

ECONOMIC ANALYSIS

Rule Citation Number: 15A NCAC 02D .0530, Prevention of Significant Deterioration
15A NCAC 02D .0531 Sources in Nonattainment Areas

Rule Topic: Revisions to New Source Review and Prevention of Significant Deterioration (PSD) Nitrogen Oxides (NO_x) Significance Level for PM_{2.5} (512) and PM_{2.5} Increment (516)

DENR Division: Division of Air Quality

Agency Contact: Joelle Burleson, Rule Development Branch Supervisor
Division of Air Quality (DAQ)
(919) 707-8720
Joelle.Burleson@ncdenr.gov

Analyst: Patrick Knowlson, DAQ
(919) 707-8711
patrick.knowlson@ncdenr.gov

Impact Summary:

State government:	Yes
Local government:	No
Substantial impact:	No
Federal government:	No
Private Sector:	Yes

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;

Necessity: The proposed rule amendments would revise North Carolina's nitrogen oxides significance level from 140 tons per year to 40 tons per year. The proposed rule amendments also update the federal cross-reference in the Prevention of Significant Deterioration (PSD) rule to reflect the current federal increments for fine particulate matter (PM_{2.5}). These proposed rule changes are necessary to comply with federal rules and are consistent with the principles of Executive Order 70.

I. Executive Summary

This rulemaking package consists of two major rule amendments. First, this proposal would revise North Carolina's nitrogen oxides significance level from 140 tons per year to 40 tons per year. The second proposed amendment will update the federal cross-reference in the Prevention of Significant Deterioration (PSD) rule to reflect the current federal increments for fine particulate matter (PM_{2.5}). The proposed text changes are located in Appendix A.

The Environmental Management Commission (EMC) amended the New Source Review (NSR) and Prevention of Significant Deterioration (PSD) permitting rules in 2010 to establish the significance level for nitrogen oxides (NO_x) for PM_{2.5} in North Carolina at 140 tons per year (tpy). This significance level was based on monitoring and modeling data indicating that NO_x is a lesser contributor to the formation of PM_{2.5} than sulfur dioxide (SO₂). As part of its rule review of North Carolina's state implementation plan (SIP), the United States Environmental Protection Agency (USEPA) has determined that, while the federal rule allows for a demonstration that NO_x is not a significant precursor to formation of PM_{2.5}, there is not an allowance for states to establish an alternate significance level. As a result, the state significance level must be revised to reflect the federal 40 tpy significance level in USEPA PM_{2.5} Implementation Rule.

In 2010, the USEPA added PM_{2.5} increments under the program. An increment is the maximum allowable increase in ambient pollutant concentration. Federal increments were established for 24-hour and annual averaging periods in Class I, Class II and Class III areas. Adoption of these federal increments is required in order for the USEPA to approve North Carolina's SIP. The current date of incorporation in the state rule needs to be updated to reflect the current PM_{2.5} increments for the current annual and 24-hour NAAQS established by the USEPA.

There are no anticipated costs or benefits associated with the change in NO_x significance level for PM_{2.5} because the significance level of NO_x for ozone is already 40 tpy (see 40 CFR 51.166(b)(23) and 40 CFR 52.21(b)(23)). Affected facilities have already implemented additional emission controls to meet the requirements for the NO_x significance level for ozone. State government and the private sector will face additional costs to incorporate the federal PM_{2.5} increments PSD program. Based on an average of six PSD applications received by the Division of Air Quality (DAQ) per year, the total annual impact to the private sector would be approximately \$134,000. DAQ would have about \$17,000 in additional expenses. The overall total cost increase to all entities would be approximately \$151,000 per year. These cost estimates are based on the assumption that all applicant facilities will need the highest level of analysis; true costs may be lower.

North Carolina will benefit from this proposed policy change because our NO_x significance level will comply with federal regulations and the federal government will approve our SIP and fund state air quality programs. There will not be any change in the health benefits to the public as a result of these amendments. Changing the NO_x significance levels will have no impact on emissions. The PM_{2.5} increments are protective elements of a NSR program designed to prevent a violation of the National Ambient Air Quality Standard (NAAQS) for PM_{2.5}. Adoption of these federal increments is required in order for the USEPA to approve North Carolina's SIP.

The proposed effective date for these proposed rule changes is projected to be May 1, 2013.

II. Background

The Clean Air Act requires the USEPA to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. The NAAQS has two types of national air quality standards, a primary standard and a secondary standard. Primary standards set limits to protect public health, including the health of "sensitive" populations such as asthmatics,

children, and the elderly. Secondary standards set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings. The NAAQS define the maximum permissible concentrations for certain pollutants, known as criteria pollutants.

A Clean Air Act program known as “New Source Review” (NSR) requires an analysis of emissions from new sources or significant modifications of existing sources. This analysis protects human health by ensuring air emissions do not exceed the NAAQS for various airborne pollutants. The NSR program consists of two permitting programs. The first permitting program is the Nonattainment New Source Review (NA NSR) program. The second NSR program is called Prevention of Significant Deterioration (PSD). These two programs are contained in North Carolina’s SIP in Rules 15A NCAC 02D .0530 and .0531.

Either NA NSR or PSD permits are required for all new or existing stationary point sources of pollution, such as factories, that plan major modifications to their facility which may increase emissions above particular pollutant significance levels. The term “Significance level” refers to a facility’s potential to emit (PTE) pollutants subject to regulation above a specified emissions threshold. If the threshold is exceeded, then the source is evaluated under the NSR program. “Major modification” means any physical change or change in the method of operation of a major stationary source that would result in a significant emissions increase of a regulated NSR pollutant and a significant net emissions increase of that pollutant from the major stationary source.

The NA NSR program requirements are used for screening permit applications from major stationary sources located in nonattainment areas. Major stationary source means one that emits, or has the potential to emit, 100 tons per year or more of any regulated NSR pollutant (40 CFR 51.166(b)(50)). A nonattainment area is an area designated by USEPA as not meeting the NAAQS minimal concentration for one or more of the NAAQS pollutants. Nonattainment areas are always designated as nonattainment for one or more NAAQS such as nonattainment for ozone or nonattainment for VOC and ozone. The area’s particular nonattainment designation influences the permit screening process. An NA NSR permit screening determines permit requirements to control the specific NAAQS pollutant for which the area is in nonattainment.

