



Periodic Review / Retain Regulation Agency Background Document

Agency name	State Air Pollution Control Board
Virginia Administrative Code (VAC) citation	9VAC5-140
Regulation title	NO _x Budget Trading Program (Part I of Regulation for Emissions Trading)
Document preparation date	March 15, 2013

This form is used when the agency has done a periodic review of a regulation and plans to retain the regulation without change. This information is required pursuant to Executive Orders 14 (2010) and 58 (1999).

Legal basis

Please identify the state and/or federal legal authority for the regulation, including (1) the most relevant law and/or regulation, and (2) promulgating entity, i.e., agency, board, or person.

Section 10.1-1322.3 of the Code of Virginia indicates that the Board may promulgate regulations to provide for an emissions trading program to achieve and maintain the NAAQS. The banking and trading program shall result in net air emission reductions, create economic incentive for reducing air emissions and allow for economic growth. In developing the regulations, the Board shall consider (i) the definition and use of emissions reduction credits from mobile and stationary sources, (ii) offsets, (iii) interstate or regional trading, (iv) mechanisms needed to facilitate trading and banking, and (v) emissions allocations. However, no regulation shall prohibit the direct trading of credits or allowances between private industries provided such trades do not adversely impact air quality in Virginia.

Promulgating Entity

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

Federal Requirements

Sections 109 (a) and (b) of the Clean Air Act require EPA to prescribe national air quality standards (NAAQS) for each air pollutant for which air quality criteria were issued before the enactment of the 1970 Clean Air Act. The standards fall into two categories, primary standards to protect public health and secondary standards to protect public welfare. Section 109 (c) requires 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 Section 108. The criteria for each pollutant shall include, to the extent practicable, information on the following:

1. Variables which may adversely affect the impact of an air pollutant on public health or welfare;
2. Pollutants which may interact with other pollutants to produce an adverse effect on public health or welfare; and
3. Any known or anticipated adverse effects on public health or welfare.

Section 302 (h) defines effects on public welfare as including, but not limited to, effects on soils, water, vegetation, man-made materials, animals, weather, visibility. Also included are damage to and deterioration of property, hazards to transportation, and adverse effects on economic values, personal comfort, and well-being.

Section 110(a) of the Clean Air Act 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 Act, 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;
3. Prohibit emissions which would contribute to nonattainment of the standards or interference with maintenance of the standards by any state;
4. Insure compliance with the requirements of §§ 126 and 115 of the Act, which relate to interstate and international pollution abatement;
5. Provide for the revision of the plan as necessary to incorporate a revision to federal law or regulation; and
6. Provide for the revision of the plan as necessary to remedy any findings of inadequacy by EPA.

Section 110(k)(5) provides the EPA administrator with the authority to issue "SIP calls". If the administrator finds that the applicable implementation plan for any area is substantially inadequate to attain or maintain the relevant national ambient air quality standard, the administrator shall require the state to revise the plan as necessary to correct such inadequacies. The administrator shall notify the state of the inadequacies and may establish reasonable deadlines (not to exceed 18 months after the date of such notice) for the submission of such plan revisions. Any such finding shall subject the state to the requirements of the Act to which the state was subject when it developed and submitted the plan for which the finding was made, except that the administrator may adjust any applicable dates as appropriate (except for attainment dates, unless these have elapsed).

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.

Section 51.121 requires specific jurisdictions to revise their State Implementation Plans to prohibit sources and other activities from emitting nitrogen oxides (NO_x) in amounts that will contribute significantly to nonattainment in one or more other states with respect to the 1-hour ozone national ambient air quality standard (NAAQS). Paragraph (a)(1) stipulates that the EPA Administrator has made a finding that 22 jurisdictions have substantially inadequate State Implementation Plans (SIPs) to comply with requirements of the Clean Air Act that address interstate transport of nitrogen oxides in amounts that will contribute significantly to nonattainment in one or more other States with respect to the 1-hour ozone national ambient air quality standards.

