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Notice of Intended Regulatory Action (NOIRA) Agency Background Document

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| Approving authority name | State Air Pollution Control Board |
| Primary action | 9 VAC 5-20-206 |
| Secondary action(s) | 9 VAC 5-40 |
| Regulation title | Regulations for the Control and Abatement of Air Pollution |
| Action title | VOC and NOx Emissions Control Areas (D04) |
| Document preparation date | September 14, 2004 |

This information is required for executive review (www.townhall.state.va.us/dpbpages/apaintro.htm#execreview) and the Virginia Registrar of Regulations (legis.state.va.us/codecomm/register/regindex.htm), pursuant to the Virginia Administrative Process Act (www.townhall.state.va.us/dpbpages/dpb_apa.htm), Executive Orders 21 (2002) and 58 (1999) (www.governor.state.va.us/Press_Policy/Executive_Orders/EOHome.html), and the *Virginia Register Form, Style, and Procedure Manual* (http://legis.state.va.us/codecomm/register/download/styl8_95.rtf).

Purpose

Please describe the subject matter and intent of the planned regulatory action.

The purpose of the proposed action is to enlarge the scope of volatile organic compound (VOC) and nitrogen oxides (NOx) emissions control areas in order to include new ozone nonattainment areas. This action is being taken to allow Virginia to meet its obligation to implement control measures in areas designated as nonattainment under the 8-hour ozone standard.

Statutory Authority

Please identify the section number and provide a brief statement relating the content of the statutory authority to the specific proposed regulation.

Section 10.1-1308 of the Virginia Air Pollution Control Law (Title 10.1, Chapter 13 of the Code of Virginia) authorizes the State Air Pollution Control Board to promulgate regulations abating, controlling and prohibiting air pollution in order to protect public health and welfare.

Need

Please provide a brief explanation of the need for and the goals of the new or amended regulation. In addition, detail the specific reasons why the agency has determined that the proposed regulatory action is essential to protect the health, safety, or welfare of citizens. Finally, delineate any potential issues that may need to be addressed as the regulation is developed.

Identification of Specific Planning Requirements Establishing the Need

Ozone is formed by complex series of reactions between nitrogen oxides (NO_x) and volatile organic compounds (VOCs) under the influence of solar ultraviolet radiation (sunlight). Ozone shows a very strong diurnal (daily) and seasonal (April to October) cyclical character. Ozone injures vegetation, has adverse effects on materials (rubber and fabrics), and is a pulmonary irritant that affects respiratory mucous membranes, lung tissues, and respiratory functions.

The original ozone air quality standard that was the focus of air quality planning requirements after the promulgation of the 1990 Amendments to the Clean Air Act was a 1-hour standard. Since then, EPA has promulgated a new 8-hour ozone air quality standard. Air quality planning efforts to address compliance with the new 8-hour standard are in the early stages. On April 15, 2004, EPA has promulgated its decision as to the 8-hour nonattainment areas and some of the planning requirements, but the final decision regarding the remainder of the planning requirements will not be made known until mid-August 2004. The state regulations established VOC and NO_x emissions control areas to provide the legal mechanism to define the geographic areas in which Virginia implements control measures to attain and maintain the air quality standards for ozone. The emissions control areas may or may not coincide with the nonattainment areas, depending on the necessity of the planning requirements.

Three areas of Virginia were originally established as VOC and NO_x emissions control areas: Northern Virginia, Hampton Roads, and Richmond. These three VOC and NO_x emissions control areas were established in order to implement control measures to attain the 1-hour ozone air quality standard. The Northern Virginia area remains out of compliance with the 1-hour standard and designated nonattainment for the 1-hour ozone standard; the area was recently reclassified to a severe classification. Furthermore, it was designated nonattainment for the 8-hour ozone standard. However, both the Hampton Roads and Richmond areas are in compliance with the 1-hour standard and are designated maintenance areas but were also designated nonattainment for the 8-hour standard. Promulgation of the 8-hour nonattainment areas resulted in some additional nonattainment areas as follows: Frederick County area, Fredericksburg area, and Roanoke area.

The Northern Virginia VOC and NO_x Emissions Control Area currently consists of the counties of Arlington, Fairfax, Loudoun, Prince William, and Stafford; and the cities of Alexandria, Fairfax, Falls Church, Manassas, and Manassas Park. No localities need to be added to the area as a result of the promulgation of the 8-hour ozone nonattainment areas. The Richmond VOC and NO_x Emissions Control Area currently consists of the counties of Charles City, Chesterfield, Hanover, and Henrico; and the cities of Colonial Heights, Hopewell, and Richmond. The following new localities need to be added to the area as a result of the promulgation of the 8-hour ozone nonattainment areas: Petersburg City and Prince George County. The Hampton Roads VOC and NO_x Emissions Control Area currently consists of the counties of James City and York; and the cities of Chesapeake, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach, and Williamsburg. The following new localities need to be added to the area as a result of the promulgation of the 8-hour ozone nonattainment areas: Gloucester County and Isle of Wight County.