NA NSR permitted facilities are required to obtain emission offsets, which are emission reductions from existing sources in nonattainment area. Offsets are credited to existing facilities that reduce emissions by installing emission control equipment beyond rule requirements; modifying production processes; or by shutting down one or more emission sources. These offsets ensure that NAAQS emissions within the nonattainment area do not increase and nonattainment area continues to work toward reaching attainment.

The PSD program does not prevent sources from increasing emissions and is used in attainment areas. Attainment areas are delineated regions designated by USEPA as meeting all NAAQS. The PSD program is designed to maintain that classification. While the NA NSR screening is designed to limit the nonattainment NAAQS pollutant, the PSD screening reviews all the NAAQS pollutants. PSD is designed to:

1. protect public health and welfare;

2. preserve, protect, and enhance the air quality in national parks, national wilderness areas, national monuments, national seashores, and other areas of special national or regional natural, recreational, scenic, or historic value;
3. insure that economic growth will occur in a manner consistent with the preservation of existing clean air resources; and
4. assure that any decision to permit increased air pollution is made only after careful evaluation of all the consequences of such a decision and after adequate procedural opportunities for informed public participation in the decision making process.

Once an NA NSR or PSD requirement is triggered for a major stationary source or a major modification by even a single pollutant, a best available control technology review must be done for each PSD regulated pollutant that is emitted in significant quantities.

Federal and State Regulations for PM_{2.5} are Different

Fine Particulate Matter (PM_{2.5}) is particles less than 2.5 micrometers in diameter and is interchangeably referred to as "fine" particles. Fine particles in the atmosphere are made up of a complex mixture of directly emitted and secondarily formed components. The United States Environmental Protection Agency (USEPA) added PM_{2.5} to the NAAQS pollutants on May 8, 2008 (72 FR 20586). The USEPA's Clean Air Fine Particulate Implementation Rule, commonly referred to as the PM_{2.5} Implementation Rule, guides states as they develop State Implementation Plans (SIP) in response to annual or daily PM_{2.5} NAAQS.

NO_x Significance level

The PM_{2.5} Implementation Rule establishes a hierarchy of precursor pollutants. Precursors are gaseous emissions of compounds that chemically combine with other compounds some time later in the atmosphere to form PM_{2.5}. Sulfur Dioxide (SO₂) and nitrogen oxides (NO_x) are significant precursors. USEPA has determined that Volatile Organic Compounds (VOCs) and ammonia (NH₃) are presumed not to be significant precursors.

In the PM_{2.5} Implementation Rule, the USEPA set the following significant emission rates or significance levels for PM_{2.5}; 10 tons per year (tpy) of direct PM_{2.5} emissions, 40 tpy of sulfur dioxide emissions, or 40 tpy of nitrogen oxides emissions. Direct PM_{2.5} consists of both solid and condensable PM_{2.5} emissions leaving the stack and entering the atmosphere. Direct PM_{2.5} does not include the PM_{2.5} precursors (SO₂ and NO_x).

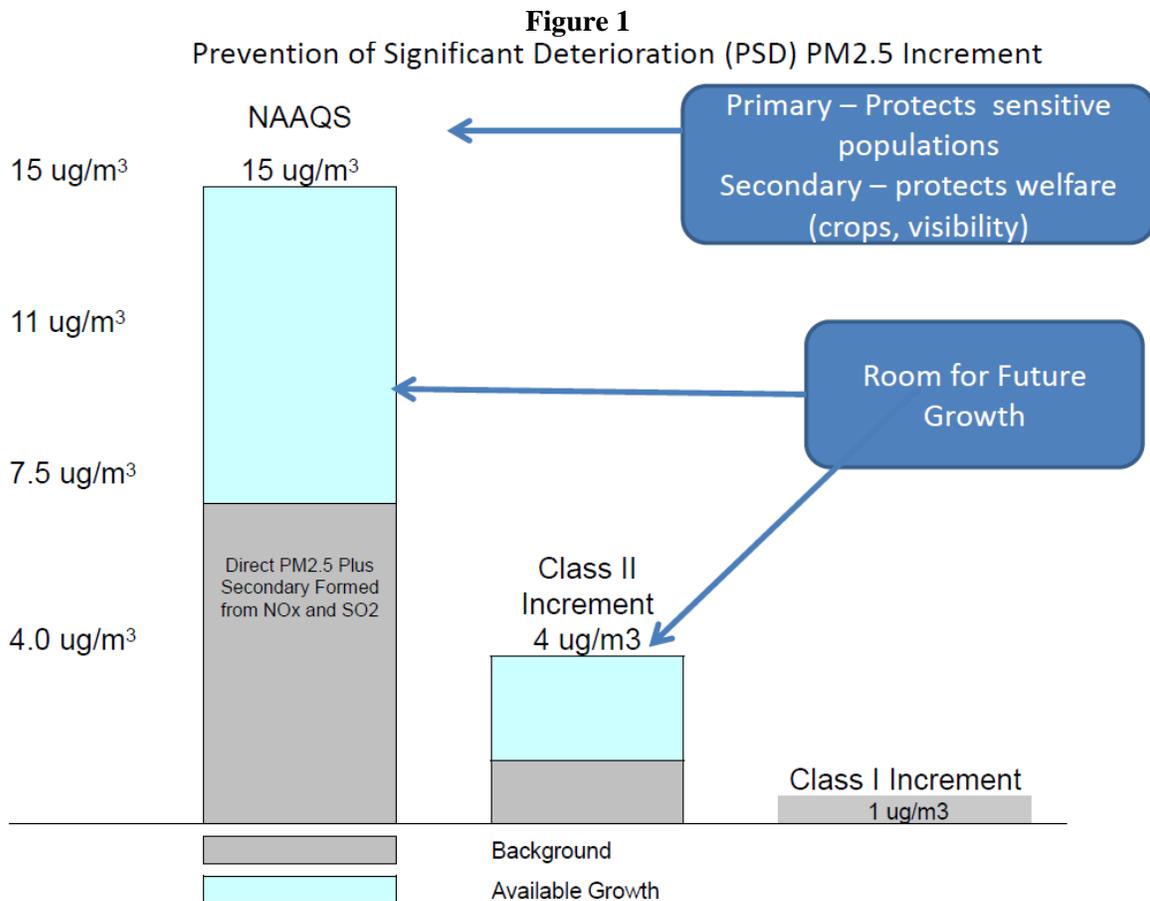
In 2010, the Environmental Management Commission (EMC) adopted amendments to the state NA NSR and PSD permitting rules to incorporate requirements relative to the PM_{2.5} Implementation Rule. The state rule amendments established the significance level for NO_x for PM_{2.5} in North Carolina at 140 tons per year based on monitoring and modeling data supporting that NO_x is a lesser contributor to the formation of PM_{2.5} than SO₂.

