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Periodic Review and Small Business Impact Findings Where Result is "Retain the Regulation As Is" Agency Background Document

Agency name	State Air Pollution Control Board
Virginia Administrative Code (VAC) citation	9VAC5 – 50, New and Modified Stationary Sources: Part I, Special Provisions Part II, Emission Standards: Article 1, Standards of Performance for Visible Emissions and Fugitive Dust/Emissions Article 2, Standards of Performance for Odorous Emissions Article 4, Standards of Performance for Stationary Sources
Regulation title	Regulations for the Control and Abatement of Air Pollution
Date	July 19, 2018

This information is required pursuant to Executive Order 17 (2014) 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 10.1-1308 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.

Promulgating Entity

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

Federal Requirements

For Part I, Special Provisions and Part II, Articles 1 and 4:

Section 110(a) of the federal 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 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.

For Part I, Special Provisions:

Section 110(j) of the CAA specifies that, as a condition for issuance of any permit required under this title, the owner or operator of each new or modified stationary source which is required to obtain such a permit must show to the satisfaction of the permitting authority that the technological system of continuous emission reduction which is proposed will enable the source to comply with the standards of performance which are to apply to the source and that the construction or modification and operation of the source will be in compliance with all other requirements of the CAA.

For Part I, Special Provisions and Part II, Article 4:

Section 123 of the CAA establishes the criteria for determining the stack height for stationary sources of air pollution in existence before 1970. Specifically the section requires that "the degree of emission limitation required of any source for control of any air pollutant under an applicable implementation plan...must not be affected in any manner by:

1. So much of any source's stack height that exceeds good engineering practice (as determined under regulations promulgated by the Administrator), or
2. Any other dispersion technique."

For purposes of this section the term "dispersion technique" includes any intermittent or supplemental control of air pollutants varying with atmospheric conditions. Good engineering practice means, with respect to stack height, the height necessary to insure that emissions from the stack do not result in excessive concentrations of any pollutant in the immediate vicinity of the source as a result of atmospheric downwash, eddies and wakes which may be created by the source itself, nearby structures or nearby terrain obstacles.

For Part I, Special Provisions and Part II, Articles 1 and 4:

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 of 40 CFR Part 51 (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.

For Part I, Special Provisions and Part II, Article 4:

Section 51.118 of Subpart G sets out stack height requirements. Section 51.118 requires that the plan submitted by the state must provide that "the degree of emission limitation required of any source for control of any air pollutant must not be affected by so much of any source's stack height that exceeds good engineering practice or by any other dispersion technique." Facilities with stacks in existence after December 31, 1970 must follow good engineering practice.

For Part I, Special Provisions and Part II, Articles 1 and 4:

Subpart I of 40 CFR Part 51 (Review of New Sources and Modifications) specifies legally enforceable procedures, public availability of information on sources, identification of responsible agency, administrative procedures, stack height procedures, permit requirements, and requirements for prevention of significant deterioration of air quality.

Subpart K of 40CFR Part 51 (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 of 40 CFR Part 51 (Legal Authority) specifies that the state implementation plan must show that the state has legal authority to implement the plans, including the authority to:

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: (i) 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 (ii) 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 of 40 CFR Part 51 (Compliance Schedules) specifies legally enforceable compliance schedules, final compliance schedule dates, and conditions for extensions beyond one year.

For Part I, Special Provisions:

Appendix M (Recommended Test Methods for State Implementation Plans) of Part 51 provides recommended test methods for measuring air pollutants which a state may choose to meet the requirements of Subpart K. The state may also choose to meet the requirements of Subpart K through any of the relevant methods in Appendix A to 40 CFR Part 60 or any other method that could be approved and adopted into the state implementation plan.

Appendix P (Minimum Emission Monitoring Requirements) of Part 51 specifies the minimum requirements for continuous emission monitoring and recording.

State Requirements

Code of Virginia § 10.1-1300 defines 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 of life or property." Excess emissions from new and modified stationary sources are harmful to human health and can significantly interfere with the people's enjoyment of life and property.

Code of Virginia § 10.1-1307 A provides that the board may, among other activities, develop a comprehensive program for the study, abatement, and control of all sources of air pollution in the Commonwealth.

Code of Virginia § 10.1-1308 provides that the board shall have the power to promulgate regulations abating, controlling, and prohibiting air pollution throughout or in any part of the Commonwealth in accordance with the provisions of the Administrative Process Act.

For Part II, Article 2:

The specific provisions in Article 2 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" (Code of Virginia § 10.1-1308 A).

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 informal advisory group was formed for purposes of this periodic review. No public comments were received during the periodic review.

Effectiveness

Please indicate whether the regulation meets the criteria set out in Executive Order 17 (2014), e.g., is necessary for the protection of public health, safety, and welfare, and is clearly written and easily understandable.

This 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), the prevention of significant deterioration (PSD) of air quality in areas cleaner than the NAAQS, and the prevention visibility impairment in Class I areas.

The NAAQS, developed and promulgated by the U.S. Environmental Protection Agency (EPA), establish the maximum limits of pollutants that are permitted in the ambient air in order to protect public health and welfare. EPA requires that each state submit a State Implementation Plan (SIP), including any laws and regulations necessary to enforce the plan, which 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).

A SIP is the key to the state's air quality programs. The CAA 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 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 limit emissions primarily from commercial/industrial facilities and operations and include 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 Federal Motor Vehicle Emission Standards, fuel volatility limits, and inspection and maintenance programs. Transportation control measures limit the location and use of motor vehicles and include carpools, special bus lanes, rapid transit systems, commuter park and ride lots, 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. Therefore, these specific SIP provisions, including implementation of the standards of this regulation and implementation of the compliance, testing, monitoring, and recordkeeping provisions of this regulation that are generally applicable to all new and modified stationary sources in the Commonwealth, are necessary for the protection of public health and welfare.

In summary, 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 (i) control levels of visibility-impairing regional haze pollutant emissions and other pollutants being emitted into the ambient air, and (ii) prohibit emissions that would contribute to the impairment of visibility in Class I federal areas or otherwise contribute to nonattainment of the national air quality standards or interfere with the maintenance of those standards. The following specific pollutants are being effectively controlled under this regulation.

Part I and Part II, Articles 1 and 4: Visible emissions, fugitive dust, and fugitive emissions.
Part I and Part II, Article 4: Particulate matter (including PM 10 and PM 2.5), carbon monoxide, sulfur dioxide, nitrogen oxides, volatile organic compounds, lead, hydrogen sulfide, fluorides, sulfuric acid mist, total reduced sulfur, nonmethane organic compounds:
Part I and Part II, Articles 2 and 4: Odor-causing emissions.

The department has determined that these regulations are clearly written and easily understandable by the individuals and entities affected. They are written so as to permit only one reasonable interpretation, are written to adequately identify the affected entity, and, insofar as possible, are written in non-technical language.

Result

Please state that the agency is recommending that the regulation should stay in effect without change and provide the reason why.

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 the 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 basis for the agency's determination to retain the regulation as is, consistent with the stated objectives of applicable law, to minimize the economic impact of regulations on small businesses.

This 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.

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

These specific articles were last reviewed in 2011. Over time, it generally becomes less expensive to characterize, measure, and mitigate the regulated pollutants that contribute to poor air quality. This regulation continues to provide the most efficient and cost-effective means to determine the level and impact of excess emissions and 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 regulations 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 this regulation will have a direct impact on families.