Paragraph (b) requires that the SIP revisions include control measures to limit the amount of NO_x so that the jurisdiction's budget is not exceeded. The control measures must be implemented no later than May 1, 2003, paragraph (b)(1)(ii). An interstate trading program may be included in the SIP according to paragraph (b)(2), provided the revision contains: (i) a prohibition of NO_x emissions in excess of the jurisdiction's budget, (ii) emissions reductions used to demonstrate compliance occur during the ozone season, and (iii) reductions occurring prior to the year 2003 may be used by a source to demonstrate compliance with the SIP for the 2003-2004 ozone season provided specific criteria are met or if not needed to demonstrate compliance, may be banked and used to demonstrate compliance with the SIP in a subsequent ozone season, paragraph (b)(2)(i) and (ii)(A)-(E).

All implementation dates referenced above were delayed by one year by the United States Court of Appeals for the District of Columbia Circuit.

The states subject to §51.121 are specifically identified, paragraph (c). The states must submit a SIP revision to impose enforceable mechanisms to assure that, collectively, all sources identified in the state's budget will not exceed the NO_x emissions projected for the year 2007 ozone season, paragraph (e). The section also identifies each state's NO_x budget, expressed in tons, paragraph (e)(2).

Each SIP revision must identify control measures for sources subject to the state budget, paragraph (f), and must identify procedures for monitoring compliance with the control measures, procedures for handling violations and a designation of the agency responsible for implementation and enforcement of the SIP revision, paragraph (f) (1) (i)-(iii). The SIP revision must also address the following: demonstrate that the control measures contained in the SIP are adequate to provide for compliance with the 2007 NO_x budget, paragraph (g); meet requirements for data availability, paragraph (h); provide for monitoring the status of compliance, paragraph (i); show that the State has legal authority to carry out all provisions of the SIP and provide copies of such documents with the submittal to EPA, paragraphs (j) and (k); demonstrate the authority to assign legal authority to local agencies according to specific criteria, paragraph (l); and demonstrate adequate resources are available to implement the SIP, paragraph (m).

The section also provides EPA authority to implement sanctions according to section 179(a)(1)-(4) of the Clean Air Act for failure to submit a required SIP revision, paragraph (n). If the state chooses, it may adopt 40 CFR Part 96 (the model NO_x budget trading program for SIPs). The State's SIP revision will be automatically approved if this option is chosen, paragraph (p).

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.

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; and
2. Enforce applicable laws, regulations, and standards, and seek injunctive relief.

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.

Alternatives

Please describe all viable alternatives for achieving the purpose of the existing regulation that have been considered as part of the periodic review process. Include an explanation of why such alternatives were rejected and why this regulation is the least burdensome alternative available for achieving the purpose of the regulation.

Alternatives to the proposal have been considered by the Department. The Department has determined that the retention of the regulation (the first alternative) is appropriate, as it is the least burdensome and least intrusive alternative that fully meets statutory requirements and the purpose of the regulation. The alternatives considered by the Department, along with the reasoning by which the Department has rejected any of the alternatives considered, are discussed below.

1. Retain the regulation without amendment. This option is being selected because the current regulation provides the least onerous means of complying with the minimum requirements of the legal mandates.
2. Make alternative regulatory changes to those required by the provisions of the legally binding state and federal mandates, and associated regulations and policies. This option was not selected because it could result in the imposition of requirements that place unreasonable hardships on the regulated community without justifiable benefits to public health and welfare.
3. Repeal the regulation or amend it to satisfy the provisions of legally binding state and federal mandates. This option was not selected because the regulation is effective in meeting its goals and already satisfies those mandates.

Public comment

Please summarize all comments received during the public comment period following the publication of the Notice of Periodic Review, and provide the agency response. Please indicate if an informal advisory group was formed for purposes of assisting in the periodic review.

No comments were received. No informal advisory group was formed for purposes of assisting in the periodic review.

Effectiveness

Please indicate whether the regulation meets the criteria set out in Executive Order 14 (2010), e.g., is necessary for the protection of public health, safety, and welfare, and is clearly written and easily understandable.