Recently, a new VOC and NO_x emissions control area was established: the Western Virginia Area. This area was designated nonattainment for the 8-hour ozone standard but was added to the list of VOC and NO_x emissions control areas prior to EPA's final decision regarding the 8-hour nonattainment areas. This was done so the affected localities could participate in EPA's Early Action Compact program. The

Western Virginia VOC and NO_x Emissions Control Area includes the counties of Botetourt, Frederick and Roanoke; and the cities of Roanoke, Salem, and Winchester.

One more VOC and NO_x emissions control area will need to be established: the Fredericksburg Area. This area was designated nonattainment for the 8-hour ozone standard. The Fredericksburg VOC and NO_x Emissions Control Area would include Spotsylvania County and Fredericksburg City.

Thus, the amendment of the regulations is to expand the applicability of the VOC and NO_x regulatory program into the new 8-hour nonattainment areas. For the areas that have been designated nonattainment for the 8-hour ozone standard, the amendment of the rule is to make legally enforceable several control measures to be included plans for the attainment and maintenance of the ozone air quality standard in those areas. This regulatory action is thus essential to protect the health, safety, and welfare of citizens.

General Planning Requirements

Among the primary goals of the federal Clean Air Act are the attainment and maintenance of the National Ambient Air Quality Standards (NAAQS) and the prevention of significant deterioration (PSD) of air quality in areas cleaner than the NAAQS.

The NAAQS, developed and promulgated by the U.S. Environmental Protection Agency (EPA), establish the maximum limits of pollutants that are permitted in the outside ambient air. EPA requires that each state submit a plan (called a State Implementation Plan or SIP), including any laws and regulations necessary to enforce the plan, that shows how the air pollution concentrations will be reduced to levels at or below these standards (attainment). Once the pollution levels are within the standards, the SIP must also demonstrate how the state will maintain the air pollution concentrations at the reduced levels (maintenance).

The PSD program is designed to protect air quality in areas where the air is cleaner than required by the NAAQS. The program has three classifications for defining the level of allowable degradation: Class I is the most stringent classification, allowing for little additional pollution, while Class III allows the most. All of Virginia is classified at the moderate level, Class II, with the exception of two Class I federal lands.

A SIP is the key to the state's air quality programs. The Clean Air Act is specific concerning the elements required for an acceptable SIP. If a state does not prepare such a plan, or EPA does not approve a submitted plan, then EPA itself is empowered to take the necessary actions to attain and maintain the air quality standards--that is, it would have to promulgate and implement an air quality plan for that state. EPA is also, by law, required to impose sanctions in cases where there is no approved plan or the plan is not being implemented, the sanctions consisting of loss of federal funds for highways and other projects and/or more restrictive requirements for new industry. Generally, the plan is revised, as needed, based upon changes in the federal Clean Air Act and associated EPA regulations and policies.

The basic approach to developing a SIP is to examine air quality across the state, delineate areas where air quality needs improvement, determine the degree of improvement necessary, inventory the sources contributing to the problem, develop a control strategy to reduce emissions from contributing sources enough to bring about attainment of the air quality standards, implement the strategy, and take the steps necessary to ensure that the air quality standards are not violated in the future.

The heart of the SIP is the control strategy. The control strategy describes the emission reduction measures to be used by the state to attain and maintain the air quality standards. There are three basic types of measures: stationary source control measures, mobile source control measures, and transportation source control measures. Stationary source control measures are directed at limiting emissions primarily from commercial/industrial facilities and operations and include the following: emission limits, control technology requirements, preconstruction permit programs for new industry and expansions, and source-specific control requirements. Stationary source control measures also include area source control measures which are directed at small businesses and consumer activities. Mobile

source control measures are directed at tailpipe and other emissions primarily from motor vehicles and include the following: Federal Motor Vehicle Emission Standards, fuel volatility limits, reformulated gasoline, emissions control system anti-tampering programs, and inspection and maintenance programs. Transportation source control measures limit the location and use of motor vehicles and include the following: carpools, special bus lanes, rapid transit systems, commuter park and ride lots, bicycle lanes, signal system improvements, and many others.

Federal guidance on states' approaches to the inclusion of control measures in the SIP has varied considerably over the years, ranging from very general in the early years of the Clean Air Act to very specific in more recent years. Many regulatory requirements were adopted in the 1970s when no detailed guidance existed. The legally binding federal mandate for these regulations is general, not specific, consisting of the Clean Air Act's broad-based directive to states to attain and maintain the air quality standards. However, in recent years, the Clean Air Act, along with EPA regulations and policy, has become much more specific, thereby removing much of the states' discretion to craft their own air quality control programs.

