

**COMMONWEALTH OF VIRGINIA  
STATE AIR POLLUTION CONTROL BOARD  
REGULATIONS FOR THE CONTROL AND ABATEMENT OF AIR POLLUTION  
(VR 120-01)**

**PRELIMINARY DETERMINATION REVIEW DOCUMENT FOR  
PROPOSED REGULATION REVISION YY  
CONCERNING**

**NEW AND MODIFIED SOURCE REVIEW**

**SUBJECT**

Permits for Stationary Sources (3 120-08-01)

**REASON FOR PROPOSED REGULATION**

The regulation amendments are being proposed to make the provisions of the regulation consistent with current federal requirements and the state objectives for the permit program.

**STATEMENT OF LEGAL AUTHORITY**

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.

**STATEMENT OF STATUTORY MANDATES**

The contemplated regulation amendments are mandated by federal law or regulation. A succinct statement of the source (including legal citation) and scope of the mandate may be found below. A copy of all cited legal provisions is attached.

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.

### **STATEMENT OF CONCLUSIONS**

The contemplated regulation is essential to protect the health, safety or welfare of citizens. The reasoning for this conclusion is set forth below.

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 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.

Section 120-08-01 provides a procedural and legal basis for the issuance of a new source permit for proposed new or expanded facilities that will (i) enable the agency to conduct a preconstruction review in order to determine compliance with applicable control technology and other standards, (ii) to assess the impact of the emissions from the facility on air quality, and (iii) provide 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.

Section 120-08-01 requires permits for major new and modifying sources that do not qualify either as PSD or nonattainment area major sources. Permits under § 120-08-01 are also required for sources emitting at levels that are above the exemption levels specified in Appendix R of the regulations.

## **STATEMENT OF PROCESS FOR CONSIDERING ALTERNATIVES**

Alternatives to the proposed regulation amendments were considered by the Department. The Department determined that the first alternative is appropriate, as it is the least burdensome and least intrusive alternative that fully meets the purpose of the regulation amendments. The alternatives considered by the Department are discussed below.

1. Amend the regulation to satisfy the provisions of the law and associated regulations and policies. This option is being considered because it meets the stated purpose of the regulation: to make the provisions of the regulation consistent with current federal requirements and the state objectives for the permit program.
2. Make alternative regulatory changes to those required by the provisions of the law and associated regulations and policies. This option is not being considered because the regulation needs to be made consistent with current federal requirements and the state objectives for the

permit program.

3. Take no action to amend the regulation and continue to use the regulation in its current state. This option is not being considered because, without change, the regulation would not be consistent with current federal requirements and the state objectives for the permit program.

As provided in the public participation procedures of the State Air Pollution Control Board, the Department will include, in the subsequent Notice of Intended Regulatory Action, a description of the above alternatives and a request for comments on other alternatives and the costs and benefits of the above alternatives or the other alternatives that the commenters may provide.

### **CONTACT PERSON**

Questions on the proposal should be referred to:

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