater treatment system is expected to be submitted in the first quarter with response desired by the end of the second quarter.
- An ATC request for a new oil/water separator is expected to be submitted by the end of the first quarter with response expected by the end of the third quarter.

Erosion and Sedimentation Control Plan

- Rev F. for the increase in disturbed land (from 35 acres to 98 acres) for the flue gas desulfurization system was submitted January 29, 2007. Additional plan revisions will be necessary as construction plans are developed.

Lee Plant

Air Permit

- A Title V permit application is due to be submitted in July 2007 in accordance with permit requirements associated with the low-NOx burner installation.

8. The results of equipment testing related to compliance with G.S. 143-215.107D.

During 2006, performance testing of the SO₂ scrubbers at Asheville Units 1 and 2 was completed. The testing confirmed that the scrubbers had achieved their performance guarantee of 97% removal efficiency.

During 2006, performance testing of the low-NOx burners (LNBs) at Sutton Unit 2 and Lee Unit 2 was completed. The testing demonstrated that the LNBs met their respective performance guarantees.

9. The number of tons of oxides of nitrogen (NOx) and sulfur dioxide (SO₂) emitted during the previous calendar year from the coal-fired generating units that are subject to the emissions limitations set out in G.S. 143-215.107D.

The total calendar year 2006 emissions from the affected coal-fired Progress Energy Carolinas units are:

NOx 46,501 tons
SO₂ 175,226 tons

10. The emissions allowances described in G.S. 143-215.107D(i) that are acquired by the investor-owned public utility that result from compliance with the emissions limitations set out in G.S. 143-215.107D.

During 2006, PEC did not acquire any allowances as a result of compliance with the emission limitations set out in N.C. General Statute 143-215.107D.

11. Any other information requested by the Commission or the Department of Environment and Natural Resources.

There have been no additional requests for information from the North Carolina Utilities Commission or the Department of Environment and Natural Resources since the last report.

Appendix A

Progress Energy Carolinas, Inc's (PEC) Air Quality Improvement Plan Supplement

April 1, 2007

On June 20, 2002, Governor Easley signed into law SB1078, which caps emissions of nitrogen oxides (NO_x) and sulfur dioxide (SO₂) from utility owned coal-fired power plants located in North Carolina. Under the law, G.S. § 143-215.107D, PEC's annual NO_x emissions must not exceed 25,000 tons beginning in 2007 and annual SO₂ emissions must not exceed 100,000 tons beginning in 2009 and 50,000 tons beginning in 2013. These caps represent a 56% reduction in NO_x emissions from 2001 levels and a 74% reduction in SO₂ emissions from 2001 levels for PEC.

PEC owns and operates 18 coal-fired units at seven plants in North Carolina. The locations of these plants are shown on Attachment 1. Under G.S. § 143-215.107D(f), "each investor-owned public utility... may determine how it will achieve the collective emissions limitations imposed by this section."

Nitrogen Oxides Emissions Control Plan

PEC has been evaluating and installing NO_x emissions controls on its coal-fired power plants since 1995 in order to comply with Title IV of the Clean Air Act and the NO_x SIP Call rule adopted by the Environmental Management Commission (EMC). Substantial NO_x emissions reductions have already been achieved (46,500 tons of NO_x in 2006 compared with 112,000 tons in 1997) and further reductions will ensure compliance with the Clean Smokestacks Act's 25,000 ton cap in calendar year 2007. This target will be achieved with a mix of combustion controls (which minimize the formation of NO_x), such as low-NO_x burners and over-fire air technologies, and post-combustion controls (which reduce NO_x produced during the combustion of fossil fuel to molecular nitrogen), such as selective catalytic reduction (SCR) and selective non-catalytic reduction (SNCR) technologies.

Attachment 2 details PEC's North Carolina coal-fired electric generating units, their name plate generation capacity, installed NO_x control technologies and those planned for installation. As technologies evolve or other circumstances change, a different mix of controls may be selected. Attachment 2 also projects annual NO_x emissions on a unit-by-unit basis based on the energy demand forecast and expected efficiencies of the NO_x emissions controls employed. This information is provided only to show how compliance may be achieved and is not intended in any way to suggest unit-specific emission limits. Actual emissions for each unit may be substantially different.