Generally, a SIP is revised, as needed, based upon changes in air quality or statutory requirements. For the most part the SIP has worked, and the standards have been attained for most pollutants in most areas. However, attainment of NAAQS for one pollutant--ozone--has proven problematic. While ozone is needed at the earth's outer atmospheric layer to shield out harmful rays from the sun, excess concentrations at the surface have an adverse effect on human health and welfare. Ozone is formed by a chemical reaction between volatile organic compounds (VOCs), nitrogen oxides (NOx), and sunlight. When VOC and NOx emissions from mobile sources and stationary sources are reduced, ozone is reduced.

Congress enacted the 1977 Amendments to the Clean Air Act in order to address unsuccessful SIPs and areas that had not attained the NAAQS (that is, nonattainment areas). Although SIP revisions submitted pursuant to the requirements of the 1977 amendments did achieve some progress in eliminating nonattainment areas, some areas remained.

In 1990 Congress once again enacted comprehensive amendments to the Act to address SIP requirements for nonattainment areas. The new Act established a process for evaluating the air quality in each region and identifying and classifying each nonattainment area according to the severity of its air pollution problem. Nonattainment areas are classified as marginal, moderate, serious, severe and extreme. Marginal areas are subject to the least stringent requirements and each subsequent classification (or class) is subject to successively more stringent control measures. Areas in a higher classification of nonattainment must meet the mandates of the lower classifications plus the more stringent requirements of their class. In addition to the general SIP-related sanctions, nonattainment areas have their own unique sanctions. If a particular area fails to attain the federal standard by the legislatively mandated attainment date, EPA is required to reassign it to the next higher classification level (denoting a worse air quality problem), thus subjecting the area to more stringent air pollution control requirements. The Clean Air Act includes specific provisions requiring these sanctions to be issued by EPA if so warranted.

The new Act required EPA, based on the air quality data from each state, to propose geographic boundaries and pollution classification levels for all nonattainment areas to each state's governor. If states disagreed with EPA's proposals, they had the opportunity to propose different boundaries; however, EPA had the authority to make the final decision.

The process provided in the new Act yielded three nonattainment areas for Virginia for the 1-hour ozone air quality standard. The classifications for Virginia's nonattainment areas were marginal for the Hampton Roads Nonattainment Area, moderate for the Richmond Nonattainment Area, and serious for the Northern Virginia Nonattainment Area. Since that time, air quality has improved in some areas. Richmond and Hampton Roads have achieved the 1-hour ozone standard and are now considered maintenance areas; that is specific strategies that were implemented must continue, however, no additional new requirements are necessary provided the areas do not measure ozone concentrations in

levels high enough to reclassify them into nonattainment. Meanwhile, Northern Virginia continues to experience difficulty in attaining the 1-hour standard and remains a nonattainment area. Although initially classified as serious, the Northern Virginia Ozone Nonattainment Area is now classified as severe because it failed to attain the 1-hour ozone air quality standard by the legislatively mandated attainment date for serious areas.

The original ozone air quality standard that was the focus of air quality planning requirements after the promulgation of the 1990 Amendments to the Clean Air Act was a 1-hour standard (0.12 ppm). Since then, EPA has promulgated a new 8-hour ozone air quality standard (0.08 ppm). Air quality planning efforts to address compliance with the new 8-hour standard are in the early stages. On April 15, 2004, EPA has promulgated its decision as to the 8-hour nonattainment areas and some of the planning requirements. Also, EPA hopes to finalize the remainder of the air quality planning requirements by mid-August 2004, so that states can begin to develop their implementation plans. Promulgation of the 8-hour nonattainment areas resulted in some additional areas (with classifications) as follows: Frederick County Nonattainment Area, Fredericksburg Nonattainment Area, and Roanoke Nonattainment Area. The Frederick County Nonattainment Area and Roanoke Nonattainment Area are classified as basic areas and the effective date of the nonattainment designation has been delayed because the affected localities volunteered to participate in the Early Action Compact program (see below). The Fredericksburg Nonattainment Area is classified moderate.

EPA has established the Early Action Compact program to allow areas that may potentially become designated nonattainment under the 8-hour ozone standard to voluntarily adopt local emission control programs to avoid air quality violations and the potential of mandated controls. By avoiding the nonattainment designation, these areas will avoid new source review for major sources, including the requirement to make offsets, and conformity review. These areas will also experience a reduction in ozone air pollution, and thus experience improved public health and welfare.

Once the nonattainment areas are defined, each state is then obligated to submit a SIP demonstrating how it will attain the air quality standards in each nonattainment area. First, the Act requires that certain specific control measures and other requirements be adopted and included in the SIP; a list of those that necessitates the adoption or modification of state regulations is provided below. In addition for moderate nonattainment areas, the state has to demonstrate that it would achieve a VOC emission reduction of 15% within 6 years of the base year. Finally for serious nonattainment areas, the SIP has to include an attainment demonstration by photochemical modeling (including annual emission reductions of 3% for years 7 to 9 beyond the base year) in addition to the 15% emission reduction demonstration. In cases where the specific control measures shown below are inadequate to achieve the emission reductions or attain the air quality standard, the state is obligated to adopt other control measures as necessary to achieve this end.