As part of its review of the rules for incorporation into North Carolina SIP, the USEPA has determined that, while the federal rule allows for a demonstration that NO_x is not a significant

precursor to formation of PM_{2.5}, there is no allowance for a state to establish an alternate significance level. As a result, the significance level needs to be revised to reflect the 40 tpy significance level in the implementation rule.

PM_{2.5} Increment

PSD increments were developed by USEPA and enacted in December 2010 to prevent the air quality in attainment areas from deteriorating to the level set by the NAAQS. The NAAQS is a maximum allowable concentration "ceiling." A PSD increment, on the other hand, is the maximum allowable increase in concentration that is allowed to occur above a baseline concentration for a pollutant. The baseline concentration (referred to as "background" in Figure 1 below) is defined for each pollutant and, in general, is the ambient concentration which exists at the time the first complete PSD permit application affecting the area is submitted. Significant deterioration is said to occur when the amount of new pollution would exceed the applicable PSD increment. It is important to note, however, that the air quality cannot deteriorate beyond the concentration allowed by the applicable NAAQS, even if not all of the PSD increment is consumed. For PM_{2.5}, this means the Class II increment of 4 ug/m³ for a new or modified source might not be reached before the applicable PM_{2.5} NAAQS is exceeded. An illustration on PM_{2.5} increments is included below.



There are three area classes are part of the increment system originally established by Congress. Congress designated Class I areas (including certain national parks and wilderness areas) as areas of special national concern, where the need to prevent deterioration of air quality is the greatest. Areas not designated as Class I were designated as Class II. The increments of Class II areas are larger than those of Class I areas and allow for a moderate degree of emissions growth. For future redesignation purposes, Congress defined a Class III classification to allow the redesignation of any existing Class II area for which a state may desire to promote a higher level of industrial development (and emissions growth). Thus, Class III areas are allowed to have the greatest amount of pollutant increase of the three area classes while still achieving the NAAQS. To date, there have been no redesignations made to establish a Class III area.

The USEPA promulgated the increments for PM_{2.5} on October 20, 2010 (75 FR 64864). North Carolina's prevention of significant deterioration rules incorporates various provisions of the corresponding federal regulations by reference as of a certain date. The current date of incorporation in the state rule needs to be updated to reflect the current PM_{2.5} increments for the current annual and 24-hour NAAQS established by the USEPA. The annual and 24-hour NAAQS and corresponding increments were set by USEPA as follows:

Table 1. USEPA PM_{2.5} Increments

	NAAQS (ug/m ³)	Increment (ug/m ³)		
		Area		
		Class I	Class II	Class III
Annual	15	1	4	8
24-hour	35	2	9	18

The Significant Impact Limit (SIL) is a screening tool that USEPA developed to evaluate the impact of new sources and major modifications on the PM_{2.5} NAAQS and PSD increments. If the highest modeled concentrations are greater than the SILs (see Table 2), a full impact, PSD increment analysis is conducted for the significant impact area (SIA). The SIA is a circular area with a radius extending out to the most distant point where the modeling predicts a significant ambient impact (not to exceed 50 kilometers) and represents the geographical area for which the NAAQS and PSD increment analysis is conducted.

Table 2. USEPA PM_{2.5} Significant Impact Limits

	SILs (ug/m ³)		
	Area		
	Class I	Class II	Class III
Annual	0.06	0.3	0.3
24-hour	0.07	1.2	1.2

The Significant Monitoring Concentration (SMC), is a screening tool that may be used to determine if a source must submit to the permitting authority one year of pre-construction air quality monitoring data prior to constructing or modifying a facility. If a proposed source's predicted impact is less than the SMC, the source's impact may be considered de minimis for monitoring

purposes, and the reviewing authority could exempt the applicant from the preconstruction monitoring requirement. The reviewing authority also may exempt the applicant from the monitoring requirement if the existing air quality in the area is shown to be less than the SMC. The USEPA set an SMC $4 \mu\text{g}/\text{m}^3$ (24-hour average) for $\text{PM}_{2.5}$.

As part of the full impact analysis, all facility emissions of PSD criteria pollutants and for which PSD increments have been established (PM_{10} , SO_2 , NO_x and $\text{PM}_{2.5}$) are evaluated to determine the individual source emissions that consume increment. These sources are included in the PSD increment modeling analysis. There are two types of sources emissions that are included in the analysis: all source increases within the county that have occurred since the baseline data was established and all sources located within the significant impact areas and established after the baseline data was established.

All new sources or source emission increases that have occurred since the Minor Source Baseline Date (MiSBD) was established for the county in which the PSD application is being submitted must be modeled. A list of the MiSBDs by county is provided on the DAQ website at <http://daq.state.nc.us/permits/psd>. Since the MiSBD in NC is county specific, the modeling domain may contain multiple MiSBDs to apply to the source selection process. Major sources in existence prior to the EPA-established Major Source Baseline Date (MSBD) are excluded from the increment modeling analysis.

Facility emission rates must reflect the maximum allowable operating conditions as expressed by the federally enforceable emissions limit, operating level, and operating factor for each applicable pollutant and averaging time. Note: operating levels less than 100 percent of capacity may also need to be modeled where differences in stack parameters associated with the lower operating levels could result in higher ground level concentrations.

Off-site increment consuming sources that were created on or after the MiSBD and that are within the SIA also must be included in the PSD increment analysis. In addition, all increment consuming sources within 50 km (screening area) of the SIA must be evaluated for inclusion in the offsite increment source inventory. Offsite sources within the screening area can be excluded from the modeling if their facility-wide emission rate in tons per year is less than $20D$ (where D is defined as the distance from the offsite source to the PSD facility being modeled for short term emissions and as the distance from the offsite source to the nearest boundary of the SIA for long term emissions).

Additional information on PSD modeling can be found in *North Carolina PSD Modeling Guidance* in Appendix B of this document.

III. Costs and Benefits by Affected Party

The baseline for this analysis is the current PSD and NA NSR rules found in Rule 15A NCAC 02D .0530, Prevention of Significant Deterioration; and 02D .0531, Sources in Nonattainment Areas. The change from the baseline is a decrease in the significance level on the precursor NO_x from the current North Carolina significance level of 140 tpy to 40 tpy that the USEPA is requiring North Carolina to adopt and the update to the federal cross-reference in the PSD rule to reflect the current federal increments for $\text{PM}_{2.5}$.

