

Notice of Proposed Rulemaking
Department of Environmental Protection
Environmental Quality Board
25 Pa. Code Chapters 121 and 127

The Environmental Quality Board (Board) proposes to amend Chapters 121 and 127 (relating to general provisions; and construction, modification, reactivation, and operation of sources) as set forth in Annex A.

This notice is given under Board order at its meeting of _____, 2009.

A. Effective Date

These amendments will be effective upon publication in the *Pennsylvania Bulletin* as final rulemaking.

These amendments will be submitted to the United States Environmental Protection Agency (EPA) as a revision to the Pennsylvania State Implementation Plan (SIP) upon final rulemaking.

B. Contact Persons

For further information, contact Krishnan Ramamurthy, Chief, Division of Permits, Bureau of Air Quality, 12th Floor, Rachel Carson State Office Building, P.O. Box 8468, Harrisburg, PA 17105-8468, telephone: (717) 783-9476 or Robert “Bo” Reiley, Assistant Counsel, Bureau of Regulatory Counsel, 9th floor, Rachel Carson State Office Building, P.O. Box 8464, Harrisburg, PA 17105-8464, telephone: (717) 787-7060.

Information regarding submitting comments on this proposal appears in Section J of this preamble. Persons with a disability may use the AT&T Relay Service by calling (800) 654-5984 (TDD users) or (800) 654-5988 (voice users). This proposal is available electronically through the Department of Environmental Protection’s (Department) Web site at <http://www.depweb.state.pa.us> (Quick Access: Public Participation).

C. Statutory Authority

This action is being taken under the authority of section 5(a)(1) of the Air Pollution Control Act (APCA) (35 P.S. § 4005(a)(1)), which grants to the Board the authority to adopt regulations for the prevention, control, reduction and abatement of air pollution.

D. Background and Summary

On July 18, 1997, the EPA revised the National Ambient Air Quality Standard (NAAQS) for particulate matter (PM) to add a new standard for fine particles, using fine particulates equal to and less than 2.5 micrometers in diameter (PM_{2.5}) as the indicator. The EPA set the health-based (primary) and welfare-based (secondary) PM_{2.5} annual standard at a level of 15 micrograms per cubic meter (µg/m³) and the 24-hour standard at a level of 65 µg/m³ (62 FR 38652). The health-based primary standard is designed to protect human health from elevated levels of PM_{2.5}, which have been linked to premature mortality and other important

health effects. The secondary standard is designed to protect against major environmental effects of PM_{2.5} such as visibility impairment, soiling and materials damage. The following counties in this Commonwealth have been designated nonattainment for the 1997 fine particulate annual NAAQS: Allegheny (Liberty-Clairton), Allegheny (remainder), Armstrong, Berks, Beaver, Bucks, Butler, Cambria, Chester, Cumberland, Dauphin, Delaware, Greene, Indiana, Lancaster, Lawrence, Lebanon, Montgomery and Philadelphia.

Subsequently, on October 17, 2006, the EPA revised the primary and secondary 24-hour NAAQS for PM_{2.5} to 35 µg/m³ from 65 µg/m³ (71 FR 61236). The following counties or portions thereof are expected to be designated shortly by the EPA as nonattainment for the 2006 fine particulate 24-hour NAAQS: Allegheny, Armstrong, Beaver, Bucks, Butler, Cambria, Chester, Cumberland, Dauphin, Delaware, Greene, Indiana, Lancaster, Lawrence, Lebanon, Lehigh, Montgomery, Northampton, Philadelphia, Washington, Westmoreland and York.

On May 16, 2008, the EPA published its final rule for the “Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM_{2.5}),” (73 FR 28321). This Federal regulation requires states with PM_{2.5} nonattainment areas to submit revised nonattainment NSR programs to the EPA for SIP approval within three years from the date of publication of the final rule, or by May 16, 2011.