ALL AREAS

- correct existing VOC regulatory program (controls on certain sources identified in EPA control technology guidelines)
- requirement for annual statements of emissions from industries
- preconstruction review (permit) program for new industry and expansions (with variable major source definition, variable offset ratio for addition of new pollution, and special requirements for expansions to existing industry in serious areas)
- offset ratio for addition of new pollution of 1.1 to 1
- procedures to determine if systems level highway plans and other federally financed projects are in conformity with air quality plans

MODERATE AND ABOVE AREAS

- requirement for controls for all VOC sources identified in EPA control technology guidelines

- case by case control technology determinations for all major VOC and NOX sources not covered by a EPA control technology guideline
- requirement for controls for all major (100 tons per year) VOC sources
- requirement for controls for all major (100 tons per year) NOX sources
- offset ratio for addition of new pollution of 1.15 to 1
- requirement for vapor recovery controls for emissions from filling vehicles with gasoline (stage II)
- basic motor vehicle emissions inspection and maintenance program

SERIOUS AND ABOVE AREAS

- requirement for controls for all major (50 tons per year) VOC sources
- requirement for controls for all major (50 tons per year) NOX sources
- offset ratio for addition of new pollution of 1.2 to 1
- enhanced monitoring (source emissions) program
- correct existing motor vehicle emissions inspection and maintenance (I&M) program
- enhanced motor vehicle emissions I&M program
- clean fuel fleet vehicle program
- oxygenated fuels program

SEVERE AND ABOVE AREAS

- requirement for controls for all major (25 tons per year) VOC sources
- requirement for controls for all major (25 tons per year) NOX sources
- offset ratio for addition of new pollution of 1.3 to 1
- requirement for major sources to pay a penalty fee if area does not attain air quality standard by attainment date
- transportation control strategies and measures to offset emissions growth from VMT

Legal Requirements

Please identify the state and/or federal source of the legal requirements that necessitate promulgation of this proposed regulation, including: (1) the most relevant law and/or regulation, including Code of Virginia citation and General Assembly bill and chapter numbers, if applicable, and (2) promulgating entity, i.e., the agency, board, or person. Also, describe the legal requirements and the extent to which the requirements are mandatory or discretionary.

Promulgating Entity

The promulgating entity for this regulation is the State Air Pollution Control Board.

Identification of Specific Applicable Federal Requirements

Ozone is formed by complex series of reactions between nitrogen oxides (NOx) and volatile organic compounds (VOCs) under the influence of solar ultraviolet radiation (sunlight). Ozone shows a very strong diurnal (daily) and seasonal (April to October) cyclical character. Ozone injures vegetation, has adverse effects on materials (rubber and fabrics), and is a pulmonary irritant that affects respiratory mucous membranes, lung tissues, and respiratory functions.

The original ozone air quality standard that was the focus of air quality planning requirements after the promulgation of the 1990 Amendments to the Clean Air Act was a 1-hour standard. Since then, EPA has

promulgated a new 8-hour ozone air quality standard, and associated designation of nonattainment areas, which necessitates the initiation of new plans and regulatory actions.

40 CFR Part 81 specifies the designations of areas made under § 107(d) of the CAA and the associated nonattainment classification (if any) under § 181 of the CAA or 40 CFR 51.903(a), as applicable. On April 30, 2004 (69 FR 23858), EPA published its final decision as to the 8-hour nonattainment areas and associated classifications. The new designations are effective June 15, 2004. The Commonwealth of Virginia designations are in 40 CFR 81.347.

40 CFR Part 51, Subpart X, contains the provisions for the implementation of the 8-hour ozone NAAQS, along with the associated planning requirements. On April 30, 2004 (69 FR 23951), EPA published phase 1 of its final rule adding Subpart X to 40 CFR Part 51. Specifically, 40 CFR 51.903(a) sets forth the classification criteria and nonattainment dates for 8-hour ozone nonattainment areas once they are designated as such under 40 CFR Part 81. The remainder of the planning requirements (phase 2) will be promulgated by the end of 2004.

The state regulations established VOC and NO_x emissions control areas to provide the legal mechanism to define the geographic areas in which Virginia implements control measures to attain and maintain the air quality standards for ozone. The emissions control areas may or may not coincide with the nonattainment areas, depending on the necessity of the planning requirements.