Public

The rule amendments to both 15A NCAC 02D .0530 and .0531 will decrease the NO_x significance level for PM_{2.5} from 140 tpy to 40 tpy but the actual emissions of regulated pollutants would not increase or decrease in response to the proposed amendment since the significance level for ozone continues to be 40 tpy. The rule amendment to 15A NCAC 02D .0530 will also update the federal cross-reference in the PSD rule to reflect the increments set by USEPA for fine particulate matter (PM_{2.5}). Although there is not any expected quantifiable health benefits to the public as a result of these amendments since all areas of the state are currently in attainment for PM_{2.5}, the NO_x significance levels and the PM_{2.5} increments are elements of a NSR program to help prevent a violation of the National Ambient Air Quality Standard (NAAQS) for PM_{2.5}. The NAAQS is set at a level to be protective of both public health and the environment. The public would benefit from the state retaining its attainment status through the use of the NO_x significance levels and the PM_{2.5} increments.

North Carolina will benefit from this proposed policy change because our NO_x significance level will comply with federal regulations and the federal government will approve our State Implementation Plan (SIP) and fund state air quality programs. The primary benefit of this set of amendments is to address applicability consistent with the requirements of the Clean Air Act and ensure approval of the SIP by USEPA. Without the proposed rule change, USEPA will not be able to approve the current version of the plan. If the state does not have a plan that meets federal requirements, the EPA approval can require corrective action within required timeframes or implement a federal plan for North Carolina. A federal plan may require solutions that are not the best to fit a particular area and are less preferable than having a state-controlled program. If not eventually corrected, potential sanctions on highway transportation funding could also occur.

Private Sector

NO_x Significance Level

Currently, North Carolina has two maintenance areas for PM_{2.5} which are Hickory (Catawba County) and Greensboro/Winston-Salem/High Point (Davidson and Guilford Counties). A maintenance area is an area that was designated nonattainment for one of the NAAQS, but later met the standard and was re-designated to attainment status. These two areas were re-designated based on ambient monitoring data from nonattainment to attainment on December 19, 2011. There are no nonattainment areas for PM_{2.5} in North Carolina at this time.

Lowering the NO_x significance level for PM_{2.5} from 140 tpy to 40 tpy will not impact any new or existing sources located in maintenance areas because the NO_x significance level is already 40 tpy for ozone. Private facilities have already invested in pollution control technologies to comply with the requirements for NO_x in ozone maintenance areas. Actual emissions of regulated pollutants would not increase or decrease in response to the proposed amendment.

PM_{2.5} Increment

A PSD increment analysis requires additional engineering and modeling. Since most likely the PM_{2.5} increment analysis will be incorporated into an analysis with other pollutants, this will not be a standalone project, thus the cost will be minimized. DAQ has estimated incremental cost increased based on three different scenarios:

- 1) Scenario 1: Below the Significant Impact Level (SIL) thus minimal modeling will be needed, i.e. only level 1 analysis.
- 2) Scenario 2: Exceeds the SIL and thus a Class II increment analysis will be required, i.e. level 1 and 2 analysis would be needed.
- 3) Scenario 3: Exceeds the SIL, a Class II increment analysis will be required and a Class I Increment analysis is required, i.e. level 1, 2, and 3 analysis would be needed.

Consulting firms usually perform the PSD analysis for an affected facility. The facility will likely have several PM_{2.5} sources and offsite sources. The consulting firm will collect data and perform modeling for all of these sources. According to the permitting section of DAQ, an offsite source inventory would cost approximately \$5,000 for the facility to generate. Industry consultants contacted by the Air Quality Analysis Branch (AQAB) of the Division of Air Quality (DAQ), estimate it would cost approximately \$4,400 to complete a level 1 analysis (Scenario 1 above).

If based on minimal modeling the SIL is exceeded, then a Class II increment analysis would also be required (Scenario 2 above). For level 2 analysis, there would be approximately 40 hours of data gathering, 40 hours to assemble the model with the source and parameter inputs and 32 hours of computer time to run the model. A level 2 analysis would add approximately \$3,000 to the overall costs for additional modeling runs. If the source is located in a Class I area, a Class I increment analysis, or level 3 analysis, would also be required (Scenario 3 above). A level 3 analysis would add approximately \$10,000 to the overall cost for an increment analysis for the expanded modeling and more intensive modeling requirements.

DAQ has averaged six PSD permit applications annually for all pollutants since 1999. PM_{2.5} is a relatively new regulated pollutant so the projected number of PSD permit applications that require a PM_{2.5} increment modeling effort is unknown. For this analysis, it is assumed that all of the PSD permit applications will require an evaluation for PM_{2.5}. Until DAQ starts receiving PSD permit application with PM_{2.5} increment calculations, it is unknown how many applications on average will require a scenario one, two or three modeling effort. This cost estimate was formulated with the assumption that all six PSD applications would require a Scenario 3 modeling effort. In reality, this is highly unlikely to occur. For this reason, these cost estimates present a highest cost scenario. Under Scenario 3, the total cost for adding a PM_{2.5} increment analysis to each PSD permit application would be estimated to be \$17,400 for the modeling and \$5,000 for the offsite source inventory. The annual cost to affected facilities for all PSD permits submitted to DAQ for review (assuming there would be 6 applications per year) would be approximately \$134,000.

Currently, the Significant Monitoring Concentration (SMC) is not used in a PSD analysis. The NC Division of Air Quality (DAQ) does not require one year of preconstruction monitoring. The State

has an extensive monitoring network. The SMC are incorporated by reference in the rule. If there was a need to require one year of preconstruction monitoring in the future, an affected source could be exempted from the monitoring requirement and associated monitoring costs if the predicted impact is less than the SMC. DAQ does not anticipate using the SMC in the future.

State Agencies

NO_x Significance Level

The rule amendment will not result in an increase or decrease in PSD permit applications. PSD permits are currently required if there is an increase in NO_x PTE emissions of 40 tpy under the ozone standard. Lowering the NO_x significance level for PM_{2.5} maintenance areas from 140 tpy to 40 tpy will not increase the number of PSD permits.

