

**SYNOPSIS OF
THE PROPOSED AMENDMENTS TO THE RULES OF THE
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION
RELATING TO AIR QUALITY, CHAPTER 391-3-1**

Rule 391-3-1-.02(7), “Prevention of Significant Deterioration of Air Quality,” is being amended.

Purpose: This rule is being revised to specify the precursors for ozone and fine particulate matter.

Main Features: The definition of “regulated NSR pollutant” is added at subparagraph 391-3-1-.02(7)(a)2.(ix). Subparagraph (ix)(I)I. specifies that volatile organic compounds and nitrogen oxides (NO_x) are precursors to ozone. Subparagraph (ix)(I)II. specifies that sulfur dioxide is a precursor to fine particulate matter (PM_{2.5}). Both of these subparagraphs are consistent with the federal rule at 40 CFR 52.21. Subparagraph (ix)(I)III. specifies that NO_x is not a precursor to PM_{2.5}. NO_x is presumed to be a precursor to PM_{2.5} in the federal rule unless a state demonstrates to EPA’s satisfaction that emissions of NO_x are not a significant contributor to ambient PM_{2.5} concentrations. This subparagraph specifies that the exclusion of NO_x as a precursor to PM_{2.5} becomes effective after EPA approves the revision to Georgia’s State Implementation Plan that incorporates this change. Subparagraphs (ix)(II), (III), (IV), (V), and (VI) regarding pollutants subject to section 111 standards, Class I and Class II Substances, any pollutant otherwise subject to regulation under the Act, hazardous air pollutants listed in section 112, and condensable particulate matter, respectively, are consistent with the federal definition of Regulated NSR pollutant.

Rule 391-3-1-.03(8) “Permit Requirements,” is being amended.

Purpose: The nonattainment new source review requirements for fine particulate matter are added to the rule. The permitting requirement for sources located in 25 counties designated as contributing to ozone levels in the Atlanta ozone nonattainment area is clarified. Other revisions are made to make the rule consistent with Federal requirements.

Main Features: Subparagraph 391-3-1-.03(8)(c)16. is added to specify the nonattainment new source review requirements for Georgia’s existing fine particulate matter nonattainment areas (Atlanta PM_{2.5} nonattainment area, Macon PM_{2.5} nonattainment area, Floyd County PM_{2.5} nonattainment area and

Georgia's portion of the Chattanooga PM_{2.5} nonattainment area.) Subparagraph 16.(i) specifies the major source threshold at 100 tons per year. Subparagraph 16.(ii) establishes the modification thresholds. Subparagraph 16.(iii) sets the offset ratio at 1 to 1. Subparagraphs 16.(iv) specifies that sulfur dioxide is a precursor to PM_{2.5}. Subparagraph 16.(v) states that nitrogen oxides is not a precursor to PM_{2.5}. However, the NO_x provision does not apply until U.S. EPA approves it into Georgia's State Implementation Plan. Subparagraph 16.(vi) specifies the requirements for condensable particulate matter. Subparagraph 16.(vii) defines the partial-county areas that are part of the designated nonattainment areas. Language is added to subparagraph 391-3-1-.03(8)(e)1. to clarify that the permitting requirements of 391-3-1-.03(8)(c) only apply to electric generating units in the 25 counties specified. Modifications to subparagraphs 391-3-1-.03(8)(g)1.(iii), (g)2.(i), (g)5.(i), and (g)6.(i) are made to reflect the addition of subparagraph (8)(c)16. Subparagraph (8)(g)1.(iii)(III) is removed to make the rule consistent with Federal requirements.

STATEMENT OF RATIONALE

Rules for Air Quality Control

Rule 391-3-1-.02(7), “Prevention of Significant Deterioration of Air Quality”

The basis of this rule is to specify the provisions for the permitting of new major sources and major modifications to existing major sources in areas that are designated as “attainment” or “unclassifiable” for National Ambient Air Quality Standards. The purpose of this revision is to add the definition of “Regulated NSR Pollutant.”