General Federal Requirements

Sections 109 (a) and (b) of the Clean Air Act (CAA) require EPA to prescribe primary and secondary air quality standards to protect public health and welfare, respectively, for each air pollutant for which air quality criteria were issued before the enactment of the 1970 Clean Air Act. These standards are known as the National Ambient Air Quality Standards (NAAQS). Section 109 (c) requires the U.S. Environmental Protection Agency (EPA) to prescribe such standards simultaneously with the issuance of new air quality criteria for any additional air pollutant. The primary and secondary air quality criteria are authorized for promulgation under § 108.

Once the NAAQS are promulgated pursuant to § 109, § 107(d) sets out a process for designating those areas that are in compliance with the standards (attainment or unclassifiable) and those that are not (nonattainment). Governors provide the initial recommendations but EPA makes the final decision. Section 107(d) also sets forth the process for redesignations once the nonattainment areas are in compliance with the applicable NAAQS.

Section 110(a) of the CAA mandates that each state adopt and submit to EPA a plan which provides for the implementation, maintenance, and enforcement of each primary and secondary air quality standard within each air quality control region in the state. The state implementation plan shall be adopted only after reasonable public notice is given and public hearings are held. The plan shall include provisions to accomplish, among other tasks, the following:

(1) establish enforceable emission limitations and other control measures as necessary to comply with the provisions of the CAA, including economic incentives such as fees, marketable permits, and auctions of emissions rights;

(2) establish schedules for compliance;

(3) prohibit emissions which would contribute to nonattainment of the standards or interference with maintenance of the standards by any state; and

(4) require sources of air pollution to install, maintain, and replace monitoring equipment as necessary and to report periodically on emissions-related data.

40 CFR Part 50 specifies the NAAQS: sulfur dioxide, particulate matter, carbon monoxide, ozone (its precursors are nitrogen oxides and volatile organic compounds), nitrogen dioxide, and lead.

40 CFR Part 51 sets out requirements for the preparation, adoption, and submittal of state implementation plans. These requirements mandate that any such plan shall include several provisions, including those summarized below.

Subpart G (Control Strategy) specifies the description of control measures and schedules for implementation, the description of emissions reductions estimates sufficient to attain and maintain the standards, time periods for demonstrations of the control strategy's adequacy, an emissions inventory, an air quality data summary, data availability, special requirements for lead emissions, stack height provisions, and intermittent control systems.

Subpart K (Source Surveillance) specifies procedures for emissions reports and record-keeping, procedures for testing, inspection, enforcement, and complaints, transportation control measures, and procedures for continuous emissions monitoring.

Subpart L (Legal Authority) specifies the requirements for legal authority to implement plans.

Section 51.230 under Subpart L specifies that each state implementation plan must show that the state has the legal authority to carry out the plan, including the authority to perform the following actions:

- (1) adopt emission standards and limitations and any other measures necessary for the attainment and maintenance of the national ambient air quality standards;
- (2) enforce applicable laws, regulations, and standards, and seek injunctive relief;
- (3) abate pollutant emissions on an emergency basis to prevent substantial endangerment to the health of persons;
- (4) prevent construction, modification, or operation of a facility, building, structure, or installation, or combination thereof, which directly or indirectly results or may result in emissions of any air pollutant at any location which will prevent the attainment or maintenance of a national standard;
- (5) obtain information necessary to determine whether air pollution sources are in compliance with applicable laws, regulations, and standards, including authority to require record-keeping and to make inspections and conduct tests of air pollution sources;
- (6) require owners or operators of stationary sources to install, maintain, and use emission monitoring devices and to make periodic reports to the state on the nature and amounts of emissions from such stationary sources; and
- (7) make emissions data available to the public as reported and as correlated with any applicable emission standards or limitations.

Section 51.231 under Subpart L requires the identification of legal authority as follows:

- (1) the provisions of law or regulation which the state determines provide the authorities required under this section must be specifically identified, and copies of such laws or regulations must be submitted with the plan; and
- (2) the plan must show that the legal authorities specified in this subpart are available to the state at the time of submission of the plan.

Subpart N (Compliance Schedules) specifies legally enforceable compliance schedules, final compliance schedule dates, and conditions for extensions beyond one year.

Part D describes how nonattainment areas are established, classified, and required to meet attainment. Subpart 1 provides the overall framework of what nonattainment plans are to contain, while Subpart 2 provides more detail on what is required of areas designated nonattainment for ozone.

Section 171 defines "reasonable further progress," "nonattainment area," "lowest achievable emission rate," and "modification."