PM_{2.5} Increments

The Air Quality Analysis Branch (AQAB) of the Division of Air Quality would require additional time to review the PM_{2.5} increment analysis in a PSD permit application. This review would not appreciably change how a PSD permit application review is performed but would add some time cost to review the PM_{2.5} increment analysis contained in the permit application. A first level analysis would add an additional eight hours to a PSD review. It is assumed a Meteorologist II employee with 10 years of experience and a salary of \$56,000 will review the PSD permit application. Using the NC Office of State Personnel Employee Compensation Calculator, a Meteorologist II hourly compensation is approximately \$40. The increase for a first level analysis would be \$320. A second level analysis would add approximately three days to the review for a total labor cost of \$960. A third level analysis would add a full week to the review process for an additional \$1,600 dollars in costs to DAQ. Using the same assumption that all PSD permit applications would require level 1, 2, and 3 analyses (i.e. Scenario 3), the total impact to DAQ would be about \$2,900 per PSD permit application. Based on an average of six PSD applications per year, the annual cost to DAQ would be approximately \$17,300.

Uncertainty

There is a small chance that the proposed rule changes may lead to a higher impact than estimate above if the USEPA goes ahead with the proposed new PM_{2.5} standards on June 14, 2012. This new USEPA proposal would set a new primary annual PM_{2.5} standard within a range of 12 to 13 ug/m³. The current annual standard is 15 ug/m³. There is the potential for costs to new or existing sources if there is a violation of the PM_{2.5} NAAQS that results in the USEPA designating an area to nonattainment for PM_{2.5} at some point in the future. In non-attainment areas, the PSD increments are not used and affected facilities would be required to obtain emission offsets from existing sources. Also modeling is more extensive in nonattainment areas.

The Division of Air Quality thinks, however, that it is unlikely that there will be a violation of the PM_{2.5} NAAQS at any point in the foreseeable future. NC's highest design value (based on 2009-11 data) is 11.2 ug/m³, which is below the more stringent proposed standard at the federal level. State

actions to implement the Clean Smokestacks Act, Vehicle Inspection and Maintenance Program and federal Tier 2 engine standards have substantially reduced the amount of PM_{2.5} in North Carolina's air.

The proposed rule changes do not meet the threshold for a substantial fiscal impact.

Appendix A

1 15A NCA 02D .0530 is proposed for amendment as follows:
2

3 **15A NCAC 02D .0530 PREVENTION OF SIGNIFICANT DETERIORATION**

4 (a) The purpose of the Rule is to implement a program for the prevention of significant deterioration of air quality
5 as required by 40 CFR 51.166.

6 (b) For the purposes of this Rule the definitions contained in 40 CFR 51.166(b) and 40 CFR 51.301 apply except
7 the definition of "baseline actual emissions." For the purposes of this Rule:

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

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

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

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

25 (iii) For an existing emission unit (other than an electric utility steam generating
26 unit), the average rate shall be adjusted downward to exclude any emissions that
27 would have exceeded an emission limitation with which the major stationary
28 source must currently comply. However, if the State has taken credit in an
29 attainment demonstration or maintenance plan consistent with the requirements
30 of 40 CFR 51.165(a)(3)(ii)(G) for an emission limitation that is part of a
31 maximum achievable control technology standard that the Administrator
32 proposed or promulgated under part 63 of the Code of Federal Regulations, the
33 baseline actual emissions shall be adjusted to account for such emission
34 reductions;

35 (iv) For an electric utility steam generating unit, the average rate shall be adjusted
36 downward to reflect any emissions reductions under G.S. 143-215.107D and for
37 which cost recovery is sought pursuant to G.S. 62-133.6;

Appendix A

- 1 (v) For a regulated NSR pollutant, when a project involves multiple emissions units,
2 only one consecutive 24-month period shall be used to determine the baseline
3 actual emissions for all the emissions units being changed. A different
4 consecutive 24-month period for each regulated NSR pollutant can be used for
5 each regulated NSR pollutant; and
- 6 (vi) The average rate shall not be based on any consecutive 24-month period for
7 which there is inadequate information for determining annual emissions, in tons
8 per year, and for adjusting this amount if required by Subparts (ii) and (iii) of
9 this Part;
- 10 (B) For a new emissions unit, the baseline actual emissions for purposes of determining the
11 emissions increase that will result from the initial construction and operation of such unit
12 shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to
13 emit; and
- 14 (C) For a plantwide applicability limit (PAL) for a stationary source, the baseline actual
15 emissions shall be calculated for existing emissions units in accordance with the
16 procedures contained in Part (A) of this Subparagraph, and for a new emissions unit in
17 accordance with the procedures contained in Part (B) of this Subparagraph;
- 18 (2) In the definition of "net emissions increase," the reasonable period specified in 40 CFR
19 51.166(b)(3)(ii) is seven years;
- 20 (3) The limitation specified in 40 CFR 51.166(b)(15)(ii) does not apply; and
- 21 (4) Particulate matter PM_{2.5} significant levels in 40 CFR 51.166(b)(23)(i) are incorporated by
22 reference except as otherwise provided in this Rule. ~~A net emission increase or the potential of a~~
23 ~~source to emit nitrogen oxide emissions shall be significant if the rate of emissions would equal or~~
24 ~~exceed 140 tons per year.~~ Sulfur dioxide and nitrogen oxides are precursor to PM_{2.5} in all
25 attainment and unclassifiable areas. Volatile organic compounds and ammonia are not significant
26 precursors to PM_{2.5}.
- 27 (c) All areas of the State are classified as Class II except that the following areas are Class I:
- 28 (1) Great Smoky Mountains National Park;
- 29 (2) Joyce Kilmer Slickrock National Wilderness Area;
- 30 (3) Linville Gorge National Wilderness Area;
- 31 (4) Shining Rock National Wilderness Area; and
- 32 (5) Swanquarter National Wilderness Area.
- 33 (d) Redesignations of areas to Class I or II may be submitted as state proposals to the Administrator of the
34 Environmental Protection Agency (EPA), if the requirements of 40 CFR 51.166(g)(2) are met. Areas may be
35 proposed to be redesignated as Class III, if the requirements of 40 CFR 51.166(g)(3) are met. Redesignations may
36 not, however, be proposed which would violate the restrictions of 40 CFR 51.166(e). Lands within the boundaries of
37 Indian Reservations may be redesignated only by the appropriate Indian Governing Body.