Sulfur Dioxide Emissions Control Plan

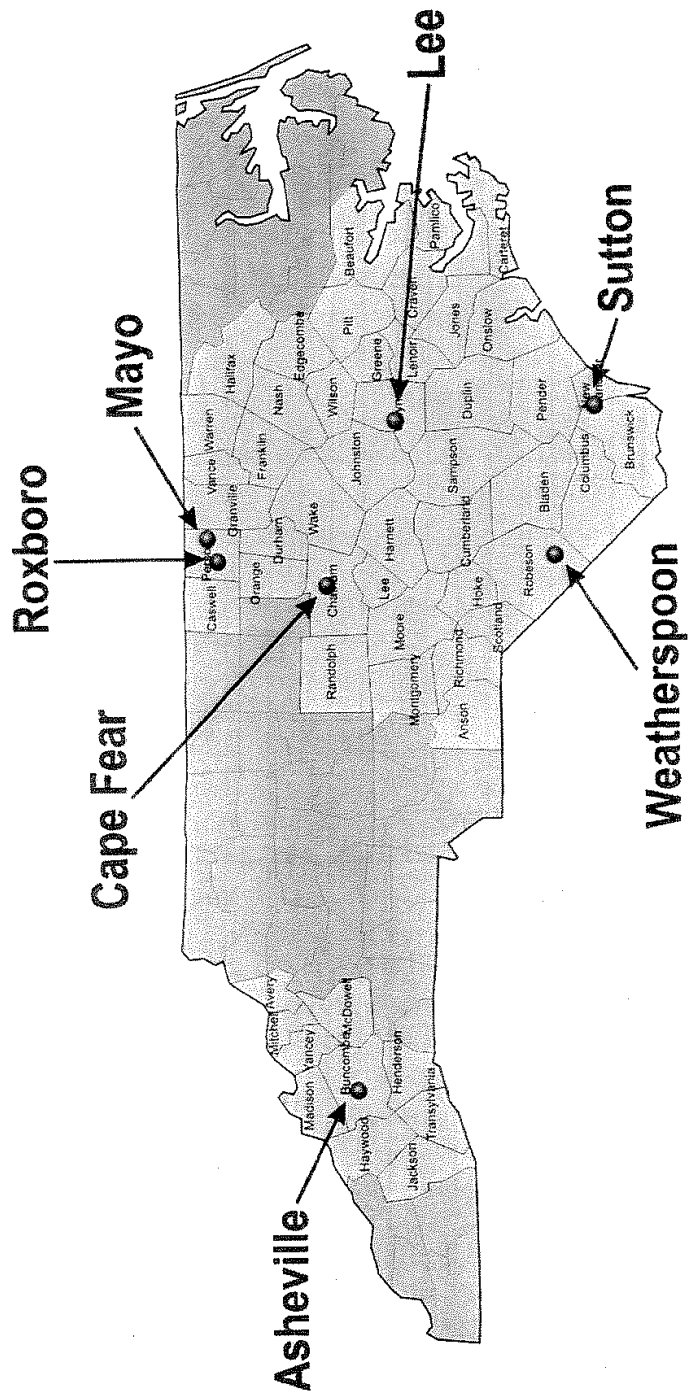
PEC will be installing wet flue gas desulfurization systems (FGD or “scrubbers”) to remove 97% of the SO₂ from the flue gas of its Asheville, Roxboro and Mayo boilers. Since our last filing, PEC has continued its evaluation of the potential to use Furnace Sorbent Injection (FSI) technology at our Cape Fear Plant. FSI technology may offer a more cost-effective compliance solution for the Cape Fear Plant than the original plan to use scrubber technology. Use of the FSI technology also eliminates the need for a costly wastewater treatment system. We plan to test the FSI technology at PEC’s Robinson Unit 1 in fall 2007. Since Robinson Unit 1 is similar in design to the Cape Fear units, the Robinson test will indicate whether the use of this technology will be effective at Cape Fear. The current compliance plan also contemplates the use of a dry scrubber at Sutton Unit 3. A dry scrubber at that unit represents a more cost effective compliance solution and also eliminates the need for a costly wastewater treatment system.

Wet scrubbers produce unique waste and byproduct streams. Issues related to wastewater permitting and solid waste disposal are being addressed for each site. PEC is treating the scrubber wastewater stream at the Asheville Plant using an innovative constructed wetlands treatment system to ensure compliance with discharge limits. A bioreactor technology will be used for the Roxboro and Mayo Plants.

A contract has been executed with a gypsum product end-user that will construct a facility near the Roxboro Plant to use the synthetic gypsum produced by the Roxboro and Mayo Plants for the manufacture of drywall products. PEC also has entered into an agreement that enables PEC to market and sell synthetic gypsum produced at the Asheville Plant.