Section 172(a) authorizes EPA to classify nonattainment areas for the purpose of assigning attainment dates. Section 172(b) authorizes EPA to establish schedules for the submission of plans designed to achieve attainment by the specified dates. Section 172(c) specifies the provisions to be included in each attainment plan, as follows:

- (1) the implementation of all reasonably available control measures as expeditiously as practicable and shall provide for the attainment of the national ambient air quality standards;
- (2) the requirement of reasonable further progress;
- (3) a comprehensive, accurate, current inventory of actual emissions from all sources of the relevant pollutants in the nonattainment area;
- (4) an identification and quantification of allowable emissions from the construction and modification of new and modified major stationary sources in the nonattainment area;
- (5) the requirement for permits for the construction and operations of new and modified major stationary sources in the nonattainment area;
- (6) the inclusion of enforceable emission limitations and such other control measures (including economic incentives such as fees, marketable permits, and auctions of emission rights) as well as schedules for compliance;
- (7) if applicable, the proposal of equivalent modeling, emission inventory, or planning procedures; and
- (8) the inclusion of specific contingency measures to be undertaken if the nonattainment area fails to make reasonable further progress or to attain the national ambient air quality standards by the attainment date.

Section 172(d) requires that attainment plans be revised if EPA finds inadequacies. Section 172(e) authorizes the issuance of requirements for nonattainment areas in the event of a relaxation of any national ambient air quality standard. Such requirements shall provide for controls which are not less stringent than the controls applicable to these same areas before such relaxation.

Section 107(d)(3)(D) provides that a state may petition EPA to redesignate a nonattainment area as attainment and EPA may approve the redesignation subject to certain criteria being met. Section 107(d)(3)(E) stipulates one of these criteria, that EPA must fully approve a maintenance plan that meets the requirements of § 175A.

According to § 175A(a), the maintenance plan must be part of a SIP submission, and must provide for maintenance of the NAAQS for at least 10 years after the redesignation. The plan must contain any additional measures, as needed, to ensure maintenance. Section 175A(b) further requires that 8 years after redesignation, a maintenance plan for the next 10 years must then be submitted. As stated in § 175A(c), nonattainment requirements continue to apply until the SIP submittal is approved. Finally, § 175A(d) requires that the maintenance plan contain contingency provisions which will be implemented should the area fail to maintain the NAAQS as provided for in the original plan.

Under Part D, Subpart 2, § 181 sets forth the classifications and nonattainment dates for 1-hour ozone nonattainment areas once they are designated as such under § 107(d).

Section 182(a)(2)(A) requires that the existing regulatory program requiring reasonably available control technology (RACT) for stationary sources of volatile organic compounds (VOCs) in marginal nonattainment areas be corrected by May 15, 1991, to meet the minimum requirements in existence prior to the enactment of the 1990 amendments. RACT is the lowest emission limit that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility. EPA has published control technology guidelines (CTGs) for various types of sources, thereby defining the minimum acceptable control measure or RACT for a particular source type.

Section 182(b) requires stationary sources in moderate nonattainment areas to comply with the requirements for sources in marginal nonattainment areas. The additional, more comprehensive control measures in §182(b)(2)(A) require that each category of VOC sources employ RACT if the source is covered by a CTG document issued between enactment of the 1990 amendments and the attainment date for the nonattainment area. Section 182(b)(2)(B) requires that existing stationary sources emitting VOCs for which a CTG existed prior to adoption of the 1990 amendments also employ RACT.

Section 182(c) requires stationary sources in serious nonattainment areas to comply with the requirements for sources in both marginal and moderate nonattainment areas.

Section 182(d) requires stationary sources in severe nonattainment areas to comply with the requirements for sources in marginal, moderate and serious nonattainment areas.

Section 182(f) extends the requirements for the control of VOC emissions to emissions of NO_x.

40 CFR Part 81 specifies the designations of areas made under § 107(d) of the CAA and the associated nonattainment classification (if any) under § 181 of the CAA or 40 CFR 51.903(a), as applicable.

EPA has issued detailed guidance that sets out its preliminary views on the implementation of the air quality planning requirements applicable to nonattainment areas. This guidance is titled the "General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990" (or "General Preamble"). See 57 FR 13498 (April 16, 1992) and 57 FR 18070 (April 28, 1992). The General Preamble has been supplemented with further guidance on Title I requirements. See 57 FR 55621 (Nov. 25, 1992) (guidance on NO_x RACT requirements in ozone nonattainment areas). For this subject, the guidance provides little more than a summary and reiteration of the provisions of the Act.

On June 21, 2001, EPA issued formal guidelines for the "Ozone Flex Program." These guidelines set out eligibility requirements, what measures may be taken and how, and how localities, states and EPA are to develop and implement early reduction plans. On November 14, 2002, EPA issued a schedule for 8-hour ozone designations and its effect on early action compacts for potential 8-hour nonattainment areas.

40 CFR Part 51, Subpart X, contains the provisions for the implementation of the 8-hour ozone NAAQS, along with the associated planning requirements. Specifically, 40 CFR 51.903(a) sets forth the classification criteria and nonattainment dates for 8-hour ozone nonattainment areas once they are designated as such under 40 CFR Part 81.