Appendix A

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

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

7 (g) Major stationary sources and major modifications shall comply with the requirements contained in 40 CFR
8 51.166(i) and (a)(7) and by extension in 40 CFR 51.166(j) through (o) and (w). The transition provisions allowed by
9 40 CFR 52.21 (i)(11)(i) and (ii) and (m)(1)(vii) and (viii) are hereby adopted under this Rule. The minimum
10 requirements described in the portions of 40 CFR 51.166 referenced in this Paragraph are hereby adopted as the
11 requirements to be used under this Rule, except as otherwise provided in this Rule. Wherever the language of the
12 portions of 40 CFR 51.166 referenced in this Paragraph speaks of the "plan," the requirements described therein
13 shall apply to the source to which they pertain, except as otherwise provided in this Rule. Whenever the portions of
14 40 CFR 51.166 referenced in this Paragraph provide that the State plan may exempt or not apply certain
15 requirements in certain circumstances, those exemptions and provisions of nonapplicability are also hereby adopted
16 under this Rule. However, this provision shall not be interpreted so as to limit information that may be requested
17 from the owner or operator by the Director as specified in 40 CFR 51.166(n)(2).

18 (h) New natural gas-fired electrical utility generating units for which cost recovery is sought pursuant to G. S. 62-
19 133.6 shall install best available control technology for NO_x and SO₂, regardless of applicability of the rest of this
20 Rule.

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

24 (j) 15A NCAC 02Q .0102 and .0302 are not applicable to any source to which this Rule applies. The owner or
25 operator of the sources to which this Rule applies shall apply for and receive a permit as required in 15A NCAC
26 02Q .0300 or .0500.

27 (k) When a particular source or modification becomes a major stationary source or major modification solely by
28 virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of
29 the source or modification to emit a pollutant, such as a restriction on hours of operation, then the provisions of this
30 Rule shall apply to the source or modification as though construction had not yet begun on the source or
31 modification.

32 (l) The provisions of 40 CFR 52.21(r)(2) regarding the period of validity of approval to construct are incorporated
33 by reference except that the term "Administrator" is replaced with "Director".

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

36 (n) The degree of emission limitation required for control of any air pollutant under this Rule shall not be affected
37 by:

Appendix A

1 (1) that amount of a stack height, not in existence before December 31, 1970, that exceeds good
2 engineering practice; or

3 (2) any other dispersion technique not implemented before then.

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

6 (p) Permits may be issued on the basis of innovative control technology as set forth in 40 CFR 51.166(s)(1) if the
7 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
8 allowance set forth in 40 CFR 51.166(s)(4).

9 (q) If a source to which this Rule applies impacts an area designated Class I by requirements of 40 CFR 51.166(e),
10 notice to EPA shall be provided as set forth in 40 CFR 51.166(p)(1). If the Federal Land Manager presents a
11 demonstration described in 40 CFR 51.166(p)(3) during the public comment period or public hearing to the Director
12 and if the Director concurs with this demonstration, the permit application shall be denied. Permits may be issued on
13 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
14 (p)(7) have been satisfied.

15 (r) A permit application subject to this Rule shall be processed in accordance with the procedures and requirements
16 of 40 CFR 51.166(q). Within 30 days of receipt of the application, applicants shall be notified if the application is
17 complete as to initial information submitted. Commencement of construction before full prevention of significant
18 deterioration approval is obtained constitutes a violation of this Rule.

19 (s) Approval of an application with regard to the requirements of this Rule does not relieve the owner or operator of
20 the responsibility to comply with applicable provisions of other rules of this Subchapter or Subchapter 02Q of this
21 Title and any other requirements under local, state, or federal law.

22 (t) When a source or modification is subject to this Rule the following procedures apply:

23 (1) Notwithstanding any other provisions of this Paragraph, the Director shall, no later than 60 days
24 after receipt of an application, notify the Federal Land Manager with the U.S. Department of
25 Interior and U.S. Department of Agriculture of an application from a source or modification
26 subject to this Rule;

27 (2) When a source or modification may affect visibility of a Class I area the Director shall provide
28 written notification to all affected Federal Land Managers within 30 days of receiving the permit
29 application or within 30 days of receiving advance notification of an application. The notification
30 shall be at least 30 days prior to the publication of notice for public comment on the application.
31 The notification shall include a copy of all information relevant to the permit application including
32 an analysis provided by the source of the potential impact of the proposed source on visibility;

33 (3) The Director shall consider any analysis concerning visibility impairment performed by the
34 Federal Land Manager if the analysis is received within 30 days of notification. If the Director
35 finds that the analysis of the Federal Land Manager fails to demonstrate to his satisfaction that an
36 adverse impact on visibility will result in the Class I area, the Director shall provide in the notice

Appendix A

1 of public hearing on the application, an explanation of his decision or notice as to where the
2 explanation can be obtained; and

- 3 (4) The Director may require monitoring of visibility in or around any Class I area by the proposed
4 new source or modification when the visibility impact analysis indicates possible visibility
5 impairment.

6 (u) If the owner or operator of a source is using projected actual emissions to avoid applicability of prevention of
7 significant deterioration requirements, the owner or operator shall notify the Director of the modification before
8 beginning actual construction. The notification shall include:

- 9 (1) a description of the project;
10 (2) identification of sources whose emissions could be affected by the project;
11 (3) the calculated projected actual emissions and an explanation of how the projected actual emissions
12 were calculated, including identification of emissions excluded by 40 CFR 51.166(b)(40)(ii)(c);
13 (4) the calculated baseline actual emissions and an explanation of how the baseline actual emissions
14 were calculated; and
15 (5) any netting calculations if applicable.

16 If upon reviewing the notification, the Director finds that the project will cause a prevention of significant
17 deterioration evaluation, then the Director shall notify the owner or operator of his findings. The owner or operator
18 shall not make the modification until it has received a permit issued pursuant to this Rule. If a permit revision is not
19 required pursuant to this rule, the owner or operator shall maintain records of annual emissions in tons per year, on a
20 calendar year basis related to the modifications for 10 years following resumption of regular operations after the
21 change if the project involves increasing the emissions unit's design capacity or its potential to emit the regulated
22 NSR pollutant; otherwise these records shall be maintained for five years following resumption of regular operations
23 after the change. The owner or operator shall submit a report to the director within 60 days after the end of each year
24 during which these records must be generated. The report shall contain the items listed in 40 CFR 51.166(r)(6)(v)(a)
25 through (c). The owner or operator shall make the information documented and maintained under this Paragraph
26 available to the Director or the general public pursuant to the requirements in 40 CFR 70.4(b)(3)(viii).