The proposed rulemaking would amend the existing nonattainment NSR requirements in Chapter 127, Subchapter E (relating to new source review), to incorporate recently promulgated Federal requirements for PM_{2.5} and PM_{2.5} precursors. The proposal would add requirements to Chapter 127, Subchapter E, § 127.203a (relating to applicability determination) and other sections of Subchapter E to expand the applicability of the nonattainment NSR program to include emissions of PM_{2.5} and sulfur dioxide (SO₂) and nitrogen oxide (NO_x) precursors. Because the EPA determined that there is considerable uncertainty related to ammonia as a precursor for PM_{2.5}, the proposal does not require ammonia to be regulated as a PM_{2.5} precursor. Other clarifying amendments for Chapter 127 would also be proposed.

The proposed rulemaking applies to construction of major stationary sources and major modifications at major stationary sources. A stationary source is a “major source” if its actual emissions or its potential to emit for a specific pollutant equals or exceeds the major source threshold for that pollutant. The PM_{2.5} threshold for new sources is 100 tons per year of PM_{2.5}. The PM_{2.5} threshold for major modifications at existing sources is 10 tons per year of PM_{2.5}.

The proposed rulemaking would help assure that the citizens of this Commonwealth will benefit from reduced emissions of PM_{2.5} and PM_{2.5} precursors from regulated sources. Attaining and maintaining levels of PM_{2.5} below the health- and welfare-based NAAQS is important to reduce premature mortality and other health and environmental effects associated with PM_{2.5} exposure. To the extent that any of the proposed revisions are more stringent than any Federal requirements, these revisions are reasonably necessary in order to attain and maintain the PM_{2.5} NAAQS.

The Department worked with the Air Quality Technical Advisory Committee (AQTAC) in the development of this proposed rulemaking. At its May 28, 2009, meeting, the AQTAC concurred with the Department’s recommendation to seek Board approval of the proposed

rulemaking. The Department also consulted with the Citizens Advisory Council on July 21, 2009.

E. Summary of Regulatory Revisions

The proposed amendments add a new term and definition, “PM2.5,” under § 121.1 (relating to definitions). The proposed amendments amend the definitions of the following existing terms under § 121.1 to include the requirements for PM2.5: “regulated NSR pollutant” and “significant.” In addition the proposed amendments delete an existing term and definition, “maximum allowable emissions,” under § 121.1.

Section 127.201 (relating to general requirements) is proposed to be amended to include a new subsection (g). Under subsection (g), gaseous emissions that condense to form PM at ambient temperatures will be included in PM2.5 and PM-10 emissions in accordance with the following requirements: beginning January 1, 2011, or earlier date established by the Administrator, condensable PM shall be accounted for in applicability determinations and in establishing emissions limitations for PM2.5 and PM-10 in permits issued under this subchapter; compliance with emissions limitations for PM2.5 and PM-10 issued prior to January 1, 2011, or earlier date established by the Administrator, shall not be based on condensable PM unless required by the terms and conditions of a plan approval, operating permit or the SIP; and applicability determinations made prior to January 1, 2011, or earlier date established by the Administrator, without accounting for condensable PM shall not be considered in violation of this subchapter unless the applicable plan approval, operating permit or SIP includes requirements for condensable PM.

Section 127.201a (relating to measurements, abbreviations and acronyms) is proposed to be amended to include the following acronyms: “PM2.5” and “PM-10.” In addition, other minor editorial changes are proposed for this section.

Section 127.202 (relating to effective date) is proposed to be amended to include references to PM2.5.

Section 127.203 (relating to facilities subject to special permit requirements) is proposed to be amended under subparagraph (b)(1)(i) to provide that the aggregated VOC or NOx emissions shall meet the applicability requirements of paragraph (2) or (3). Paragraphs (2) and (3) of subsection (b) are proposed to be amended to clarify that emissions from a proposed project are included in the applicability provisions.