State Requirements

These specific amendments are not required by state mandate. Rather, Virginia's Air Pollution Control Law gives the State Air Pollution Control Board the discretionary authority to promulgate regulations "abating, controlling and prohibiting air pollution throughout or in any part of the Commonwealth" (§ 10.1-1308). The law defines such air pollution as "the presence in the outdoor atmosphere of one or more substances which are or may be harmful or injurious to human health, welfare or safety, to animal or plant

life, or to property, or which unreasonably interfere with the enjoyment by the people or life or property" (§ 10.1-1300).

Substance

Please detail any changes that will be proposed. For new regulations, include a summary of the proposed regulatory action. Where provisions of an existing regulation are being amended, explain how the existing regulation will be changed.

The primary change will be to expand the regulatory scope of the VOC and NOx emissions control areas (9 VAC 5-20-206) to include the new 8-hour ozone nonattainment areas. The secondary change will be to make any other changes to the applicability of the VOC and NOx control measures in 9 VAC 5 Chapter 40 that may be necessary to accommodate compliance with federal requirements and to attain and maintain the 8-hour ozone air quality standard.

Currently, Chapter 40 of the Regulations for the Control and Abatement of Air Pollution contains a number of articles with VOC emission standards. The geographic applicability of these articles is defined by establishing VOC emissions control areas (in a list located in 9 VAC 5-20-206 of Chapter 20). Chapter 40 also contains a rule (Article 4) that establishes a process for making case-by-case control technology determinations for major sources of VOC and NOx. The geographic applicability of this article is defined by the VOC emissions control areas, as well as NOx emissions control areas. The articles containing VOC and NOx control measures found in Chapter 40 are as follows:

- Article 4 - General Process Operations (Sections 300 and 310)
- Article 5 - Synthesized Pharmaceutical Products Manufacturing Operations (Section 430)
- Article 6 - Rubber Tire Manufacturing Operations (Section 580)
- Article 11 - Petroleum Refinery Operations (Section 1390)
- Article 24 - Solvent Metal Cleaning Operations Using Non-halogenated Solvents (Section 3260)
- Article 25 - Volatile Organic Compound Storage and Transfer Operations (Section 3410)
- Article 26 - Large Appliance Coating Application Systems (Section 3560)
- Article 27 - Magnet Wire Coating Application Systems (Section 3710)
- Article 28 - Automobile And Light Duty Truck Coating Application Systems (Section 3860)
- Article 29 - Can Coating Application Systems (Section 4010)
- Article 30 - Metal Coil Coating Application Systems (Section 4160)
- Article 31 - Paper and Fabric Coating Application Systems (Section 4310)
- Article 32 - Vinyl Coating Application Systems (Section 4460)
- Article 33 - Metal Furniture Coating Application Systems (Section 4610)
- Article 34 - Miscellaneous Metal Parts and Products Coating Application Systems (Section 4760)
- Article 35 - Flatwood Paneling Coating Application Systems (Section 4910)
- Article 36 - Flexographic, Packaging Rotogravure and Publication Rotogravure Printing Lines (Section 5060)
- Article 37 - Petroleum Liquid Storage and Transfer Operations (Section 5200)
- Article 39 - Asphalt Paving Operations (Section 5490)
- Article 42 - Portable Fuel Container Spillage Control (Section 5700)
- Article 43 - Municipal Solid Waste Landfills (Section 5800)
- Article 47 - Solvent Cleaning (Section 6820)
- Article 48 - Mobile Equipment Repair and Refinishing (Section 6970)
- Article 49 - Architectural and Industrial Maintenance Coatings (Section 7120)
- Article 50 - Consumer Products (Section 7240)
- Article 53 - Lithographic Printing Processes (Section 7800)

Alternatives

Please describe all viable alternatives to the proposed regulatory action that have been or will be considered to meet the essential purpose of the action. Also, describe the process by which the agency has considered or will consider, other alternatives for achieving the need in the most cost-effective manner.

Alternatives to the proposed regulation amendments are being considered by the Department. The Department has tentatively determined that the first alternative is appropriate, as it is the least burdensome and least intrusive alternative that fully meets the purpose of the regulatory action. The alternatives being considered by the Department, along with the reasoning by which the Department has rejected any of the alternatives being considered, are discussed below.

1. Amend the regulations to satisfy the provisions of the law and associated regulations and policies. This option is being selected because it meets the stated purpose of the regulatory action: to allow Virginia to meet its obligation to implement control measures in areas designated as nonattainment under the 8-hour ozone standard, thus protecting public health and welfare.

