



Notice of Intended Regulatory Action (NOIRA) Agency Background Document

Approving authority name	State Air Pollution Control Board
Primary action	Article 6 (9 VAC 5-80-1100 et seq.) of Part II of 9 VAC 5 Chapter 80
Secondary action(s)	9 VAC 5-50-260
Regulation title	Regulations for the Control and Abatement of Air Pollution
Action title	Permits for New and Modified Sources (Rev. H05)
Document preparation date	October 4, 2005

This information is required for executive review and the Virginia Registrar of Regulations, pursuant to the Virginia Administrative Process Act, Executive Orders 21 (2002) and 58 (1999), and the *Virginia Register Form, Style, and Procedure Manual*.

Purpose

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

The purpose of the proposed action is to simplify the minor new source review program requirements and reduce the complexity of the permit program, as well as, revise program requirements based on implementation experience. This action takes the place of Revision K04 that was withdrawn by the State Air Pollution Control Board at its meeting on September 26, 2006.

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. 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. Delineate any potential issues that may need to be addressed as the proposal is developed.

Identification of Specific Requirements Establishing the Need

Article 6 provides a procedural and legal basis for issuing new source review (NSR) permits for proposed new or expanded facilities that do not otherwise qualify for review under the major source NSR program. This minor source NSR (MNSR) regulation (i) enables the agency to conduct a preconstruction review in order to determine compliance with applicable control technology and other standards, (ii) requires the agency to assess the impact of the emissions from the facility on air quality, and (iii) provides a state and federally enforceable mechanism to enforce permit program requirements. The regulation also provides the basis for the agency's final action (approval or disapproval) on the permit depending upon the results of the preconstruction review.

The current program uses a permit applicability approach that looks at the emissions changes from a source wide perspective to determine applicability. Applicability is based on the net emissions increase (NEI) in actual emissions based on all the source wide emissions changes due to or directly resultant from the physical or operational changes. Netting involves considering the emissions increases and decreases from all of the source wide emissions changes from the affected units in the project. To lower the net emissions increase at an expanding or modernizing source below levels subject to permitting, an emission reduction credit (ERC) obtained at the same source may be used to avoid the requirements of new source review. An ERC is a surplus emission reduction approved by the agency in accordance with the requirements of the current regulations which represents a decrease in the quantity of a pollutant discharged from a source below the allowable emissions in the current regulations or any emission limit specified as a permit condition by the approving authority.

To assure that regulatory requirements are met, each transaction which allows the use of an ERC must be approved by the state and be federally enforceable. Means of making ERCs federally enforceable include SIP revisions, EPA-approved generic trading rules, and new source preconstruction permits issued by states under EPA-approved regulations, as well as construction permits issued by EPA. ERCs should be incorporated in an enforceable compliance instrument which requires recordkeeping based on the averaging period over which the NEI is operating, so it may easily be determined over any single averaging period that the ERC limits are being met.

In the new source review program, the netting concept is used primarily to avoid major NSR by using netting operations to avoid major NSR permit applicability. It works in major NSR due to the use of MNSR program as an underlying permit program to make the netting operations state and federally enforceable. While the netting concept, essential to determining applicability, works well in major NSR, it is not working in MNSR, primarily due to the lack of an underlying permit program to make the netting operations enforceable. Thus, there was no practical way to net out of MNSR permit applicability, as is the case with major NSR. In order to work within the intent of the netting concept, the Department promulgated procedures that would allow the netting concept to be used for BACT applicability. The MNSR permit itself then would become the vehicle to make the netting operations for BACT applicability determinations federally and state enforceable. It would also be used as a vehicle to place emission caps on emissions units potentially subject to BACT in order to legally maintain their emissions below the applicability thresholds for the BACT requirements. Using the netting concept resulted in some sources being able to avoid BACT; however, it also resulted in some sources having to use BACT on additional units, such as debottlenecked units. The result of using the NEI approach is increased complexity of the minor NSR program and the introduction of a new burden on both the agency and regulated community.

The revised program would base permit applicability on the uncontrolled emissions from only those emissions units that undergo a physical or operational change in the project. This approach was used

prior to the current regulation changes which resulted in the use of the NEI approach and is far simpler to implement and make permit applicability determinations.

The above changes are the primary reason for the proposed action and are intended to simplify the program requirements and reduce the complexity of the permit program. In addition, the implementation of the program over the previous three years has resulted in the considerable implementation experience. The agency will review this implementation experience and propose other program changes as appropriate.

General Planning Requirements

Among the primary goals of the 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, showing how the air pollution concentrations will be reduced to levels at or below these standards (i.e., attainment). Once the pollution levels are within the standards, the plan must also demonstrate how the state will maintain the air pollution concentrations at the reduced levels (i.e., maintenance).