27 (v) The references to the Code of Federal Regulations (CFR) in this Rule are incorporated by reference unless a
28 specific reference states otherwise. The version of the CFR incorporated in this Rule is that as of ~~May 16, 2008~~
29 October 20, 2010 at <http://www.gpo.gov/fdsys/pkg/FR-2010-10-20/pdf/2010-25132.pdf> and does not include any
30 subsequent amendments or editions to the referenced material.

31
32 *History Note:* Authority G.S. 143-215.3(a)(1); 143-215.107(a)(3); 143-215.107(a)(5); 143-215.107(a)(7); 143-
33 215.108(b); 150B-21.6;
34 Eff. June 1, 1981;
35 Amended Eff. December 1, 1992; August 1, 1991; October 1, 1989; July 1, 1988; October 1,
36 1987; June 1, 1985; January 1, 1985; February 1, 1983;
37 Temporary Amendment Eff. March 8, 1994, for a period of 180 days or until the permanent rule is
38 effective, whichever is sooner;
39 Amended Eff. _____; January 2, 2011; September 1, 2010; May 1, 2008; July 28, 2006; July
40 1, 1997; February 1, 1995; July 1, 1994.

Appendix A

1
2 15A NCA 02D .0531 is proposed for amendment as follows:
3

4 **15A NCAC 02D .0531 SOURCES IN NONATTAINMENT AREAS**

5 (a) For the purpose of this Rule the definitions contained in 40 CFR 51.165(a)(1) and 40 CFR 51.301 apply except
6 the definition of "baseline actual emissions." For the purposes of this Rule:

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

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

- 19 (i) The average rate shall include fugitive emissions to the extent quantifiable, and
20 emissions associated with startups, shutdowns, and malfunctions;
- 21 (ii) The average rate shall be adjusted downward to exclude any non-compliant
22 emissions that occurred while the source was operating above any emission
23 limitation that was legally enforceable during the consecutive 24-month period;
- 24 (iii) For an existing emission unit (other than an electric utility steam generating
25 unit), the average rate shall be adjusted downward to exclude any emissions that
26 would have exceeded an emission limitation with which the major stationary
27 source must currently comply. However, if the State has taken credit in an
28 attainment demonstration or maintenance plan consistent with the requirements
29 of 40 CFR 51.165(a)(3)(ii)(G) for an emission limitation that is part of a
30 maximum achievable control technology standard that the Administrator
31 proposed or promulgated under part 63 of the Code of Federal Regulations, the
32 baseline actual emissions shall be adjusted to account for such emission
33 reductions;
- 34 (iv) For an electric utility steam generating unit, the average rate shall be adjusted
35 downward to reflect any emissions reductions under G.S. 143-215.107D and for
36 which cost recovery is sought pursuant to G.S. 62-133.6;

Appendix A

- 1 (v) For a regulated NSR pollutant, when a project involves multiple emissions units,
2 only one consecutive 24-month period shall be used to determine the baseline
3 actual emissions for all the emissions units being changed. A different
4 consecutive 24-month period for each regulated NSR pollutant; and
- 5 (vi) The average rate shall not be based on any consecutive 24-month period for
6 which there is inadequate information for determining annual emissions, in tons
7 per year, and for adjusting this amount if required by Subparts (ii) and (iii) of
8 this Part;
- 9 (B) For a new emissions unit, the baseline actual emissions for purposes of determining the
10 emissions increase that will result from the initial construction and operation of such unit
11 shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to
12 emit; and
- 13 (C) For a plantwide applicability limit (PAL) for a stationary source, the baseline actual
14 emissions shall be calculated for existing emissions units in accordance with the
15 procedures contained in Part (A) of this Subparagraph, and for a new emissions unit in
16 accordance with the procedures contained in Part (B) of this Subparagraph;
- 17 (2) In the definition of "net emissions increase," the reasonable period specified in 40 CFR
18 51.165(a)(1)(vi)(C)(1) is seven years; and
- 19 (3) Particulate matter PM_{2.5} significant levels in 40 CFR 51.165(a)(1)(x)(A) are incorporated by
20 reference except as otherwise provided in this Rule. ~~A net emission increase or the potential of a~~
21 ~~source to emit nitrogen oxide emissions shall be significant if the rate of emissions would equal or~~
22 ~~exceed 140 tpy.~~ Sulfur dioxide and nitrogen oxides are precursor to PM_{2.5} in all nonattainment
23 areas. Volatile organic compounds and ammonia are not significant precursors to PM_{2.5}.
- 24 (b) Redesignation to Attainment. If any county or part of a county to which this Rule applies is later designated in
25 40 CFR 81.334 as attainment, all sources in that county subject to this Rule before the redesignation date shall
26 continue to comply with this Rule.
- 27 (c) Applicability. 40 CFR 51.165(a)(2) is incorporated by reference. This Rule applies to areas designated as
28 nonattainment in 40 CFR 81.334, including any subsequent amendments or editions.
- 29 (d) This Rule is not applicable to:
- 30 (1) complex sources of air pollution regulated only under Section .0800 of this Subchapter and not
31 under any other rule in this Subchapter;
- 32 (2) emission of pollutants at the new major stationary source or major modification located in the
33 nonattainment area that are pollutants other than the pollutant or pollutants for which the area is
34 nonattainment. (A major stationary source or major modification that is major for volatile organic
35 compounds or nitrogen oxides is also major for ozone.);
- 36 (3) emission of pollutants for which the source or modification is not major;

Appendix A

1 (4) a new source or modification that qualifies for exemption under the provision of 40 CFR
2 51.165(a)(4); or

3 (5) emission of compounds listed under 40 CFR 51.100(s) as having been determined to have
4 negligible photochemical reactivity except carbon monoxide.

5 (e) 15A NCAC 02Q .0102 and .0302 are not applicable to any source to which this Rule applies. The owner or
6 operator of the source shall apply for and receive a permit as required in 15A NCAC 02Q .0300 or .0500.