Attachment 3 details PEC’s North Carolina coal-fired electric generating units, their name plate generation capacity, installed SO₂ control technologies and those planned for installation. As technologies evolve or other circumstances change, a different mix of controls may be selected. Attachment 3 also projects annual SO₂ emissions on a unit-by-unit basis based on the energy demand forecast and expected efficiencies of the SO₂ emissions controls employed. These projections are based on the planned removal technologies and PEC’s current fuel and operating forecasts. This information is provided only to show how compliance may be achieved and is not intended in any way to suggest unit-specific emission limits. Actual emissions for each unit may be substantially different.

Attachment 1: Location of PEC's Coal-Fired Power Plants in North Carolina



Attachment 2: PEC's 2007 NOx Control Plan for North Carolina Coal-fired Units

Unit	MW Rating	Control Technology	Operation Date ¹	Projected NOx Tons, 2007 ²
Asheville 1	198	LNB/AEFLGR/SCR	2007	1,304
Asheville 2	194	LNB/OFA/SCR		377
Cape Fear 5	143	ROFA/ROTAMIX		627
Cape Fear 6	173	ROFA/ROTAMIX		930
Lee 1	79	WIR		909
Lee 2	76	LNB	2006	740
Lee 3	252	LNB/ROTAMIX	2007	1,855
Mayo 1	745	LNB/OFA/SCR		1,712
Roxboro 1	385	LNB/OFA/SCR		1,067
Roxboro 2	670	TFS2000/SCR		1,021
Roxboro 3	707	LNB/OFA/SCR		2,092
Roxboro 4	700	LNB/OFA/SCR		1,999
Sutton 1	97	SAS		960
Sutton 2	106	LNB	2006	1,282
Sutton 3	410	LNB/ROFA/ROTAMIX		3,936
Weatherspoon 1	49			881
Weatherspoon 2	49			951
Weatherspoon 3	78	WIR		1,205
Total	5,111			23,848

AEFLGR = Amine-Enhanced Flue Lean Gas Reburn

LNB = Low NOx Burner

SNCR = Selective Non-Catalytic Reduction

OFA = Overfire Air

ROFA = Rotating Opposed-fired Air

ROTAMIX = Injection of urea to further reduce NOx

WIR = Underfire Air

TFS2000 = Combination Low-NOx Burner/Overfire Air

SAS = Separated Air Staging

¹ This is the operation date for the control technology installed to comply with the North Carolina Improve Air Quality/Electric Utilities Act only (shown in bold).

² Unit by unit emissions are illustrative only and specific emissions limits should not be inferred. Actual emissions in 2007 may be different from unit to unit.

Attachment 3: PEC's 2007 SO₂ Control Plan for North Carolina Coal-Fired Units

Unit	MW Rating	Technology	Operation Date	Projected SO ₂ Tons, 2009 ¹	Projected SO ₂ Tons, 2013
Asheville 1	198	Scrubber	2005	379	360
Asheville 2	194	Scrubber	2006	405	398
Cape Fear 5	143	FSI	2011	7,004	3,379
Cape Fear 6	173	FSI	2012	8,629	4,300
Lee 1	79			2,925	2,504
Lee 2	76			2,883	2,470
Lee 3	252			11,384	6,892
Mayo 1	745	Scrubber	2009	9,406	1,532
Roxboro 1	385	Scrubber	2008	742	960
Roxboro 2	670	Scrubber	2007	978	1,260
Roxboro 3	707	Scrubber	2008	1,102	1,521
Roxboro 4	700	Scrubber	2007	1,376	1,402
Sutton 1	97			4,383	4,470
Sutton 2	106			4,335	4,353
Sutton 3	410	Scrubber	2012	17,907	1,019
Weatherspoon 1	49			1,599	1,778
Weatherspoon 2	49			1,580	1,701
Weatherspoon 3	78			2,917	3,079
Total	5,111			79,934	43,378

FSI = Furnace Sorbent Injection

¹ Unit by unit emissions are illustrative only and specific emissions limits should not be inferred. Actual emissions in 2009 and 2013 may be different from unit to unit.