On May 16, 2008, U.S. EPA promulgated revisions to the federal Prevention of Significant Deterioration (PSD) regulations to incorporate provisions related to fine particulate matter (PM_{2.5}.) These revisions included the significant emission rates for PM_{2.5} and its precursors, identification of precursors to PM_{2.5}, and a requirement to include gaseous emissions when determining particulate matter emissions beginning on January 1, 2011. The precursor provision allows states to submit a demonstration that nitrogen oxides (NO_x) emissions are not a significant contributor to ambient PM_{2.5} concentrations. Upon approval of a state’s demonstration, NO_x would no longer be considered a precursor for PM_{2.5}. EPD has conducted air quality modeling to demonstrate that NO_x does not significantly contribute to ambient PM_{2.5} concentrations. The proposed definition of “Regulated NSR Pollutant” includes a provision whereby NO_x would not be a precursor to PM_{2.5} upon approval by EPA. States are required to incorporate these revisions into their State Implementation Plan (SIP) within 3 years following promulgation (see 73 FR 28341). On December 8, 2010, the DNR Board adopted the revisions to the federal PSD regulations by reference and EPD submitted that rule change to EPA as a SIP revision on January 13, 2011. Upon adoption by the Board, the proposed rule change will be sent to EPA to revise the SIP revision submitted on January 13th.

This revision does not incur any additional costs to the Environmental Protection Division or the regulated industry beyond what is required under the existing Federal permitting requirements. Costs to the Division and regulated industry will be reduced once EPA approves the provisions of Subparagraph 391-3-1-.02(7)(a)2.(ix)(I)III. (which reverses the presumption in the Federal rule that nitrogen oxides are a precursor to fine particulate matter) into Georgia’s State Implementation Plan. No costs will be imposed on local governments or the general public.

Rule 391-3-1-.03(8) – Permit Requirements

The basis of this paragraph is to specify the permitting requirements for major new sources and major modifications to existing major sources. Subparagraphs (c), (e), and (g) specifically apply to areas designated by U.S. EPA as nonattainment for ambient air quality standards and areas designated by the Director as contributing to air quality in such nonattainment areas. The purpose of this revision is to add nonattainment new source review requirements for fine particulate matter, to clarify the permitting requirements for counties designated as contributing

to the Atlanta ozone nonattainment area, and to make Georgia's rule consistent with federal requirements.

On May 16, 2008, U.S. EPA promulgated revisions to the federal Nonattainment New Source Review (NAA-NSR) regulations to incorporate provisions related to fine particulate matter (PM_{2.5}.) States are required to incorporate these revisions into their State Implementation Plan (SIP) within 3 years following promulgation (see 73 FR 28341). These revisions included the significant emission rates for PM_{2.5} and its precursors, identification of precursors to PM_{2.5}, a requirement to include gaseous emissions when determining particulate matter emissions beginning on January 1, 2011, and the offset ratio for PM_{2.5} and its precursors. The federal precursor provision allows states to submit a demonstration that nitrogen oxides (NO_x) emissions do are not a significant contributor to ambient PM_{2.5} concentrations. Upon approval of a state's demonstration, NO_x would no longer be considered a precursor for PM_{2.5}. EPD has conducted air quality modeling to demonstrate that NO_x does not significantly contribute to ambient PM_{2.5} concentrations. The proposed revision includes a provision whereby NO_x would not be a precursor to PM_{2.5} upon approval by EPA.

This revision does not incur any additional costs to the Environmental Protection Division or the regulated industry beyond what is required under the existing federal permitting requirements. Costs to the Division and regulated industry will be reduced once EPA approves the provisions of Subparagraph 391-3-1-.03(8)(c)16.(v) (which reverses the presumption in the federal rule that nitrogen oxides are a precursor to fine particulate matter) into Georgia's State Implementation Plan. No costs will be imposed on local governments or the general public.