Section 127.203a (relating to applicability determination) is proposed to be amended to include the following requirements under subsection (a): the owner or operator of the facility shall include in the plan approval application the estimate of an emissions increase in a regulated NSR pollutant from the project; the owner or operator shall calculate an emissions increase in a regulated NSR pollutant from a project in accordance with paragraph (1); if the emissions increase from a project equals or exceeds the applicable emissions rate that is significant, the owner or operator shall calculate a net emissions increase in accordance with subparagraph (1)(ii); and if the emissions increase from a project does not exceed the listed applicable

emissions rate that is significant, the owner or operator shall calculate the net emissions increase in accordance with paragraph (2).

In addition, minor editorial changes are proposed to be made to this section as well.

Section 127.204 (relating to emissions subject to this subchapter) is proposed to be amended to include some minor editorial changes.

Section 127.206 (relating to ERC general requirements) is proposed to be amended to clarify under subsection 127.206(o) that an emission reduction credit (ERC) created for a regulated criteria pollutant may be used for interpollutant offsetting authorized under this subchapter. The “amnesty period” dates under subsection 127.206(r) relating to when emission reductions may be used to generate ERCs are proposed to be amended to specify that emission reductions occurring at a facility after April 5, 2005, but prior to the effective date of adoption of this proposed rulemaking may be used to generate ERCs in accordance with this subchapter, if a complete ERC registry application is submitted to the Department by the date 12 months after the effective date of this proposed rulemaking. In addition, other minor editorial changes are proposed for this section.

Section 127.210 (relating to offset ratios) is proposed to be amended to include, among other things, interpollutant offsetting ratios for SO₂ and NO_x. This section is further proposed to be amended to provide that the emissions offsets shall be of the same NSR regulated pollutant unless interpollutant offsetting is authorized for a particular pollutant as specified. The offset requirements for PM_{2.5} emissions or emissions of a PM_{2.5} precursor may be satisfied by offsetting PM_{2.5} emissions or emissions of PM_{2.5} precursors. The emissions offset ratio for PM_{2.5} is one ton per year (tpy) of PM_{2.5} to one tpy of PM_{2.5}. The emissions offset ratio for PM_{2.5} precursors is one tpy of SO₂ to one tpy of SO₂ and one tpy of NO_x to one tpy of NO_x. The PM_{2.5} interpollutant trading ratio is 40 tpy of SO₂ to one tpy of PM_{2.5}, and 200 tpy of NO_x to one tpy of PM_{2.5}.

F. Benefits, Costs and Compliance

Benefits

Overall, the citizens of this Commonwealth will benefit from this proposed rulemaking because it would help to reduce emissions of PM_{2.5} from major stationary sources. Attaining and maintaining levels of PM_{2.5} below the health- and welfare-based NAAQS is important to reduce premature mortality and other health effects associated with PM_{2.5} exposure. Reductions in ambient levels of PM_{2.5} would also promote improved animal health and welfare, improved visibility, decreased soiling and materials damage and decreased damage to plants and trees.

Compliance Costs

The owners and operators of new or modified major facilities would be affected by adoption of the proposed amendments as final-form rulemaking. There are approximately 700 major facilities in this Commonwealth that may be subject to the existing NSR rules if major modifications to those facilities are proposed. The majority of those facilities affected by these regulatory changes are already subject to the existing NSR provisions in Chapter 127,

Subchapter E, and also to the requirements of 40 CFR Part 51, Appendix S (relating to emission offset interpretative ruling). It is not anticipated that significant additional costs would be incurred by the affected companies. These proposed amendments would provide increased flexibility for the owners and operators of affected facilities by allowing exchanges of interpollutant offsets.

Compliance Assistance Plan

The Department plans to educate and assist the public and regulated community in understanding the newly revised requirements and how to comply with them. This will be accomplished through the Department's ongoing compliance assistance program.

Paperwork Requirements

There are no additional paperwork requirements associated with this proposed rulemaking that industry would need to comply with.