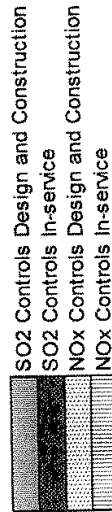
Appendix B
PEC's Actual Costs Through 2006 and Projected Costs Through 2013
for Clean Smokestacks Act Compliance (in thousands)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total
Asheville 1 FGD	\$ 100	\$ 9,652	\$ 33,574	\$ 35,769	\$ 3,930	\$ 1,132	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 81,894
Asheville 1 SCR	\$ 0	\$ 0	\$ 688	\$ 1,423	\$ 14,608	\$ 19,063	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 35,783
Asheville 2 FGD	\$ 100	\$ 7,742	\$ 28,390	\$ 24,238	\$ 11,701	\$ 992	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 71,180
Asheville FGD Common	\$ 467	\$ 0	\$ 0	\$ 0	\$ 0	\$ 467	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Mayo 1 FGD	\$ 187	\$ 0	\$ 276	\$ 644	\$ 22,794	\$ 102,487	\$ 90,669	\$ 19,894	\$ 0	\$ 0	\$ 0	\$ 0	\$ 236,950
Roxboro FGD Common	\$ 403	\$ 5,561	\$ 10,033	\$ 51,717	\$ 72,934	\$ 20,277	\$ 22,155	\$ 495	\$ 0	\$ 0	\$ 0	\$ 0	\$ 183,576
Roxboro 1 FGD	\$ 0	\$ 0	\$ 0	\$ 3,135	\$ 12,164	\$ 19,380	\$ 62,807	\$ 884	\$ 0	\$ 0	\$ 0	\$ 0	\$ 98,370
Roxboro 2 FGD	\$ 120	\$ 3,574	\$ 6,848	\$ 30,782	\$ 46,014	\$ 19,166	\$ 1,123	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 107,627
Roxboro 3 FGD	\$ 0	\$ 0	\$ 244	\$ 10,628	\$ 36,661	\$ 44,571	\$ 18,891	\$ 255	\$ 0	\$ 0	\$ 0	\$ 0	\$ 111,251
Roxboro 4 FGD	\$ 0	\$ 0	\$ 0	\$ 9,075	\$ 28,550	\$ 56,309	\$ 9,346	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 103,279
Cape Fear 5 FSI	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 5,120	\$ 8,152	\$ 9,844	\$ 0	\$ 0	\$ 23,116
Cape Fear 6 FSI	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 5,573	\$ 8,874	\$ 10,715	\$ 0	\$ 25,163
Lee 3 Rotamix	\$ 0	\$ 0	\$ 0	\$ 198	\$ 6,424	\$ 3,197	\$ 27	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 9,846
Sutton 3 FGD	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 10,378	\$ 60,142	\$ 61,607	\$ 44,211	\$ 6,610	\$ 182,948
Lee 2 LNB	\$ 0	\$ 0	\$ 133	\$ 273	\$ 1,886	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 2,292
Sutton 2 LNB	\$ 0	\$ 0	\$ 0	\$ 236	\$ 1,900	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 2,136
Total without Wastewater	\$ 1,377	\$ 26,528	\$ 80,187	\$ 168,118	\$ 259,566	\$ 281,860	\$ 205,019	\$ 37,026	\$ 73,867	\$ 80,325	\$ 54,926	\$ 6,610	\$ 1,275,410
Asheville WWT	\$ 0	\$ 0	\$ 0	\$ 12,365	\$ 1,289	\$ 200	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 13,853
Mayo WWT	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 6,117	\$ 10,813	\$ 4,638	\$ 0	\$ 0	\$ 0	\$ 0	\$ 21,568
Roxboro WWT	\$ 0	\$ 0	\$ 0	\$ 791	\$ 11,965	\$ 28,250	\$ 2,708	\$ 32	\$ 0	\$ 0	\$ 0	\$ 0	\$ 43,746
Sutton WWT	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Total Wastewater Treatment	\$ 0	\$ 0	\$ 0	\$ 13,156	\$ 13,253	\$ 34,567	\$ 13,521	\$ 4,670	\$ 0	\$ 0	\$ 0	\$ 0	\$ 79,167
Total NC Clean Smokestacks Act	\$ 1,377	\$ 26,528	\$ 80,187	\$ 181,274	\$ 272,819	\$ 316,427	\$ 218,540	\$ 41,696	\$ 73,867	\$ 80,325	\$ 54,926	\$ 6,610	\$ 1,354,577
Estimated AFUDC						\$ 710	\$ 11,720	\$ 6,470	\$ 1,332	\$ 2,857			

Notes: Costs reflect the Power Agency contribution.
Historic year costs are actual, current year costs are projected, and future year costs are escalated.

Appendix C PEC's Clean Smokestacks Act Compliance Plan

Plant Project	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Asheville 1 FGD											
Asheville 1 SCR											
Asheville 2 FGD											
Mayo 1 FGD											
Roxboro 1 FGD											
Roxboro 2 FGD											
Roxboro 3 FGD											
Roxboro 4 FGD											
Cape Fear 5 FSI											
Cape Fear 6 FSI											
Lee 3 Rotamix											
Sutton 3 FGD											
Lee 2 LNB											
Sutton 2 LNB											



Schedule as of 4/1/2007