2. Make alternative regulatory changes to those required by the provisions of the law and associated regulations and policies. This option is not being selected because it would be contrary to the requirements of the Clean Air Act. This alternative included consideration of a cap and trade program. As explained above, control measures contained in SIPs usually fall into two categories: those mandated by the Act or federal government and those selected at the discretion of the state. This regulatory action is being initiated to meet a specific requirement of the Clean Air Act, where the state does not have discretion. Furthermore, because of the complexity of federal guidance and the stringency of federal oversight on emissions trading, the development of a cap-and-trade program would take years longer to develop and implement than will the regulations, with VOC emissions remaining unreduced in the meantime. Finally, while cap and trade programs are fairly easy to implement for larger stationary sources, application of such programs to smaller sources poses unique challenges requiring even more resources and time to establish and implement. Finally, unlike the current national acid rain and NOx trading programs, the state would not have the assistance of EPA in the implementation and would have to summon up the resources to implement and maintain the program on its own.

3. Take no action to amend the regulations and continue to operate under the existing regulatory program. This option is not being selected because it would allow the current emissions levels in nonattainment areas to be maintained and possibly increase, to the detriment of public health and welfare. If a state does not prepare such a plan, or EPA does not approve a submitted plan, then EPA itself is empowered to take the necessary actions to attain and maintain the air quality standards--that is, it would have to promulgate and implement an air quality plan for that state. EPA is also, by law, required to impose sanctions in cases where there is no approved plan or the plan is not being implemented, the sanctions consisting of loss of federal funds for highways and other projects and/or more restrictive requirements for new industry.

Public Participation

Please indicate the agency is seeking comments on the intended regulatory action, to include ideas to assist the agency in the development of the proposal and the costs and benefits of the alternatives stated in this notice or other alternatives. Also indicate whether a public meeting is to be held to receive comments on this notice. Indicate that: (1) the agency is not holding a public meeting because the agency has authorized proceeding without holding a meeting or (2) the agency is holding a meeting. If a public

meeting is to be held, indicate that the date, time and place of the meeting may be found in the calendar of events section of the Virginia Register of Regulations.

The Department is soliciting comments on (i) the intended regulatory action, to include ideas to assist the Department in the development of the proposal, (ii) the impacts of the proposed regulation on farm and forest land preservation, and (iii) the costs and benefits of the alternatives stated in this notice or other alternatives. All comments must be received by the Department by 5:00 p.m. on the day of the public meeting (see information below) in order to be considered. It is preferred that all comments be provided in writing to the Department, along with any supporting documents or exhibits; however, oral comments will be accepted at the meeting. Comments may be submitted by mail, facsimile transmission, e-mail, or by personal appearance at the meeting, but must be submitted to Gary Graham, Environmental Consultant, Office of Air Regulatory Development, Department of Environmental Quality, P.O. Box 10009, Richmond, Virginia, 23240 (e-mail: gegraham@deq.virginia.gov) (fax number: 804-698-4510). Comments by facsimile transmission will be accepted only if followed by receipt of the signed original within one week. Comments by e-mail will be accepted only if the name, address and phone number of the commenter are included. All testimony, exhibits and documents received are a matter of public record. Only comments (i) related to the information specified in this notice and (ii) provided in accordance with the procedures specified in this notice will be given consideration in the development of the proposed regulation amendments.

A public meeting will be held by the Department to receive comments on and to discuss the intended action. Information on the date, time, and place of the meeting is published in the Calendar of Events section of the Virginia Register. Unlike a public hearing, which is intended only to receive testimony, this meeting is being held to discuss and exchange ideas and information relative to regulation development.

Participatory Approach

Please indicate the extent to which an ad hoc advisory group will be used in the development of the proposed regulation. Indicate that: (1) the agency is not using the participatory approach in the development of the proposal because the agency has authorized proceeding without using the participatory approach; (2) the agency is using the participatory approach in the development of the proposal; or (3) the agency is inviting comment on whether to use the participatory approach to assist the agency in the development of a proposal.

Subject to the stipulations noted below, the Department will form an ad hoc advisory group to assist in the development of the regulation. If you want to be on the group, notify the agency contact in writing by 5:00 p.m. the last day of the comment period and provide your name, address, phone number and the organization you represent (if any). Notification of the composition of the ad hoc advisory group will be sent to all applicants. If you want to be on the group, you are encouraged to attend the public meeting mentioned above. The primary function of the group is to develop recommended regulation amendments for Department consideration through the collaborative approach of regulatory negotiation and consensus. At its discretion, the Department may dispense with the use of an ad hoc advisory group if it receives less than five applications. Multi-applications from a single company, organization, group or other entity count as one for purposes of making the decision specified in the preceding sentence.

Impact on Family

Please provided an assessment of the potential impact of the proposed regulatory action on the institution of the family and family stability including to what extent the regulatory action will: (1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; (2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; (3) strengthen or erode the marital commitment; and (4) increase or decrease disposable family income.

It is not anticipated that these regulation amendments will have a direct impact on families. However, there will be positive indirect impacts in that the regulation amendments will ensure that the Commonwealth's air pollution control regulations will function as effectively as possible, thus contributing to reductions in related health and welfare problems.

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