A state implementation plan is the key to the 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 its requirements.

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 the air quality standards. Once the air quality standard is attained, the agency must have a program to continuously monitor air quality to ensure that it meets the standards. The agency must also have a means to monitor compliance by sources, to prevent the construction of a new or modified source if it will cause a violation of the air quality standards, and to take action as necessary to prevent air pollution levels in the air from creating an emergency condition. In addition, development and enforcement of regulations under the SIP must be continually pursued, as well as development of new plan revisions as federal laws and regulations change.

Most of the agency's regulations are designed to provide the means for implementing and enforcing control measures (primarily stationary source and some mobile source) necessary to carry out the SIP. The chief stationary source control measures are to establish emission standards for existing sources and to require a permit for new or modified sources. The new source review permit is the agency's means to limit the amount of pollutant from the source by means of new source performance standards, and in some cases, to determine its siting.

A key strategy for managing the growth of new emissions is the permit program for new and modified stationary sources. The basic program requires that owners obtain a permit from the agency prior to the

construction of a new industrial or commercial facility or the expansion of an existing one. Through preconstruction technology reviews and the issuance of permits, the agency ensures that new or modified facilities progressively minimize their adverse impact upon the air quality. Therefore, the implementation of new and modified source permit program, emission increases from new and expanding stationary sources can be managed so that affected areas can attain and maintain the air quality standards and accommodate growth.

The basic program (in existence since 1972) was later supplemented by mandate of the CAA with requirements that differ according to the facility's potential to emit a specified amount of a specific pollutant and the air quality status of the various areas within the state where the facility is or will be located. Requirements for facilities considered to be major due to their potential to emit a specified pollutant are more stringent than for less polluting facilities. Requirements for major facilities located or locating in those areas which have ambient air quality concentrations that have not been maintained at or below the health-based standard for a pollutant (nonattainment areas) are considerably more stringent than for those areas which have concentrations maintained at or below the standard (prevention of significant deterioration (PSD) areas). Permits issued in nonattainment areas require the facility owner to apply control technology that meets the lowest achievable emission rate and to obtain emission reductions from existing sources in the area such that the reductions offset the increases from the proposed facility by a ratio greater than one for the emissions contributing to the nonattainment situation. Permits issued in PSD areas require the facility owner to employ control technology that is the best available and, in some cases, to monitor ambient air quality at the site where the facility will be located to determine ambient air background levels of the pollutants to be emitted.

The minor new source review (MNSR) program requires permits for new and modified stationary sources that do not qualify either as PSD or nonattainment area major sources. The MNSR program also includes exemption levels for exempting smaller sources from permit requirements even though the exempted sources, in some cases, must still meet any applicable emission standards.

This regulatory action replaces a previous regulatory action (Rev. K04), which was withdrawn by the Board on September 26, 2005.

Legal Requirements

Please identify the state and/or federal source of the legal requirements that necessitate promulgation of this proposal, 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.

Federal Requirements

Section 110(a) of the Clean Air Act (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 a program for the enforcement of the emission limitations and schedules for compliance; and

(3) establish programs for the regulation and permitting of the modification and construction of any stationary source within the areas covered by the plan to assure the achievement of the ambient air quality standards.

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, as summarized below.

Subpart F (Procedural Requirements) specifies definitions of key terms, stipulations and format for plan submission, requirements for public hearings, and conditions for plan revisions and federal approval.

Subpart G (Control Strategy) specifies the description of emissions reductions estimates sufficient to attain and maintain the standards, the description of control measures and schedules for implementation, 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 I (Review of New Sources and Modifications) specifies legally enforceable procedures, public availability of information on sources, identification of responsible agency, and administrative procedures.

Section 51.160 of Subpart I specifies that the plan must stipulate legally enforceable procedures that enable the permitting agency to determine whether the construction or modification of a facility, building, structure or installation, or combination of these will result in either a violation of any part of a control strategy or interference with attainment or maintenance of a national standard and, if such violation or interference would occur, the means by which the construction or modification can be prevented. The procedures must identify types and sizes of facilities, buildings, structures or installations which will be subject to review and discuss the basis for determining which facilities will be subject to review. The procedures must provide that owners of facilities, buildings, structures or installations must submit information on the nature and amounts of emissions and on the location, construction and operation of the facility. The procedures must ensure that owners comply with applicable control strategies after permit approval. The procedures must discuss air quality data and modeling requirements on which applications must be based.

Section 51.161 of Subpart I specifies that the permitting agency must provide opportunity for public comment on information submitted by owners and on the agency's analysis of the effect of construction or modification on ambient air quality, including the agency's proposed approval or disapproval. Section 51.161 also specifies the minimum requirements for public notice and comment on this information.

Section 51.162 of Subpart I specifies that the responsible agency must be identified in the plan.