The regulation is necessary for the protection of public health and welfare, as it is needed to meet the primary goals of the federal Clean Air Act: 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 federal Clean Air Act gives the U.S. Environmental Protection Agency (EPA) the authority to establish the NAAQS, which are designed to protect the health of the general public with an adequate margin of safety. The NAAQS establish the maximum limits of pollutants that are permitted in the ambient air. The Act 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 reduced levels (i.e., maintenance).

The Act has 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. There are five nonattainment area classifications called 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 its own class. 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 Northern Virginia Ozone Nonattainment Area was originally classified as serious and therefore has to meet the requirements for the marginal, moderate, and serious classes.

The Act contains comprehensive air quality planning requirements for areas that do not attain the federal air quality standard for ozone (that is, nonattainment areas). Once the nonattainment areas were defined, each state was then obligated to submit a SIP revision or plan demonstrating how it will attain the air quality standard in each nonattainment area. Failure to develop adequate plans to meet the ozone air quality standard: (i) will result in the continued violations of the standard, (ii) may result in assumption of air quality programs by EPA at which time the Commonwealth would lose authority over matters affecting its citizens, and (iii) may result in the implementation of sanctions by EPA, such as more restrictive requirements on new major industrial facilities and loss of federal funds for highway construction.

The heart of the plan is the control strategy. The control strategy describes the 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 emissions primarily from commercial/industrial facilities and operations. Mobile source control measures are directed at tailpipe and other emissions from motor vehicles, and transportation source control measures affect motor vehicle location and use. The Act encourages the use of market-based programs to facilitate the attainment of the milestones and goals in the SIP. One market-based program to assist in meeting these goals is emissions trading.

Emissions trading consists of bubbles, netting, offsetting and emissions reduction credit banking. These steps involve the creation of surplus emissions reduction credits at sources of air pollution for use to meet SIP

air pollution control requirements by the same or other sources. The source creating the emission reduction credit could either sell (trade) the credit to another source or store (bank) the credit for later use or sale. Such a program can provide more flexibility to meet environmental requirements, thus reducing costs and encouraging faster compliance. Moreover, the development of generic trading rules enables states to expedite the attainment of SIP goals and eliminates the need for case-by-case review of emission trading projects. New and existing sources can take advantage of emissions trading. In order to obtain an air quality permit in some air quality areas, new industry and existing industry that is significantly expanding or modifying its operations must find credits to offset the amount of new pollution released so there is no net increase in pollution levels in the area.

Properly utilized, emissions trading can provide more flexibility for both new and existing industry to meet environmental requirements, while reducing pollution control costs and encouraging faster compliance with regulatory requirements. Emissions trading can also provide an incentive for industry to install innovative pollution control equipment and increase pollution prevention efforts.

Many areas within the eastern half of the United States petitioned EPA regarding their inability to achieve the ozone standard due to significant amounts of ozone and oxides of nitrogen (NO_x), a precursor to ozone, being transported across state boundaries. EPA made a determination (Finding of Significant Contribution and Rulemaking for Certain States in the Ozone Transport Assessment Group Region for Purposes of Reducing Regional Transport of Ozone; 63 FR 57356, October 27, 1998) that sources in 22 states and the District of Columbia emitted NO_x in amounts that significantly contribute to nonattainment of the ozone NAAQS in one or more downwind states. EPA also required that each of the affected upwind jurisdictions (sometimes referred to as upwind states) submit SIP revisions prohibiting those amounts of NO_x emissions which significantly contribute to downwind air quality problems. Virginia was included as one of the upwind states.

The rulemaking, known as the NO_xSIP call rule (40 CFR 51.121), also includes statewide NO_x emissions budget levels that each state must achieve by the year 2007. Furthermore, the NO_x SIP call rule identifies specific source categories that are covered by the budget. Failure to achieve the budget will result in a Federal Implementation Plan (FIP) for which EPA has also published a Notice of Proposed Rulemaking (63 FR 56394, October 21, 1998).