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

9 (1) The new major stationary source or major modification will emit the nonattainment pollutant at a
10 rate no more than the lowest achievable emission rate;

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

18 (3) The owner or operator of the proposed new major stationary source or major modification will
19 obtain sufficient emission reductions of the nonattainment pollutant from other sources in the
20 nonattainment area so that the emissions from the new major source and associated new minor
21 sources will be less than the emissions reductions by a ratio of at least 1.00 to 1.15 for volatile
22 organic compounds and nitrogen oxides and by a ratio of less than one to one for carbon
23 monoxide. The baseline for this emission offset shall be the actual emissions of the source from
24 which offset credit is obtained. Emission reductions shall not include any reductions resulting
25 from compliance (or scheduled compliance) with applicable rules in effect before the application.
26 The difference between the emissions from the new major source and associated new minor
27 sources of carbon monoxide and the emission reductions shall be sufficient to represent reasonable
28 further progress toward attaining the National Ambient Air Quality Standards. The emissions
29 reduction credits shall also conform to the provisions of 40 CFR 51.165(a)(3)(ii)(A) through (G)
30 and (J); and

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

33 (g) New natural gas-fired electrical utility generating units for which cost recovery is sought pursuant to G. S. 62-
34 133.6 shall install lowest achievable emission rate technology for NO_x and SO₂, regardless of the applicability of the
35 rest of this Rule.

36 (h) 40 CFR 51.165(f) is incorporated by reference except that 40 CFR 51.165(f)(10)(iv)(A) is changed to read: "If
37 the emissions level calculated in accordance with Paragraph (f)(6) of this Section is equal to or greater than 80

Appendix A

1 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
2 incorporated by reference.

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

7 (j) To issue a permit to a source of a nonattainment pollutant, the Director shall determine, in accordance with
8 Section 173(a)(5) of the Clean Air Act and in addition to the other requirements of this Rule, that an analysis
9 (produced by the permit applicant) of alternative sites, sizes, production processes, and environmental control
10 techniques for the source demonstrates that the benefits of the source significantly outweigh the environmental and
11 social costs imposed as a result of its location, construction, or modification.

12 (k) The provisions of 40 CFR 52.21(r)(2) regarding the period of validity of approval to construct are incorporated
13 by reference except that the term "Administrator" is replaced with "Director".

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

17 (m) Except as provided in 40 CFR 52.28(c)(6), for a source or modification subject to this Rule the following
18 procedures shall be followed:

- 19 (1) Notwithstanding any other provisions of this Paragraph, the Director shall, no later than 60 days
20 after receipt of an application, notify the Federal Land Manager with the U.S. Department of
21 Interior and U.S. Department of Agriculture of an application from a source or modification
22 subject to this Rule;
- 23 (2) The owner or operator of the source shall provide an analysis of the impairment to visibility that
24 would occur because of the source or modification and general commercial, industrial and other
25 growth associated with the source or modification;
- 26 (3) When a source or modification may affect the visibility of a Class I area the Director shall provide
27 written notification to all affected Federal Land Managers within 30 days of receiving the permit
28 application or within 30 days of receiving advance notification of an application. The notification
29 shall be at least 30 days before the publication of the notice for public comment on the application.
30 The notification shall include a copy of all information relevant to the permit application including
31 an analysis provided by the source of the potential impact of the proposed source on visibility;
- 32 (4) The Director shall consider any analysis concerning visibility impairment performed by the
33 Federal Land Manager if the analysis is received within 30 days of notification. If the Director
34 finds that the analysis of the Federal Land Manager fails to demonstrate to his satisfaction that an
35 adverse impact on visibility will result in the Class I area, the Director shall provide in the notice
36 of public hearing on the application, an explanation of his decision or notice where the explanation
37 can be obtained;

Appendix A

1 (5) The Director shall issue permits only to those sources whose emissions will be consistent with
2 making reasonable progress, as defined in Section 169A of the Clean Air Act, toward the national
3 goal of preventing any future, and remedying any existing, impairment of visibility in mandatory
4 Class I areas when the impairment results from manmade air pollution. In making the decision to
5 issue a permit, the Director shall consider the cost of compliance, the time necessary for
6 compliance, the energy and nonair quality environmental impacts of compliance, and the useful
7 life of the source; and

8 (6) The Director may require monitoring of visibility in or around any Class I area by the proposed
9 new source or modification when the visibility impact analysis indicates possible visibility
10 impairment.

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

12 (n) If the owner or operator of a source is using projected actual emissions to avoid applicability of nonattainment
13 new source review, the owner or operator shall notify the director of the modification before beginning actual
14 construction. The notification shall include:

- 15 (1) a description of the project;
- 16 (2) identification of sources whose emissions could be affected by the project;
- 17 (3) the calculated projected actual emissions and an explanation of how the projected actual emissions
18 were calculated, including identification of emissions excluded by 40 CFR
19 51.165(a)(1)(xxviii)(B)(3);
- 20 (4) the calculated baseline actual emissions and an explanation of how the baseline actual emissions
21 were calculated; and
- 22 (5) any netting calculations if applicable.

23 If upon reviewing the notification, the Director finds that the project will cause a nonattainment new source review
24 evaluation, then the Director shall notify the owner or operator of his findings. The owner or operator shall not make
25 the modification until it has received a permit issued pursuant to this Rule. If a permit revision is not required
26 pursuant to this Rule, the owner or operator shall maintain records of annual emissions in tons per year on a calendar
27 year basis related to the modifications for 10 years following resumption of regular operations after the change if the
28 project involves increasing the emissions unit's design capacity or its potential to emit the regulated NSR pollutant;
29 otherwise these records shall be maintained for five years following resumption of regular operations after the
30 change. The owner or operator shall submit a report to the director within 60 days after the end of each year during
31 which these records must be generated. The report shall contain the items listed in 40 CFR 51.165(a)(6)(v)(A)
32 through (C). The owner or operator shall make the information documented and maintained under this Paragraph
33 available to the Director or the general public pursuant to the requirements in 40 CFR 70.4(b)(3)(viii).

34 (o) The reference to the Code of Federal Regulations (CFR) in this Rule are incorporated by reference unless a
35 specific reference states otherwise. Except for 40 CFR 81.334, the version of the CFR incorporated in this Rule is
36 that as of May 16, 2008 and does not include any subsequent amendments or editions to the referenced material.

37

Appendix A

1 History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); 143-215.108(b);*
2 *Eff. June 1, 1981;*
3 *Amended Eff. December 1, 1993; December 1, 1992; August 1, 1991; December 1, 1989; October*
4 *1, 1989; July 1, 1988; October 1, 1987; June 1, 1985; January 1, 1985; February 1, 1983;*
5 *Temporary Amendment Eff. March 8, 1994 for a period of 180 days or until the permanent rule is*
6 *effective, whichever is sooner;*
7 *Amended Eff. _____; January 2, 2011; September 1, 2010; May 1, 2008; May 1, 2005; July 1,*
8 *1998; July 1, 1996; July 1, 1995; July 1, 1994.*