Section 51.163 of Subpart I specifies that the plan must include administrative procedures to be followed in determining whether the construction or modification of a facility, building, structure or installation will violate applicable control strategies or interfere with the attainment or maintenance of a national standard.

Subpart L (Legal Authority) specifies identification of legal authority to implement plans and assignment of legal authority to local agencies.

Section 51.230 of 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) obtain information necessary to determine whether air pollution sources are in compliance with applicable laws, regulations, and standards, including authority to require recordkeeping and to make inspections and conduct tests of air pollution sources; and

(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.

Section 51.231 of 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 § 51.231 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 Subpart L are available to the state at the time of submission of the plan.

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 regulation applies to the construction or reconstruction of new stationary sources or expansions (modifications) to existing ones. Exemptions are provided for smaller facilities. With some exceptions, the owner must obtain a permit from the agency prior to the construction or modification of the source. The owner of the proposed new or modified source must provide information as needed to enable the agency to conduct a preconstruction review in order to determine compliance with applicable control technology and other standards and to assess the impact of the net emissions from the facility on air quality. The regulation also provides the basis for the agency's final action (approval or disapproval) on the permit depending upon the results of the preconstruction review. The regulation provides a source-wide perspective to determine applicability based upon the net emissions changes due to or directly resulting from the modification (physical or operational change). Procedures for making changes to permits are included. There are provisions which allow the use of a general permit. The regulation also allows consideration of additional factors for making Best Available Control Technology (BACT) determinations for sources subject to minor new source review.

The primary change being planned for the program is to convert from a permit applicability approach which looks at the net emissions increase due to or directly resultant from the physical or operational changes from all affected units in the project back to an approach that looks at emissions changes due to physical or operational changes at emissions units to determine applicability. Currently applicability is based on the net emissions increase in actual emissions based on all the source wide emissions changes due to or directly resultant from the physical or operational change. The proposed program would base permit applicability on the uncontrolled emissions from only those emissions units that undergo a physical or operational change in the project.

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 proposal 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 change the permit applicability approach of the permit program while satisfying the provisions of the law and associated regulations and policies. This option was chosen because it meets the stated purpose of the regulation: to simplify the program requirements and reduce the complexity of the permit program.
2. Make alternative regulatory changes to those required by the provisions of the law and associated regulations and policies. This option was not chosen because it the regulation needs to be remain consistent with current federal requirements and the state objectives for the permit program.
3. Take no action to amend the regulations and continue to use the regulation in its current state. This option was not chosen because, without change, needless resources by the business community and department would be expended in implementing the permit program.

Public Participation

Please indicate the agency is seeking comments on the intended regulatory action, to include (i) ideas to assist in the development of the proposal, (ii) the costs and benefits of the alternatives stated in this document or other alternatives, and (iii) the effects of the proposal on farm and forest land preservation. Indicate that the agency is also seeking information on impacts on small businesses. Also indicate whether a public meeting is to be held to receive comments on this notice. 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 the intended regulatory action, including but not limited to (i) ideas to assist in the development of the proposal, (ii) the costs and benefits of the alternatives stated in this document or other alternatives, and (iii) the effects of the proposal on farm and forest land preservation. The Department is also seeking information on impacts on small businesses as defined in § 2.2-4007.1 of the Code of Virginia. Information may include (i) projected reporting, recordkeeping and

other administrative costs, (ii) probable effect of the proposal on affected small businesses, and (iii) description of less intrusive or costly alternative methods of achieving the purpose of the regulatory action.

The Department accepts written comments by e-mail, facsimile transmission and postal mail. In order to be considered, written comments must include the full name, address and telephone number of the person commenting and be received by Department by 5:00 p.m. on the last day of the comment period. Due to problems with the quality of facsimile transmissions, commenters are encouraged to provide the signed original by postal mail within one week. Both oral and written comments are accepted at the public meeting. The Department prefers that comments be provided in writing, along with any supporting documents or exhibits. All testimony, exhibits and documents received are part of the public record.

All comments requested by this document must be submitted to the agency contact: Gary Graham, Environmental Analyst, 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). Requests for documents and additional information may also be submitted to the agency contact.

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. Both oral and written comments may be submitted at that time. 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 development of the proposal.

Participatory Approach

Please indicate the extent to which an ad hoc advisory group will be used in the development of the proposal. 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.

The Department will form an ad hoc advisory group to assist in the development of the proposal. If you want to be on the group, notify the agency contact in writing by the end of the comment period and provide your name, address, phone number and the organization you represent (if any). Multi-applications from a single company, organization, group or other entity count as one for purposes of making a decision through the collaborative approach. 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 a proposal for Department consideration through the collaborative approach of regulatory negotiation and consensus.

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 the proposal will have a direct impact on families. However, there will be positive indirect impacts in that the proposal 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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