The NO_x SIP Call final rule identifies 22 jurisdictions as having substantially inadequate SIPs to comply with requirements of the Clean Air Act that address interstate transport of nitrogen oxides in amounts that will contribute significantly to nonattainment in one or more other States with respect to the 1-hour ozone national ambient air quality standards. It mandates that, for each jurisdiction identified, a SIP revision must be submitted to EPA that imposes enforceable mechanisms to assure that, collectively, all sources identified in the budget, will not exceed the NO_x emissions projected for the year 2007 ozone season. The SIP revisions must include control measures to limit the amount of NO_x so that the jurisdiction's budget is not exceeded. The control measures must be implemented no later than May 1, 2003 (later adjusted by the United States Court of Appeals for the District of Columbia Circuit to May 31, 2004). Emission reductions used to demonstrate compliance with the revision must occur during the ozone season. The revision must include a description of enforcement methods including monitoring compliance with each selected control measure and procedures for handling violations. For large electric generators and industrial boilers, the control measures must include a NO_x mass emissions cap on each source, and impose a NO_x emission rate so that the State can comply with the 2007 ozone NO_x budget.

The NO_x SIP call rule permits the states to include an allowance trading program as an option in their SIP revisions. This element is allowed under 40 CFR 51.121(p) and is contained in 40 CFR Part 96 of the NO_x SIP Call rule. The allowance trading system is very similar to the emissions trading system described above in this notice except the geographic area is different and the pollutant and sources covered are limited as described in the preceding paragraph. For this reason the allowance trading system is classified as a closed market trading system.

Since the NO_x SIP call rule was originally established, there have been numerous changes to the emissions trading program. However, these changes have been the subject of considerable litigation, and many newer components of the program cannot be implemented. It is important that the NO_x SIP call rule be retained in order for the emissions trading program to continue to function until more recent emissions trading program requirements are finally resolved.

This regulation has been effective in protecting public health and welfare with the least possible cost and intrusiveness to the citizens and businesses of the Commonwealth, ensuring that owners comply with air pollution emission limits and control technology requirements in order to control levels of NO_x emissions being emitted into the ambient air, and prohibiting emissions that would contribute to nonattainment of the national air quality standards or interference with maintenance of those standards.

The Department has determined that the regulation is clearly written and easily understandable by the individuals and entities affected. It is written so as to permit only one reasonable interpretation, to adequately identify the affected entity, and, insofar as possible, in non-technical language.

Result

Please state that the agency is recommending that the regulation should stay in effect without change.

This regulation satisfies the provisions of the law and legally binding state and federal requirements, and is effective in meeting its goals; therefore, the regulation is being retained without amendment.

Small business impact

In order to minimize the economic impact of regulations on small business, please include, pursuant to § 2.2-4007.1 E and F, a discussion of the agency's consideration of: (1) the continued need for the regulation; (2) the nature of complaints or comments received concerning the regulation from the public; (3) the complexity of the regulation; (4) the extent to which the regulation overlaps, duplicates, or conflicts with federal or state law or regulation; and (5) the length of time since the regulation has been evaluated or the degree to which technology, economic conditions, or other factors have changed in the area affected by the regulation. Also, include a discussion of the agency's determination whether the regulation should be amended or repealed, consistent with the stated objectives of applicable law, to minimize the economic impact of regulations on small businesses.

The regulation continues to be needed. It provides sources with the most cost-effective means of fulfilling ongoing state and federal requirements that protect air quality.

The regulation's level of complexity is appropriate to ensure that the regulated entities are able to meet their legal mandates as efficiently and cost-effectively as possible.

The regulation does not overlap, duplicate, or conflict with any state law or other state regulation.

Part 1 was last reviewed in 2008. In that time, it has generally become less expensive to characterize, measure, and mitigate the regulated pollutants that contribute to poor air quality. The regulations continue to provide the most efficient and cost-effective means to determine the level and impact of excess emissions, to enforce permit and regulatory requirements, and thereby to control those excess emissions.

The Department, through examination of the regulation, has determined that the regulatory requirements currently minimize the economic impact of emission control regulation on small businesses and thereby

minimize the impact on existing and potential Virginia employers and their ability to maintain and increase the number of jobs in the Commonwealth.

Family impact

Please provide an analysis of the regulation's impact on the institution of the family and family stability.

It is not anticipated that the regulation will have a direct impact on families.