G. Pollution Prevention

The Federal Pollution Prevention Act of 1990 established a National policy that promotes pollution prevention as the preferred means for achieving state environmental protection goals. The Department encourages pollution prevention, which is the reduction or elimination of pollution at its source, through the substitution of environmentally friendly materials, more efficient use of raw materials and the incorporation of energy efficiency strategies. Pollution prevention practices can provide greater environmental protection with greater efficiency because they can result in significant cost savings to facilities that permanently achieve or move beyond compliance. The proposed rulemaking does not directly promote a multi-media approach. The reduced levels of PM_{2.5}, however, would benefit water quality through reduced soiling and quantities of sediment that may run off into waterways. Reduced levels of PM_{2.5} would therefore promote improved aquatic life and biodiversity, as well as improved animal and plant life on land.

H. Sunset Review

This regulation will be reviewed in accordance with the sunset review schedule published by the Department to determine whether the regulation effectively fulfills the goals for which it was intended.

I. Regulatory Review

Under section 5(a) of the Regulatory Review Act, 71 P.S. § 745.5(a), on (blank), the Department submitted a copy of these proposed amendments to the Independent Regulatory Review Commission (IRRC) and the Chairpersons of the House and Senate Environmental Resources and Energy Committees. In addition to submitting the proposed amendments, the Department has provided the IRRC and the Committees with a copy of a detailed regulatory analysis form prepared by the Department. A copy of this material is available to the public upon request.

Under section 5(g) of the Regulatory Review Act, the IRRC may convey any comments, recommendations or objections to the proposed regulations within 30 days of the close of the public comment period. The comments, recommendations or objections shall specify the regulatory review criteria that have not been met. The Regulatory Review Act specifies detailed procedures for review of these issues by the Department, the General Assembly and the Governor prior to final publication of the regulations.

J. Public Comments

Written Comments - Interested persons are invited to submit comments, suggestions or objections regarding the proposed regulation to the Environmental Quality Board, P.O. Box 8477, Harrisburg, PA 17105-8477 (express mail: Rachel Carson State Office Building, 16th Floor, 400 Market Street, Harrisburg, PA 17101-2301). Comments submitted by facsimile will not be accepted. Comments, suggestions or objections must be received by the Board by (blank) (within ___ days of publication in the *Pennsylvania Bulletin* and within 30 days after the third hearing). Interested persons may also submit a summary of their comments to the Board. The summary may not exceed one page in length and must also be received by (blank) (within ___ days of publication in the *Pennsylvania Bulletin* and within 30 days after the third hearing). The one-page summary will be provided to each member of the Board in the agenda packet distributed prior to the meeting at which the final regulation will be considered.

Electronic Comments - Comments may be submitted electronically to the Board at RegComments@state.pa.us and must also be received by the Board by (date). A subject heading of the proposal and a return name and address must be included in each transmission. If the sender does not receive an acknowledgement of electronic comments within 2 working days, the comments should be retransmitted to the Board to ensure receipt.

K. Public Hearings

The Environmental Quality Board will hold public hearings in Harrisburg, Norristown and Pittsburgh for the purpose of accepting comments on this proposal. The hearings will be held as follows:

- _____ (blank) _____
- _____ (blank) _____
- _____ (blank) _____

Persons wishing to present testimony at a hearing are requested to contact the Environmental Quality Board, P.O. Box 8477, Harrisburg, PA 17105-8477, (717) 787-4526, at least 1 week in advance of the hearing to reserve a time to present testimony. Oral testimony is limited to 10 minutes for each witness. Witnesses are requested to submit three written copies of their oral testimony to the hearing chairperson at the hearing. Organizations are limited to designating one witness to present testimony on their behalf at each hearing.

Persons in need of accommodations as provided for in the Americans With Disabilities Act of 1990 should contact the Environmental Quality Board at (717) 787-4526 or through the

Pennsylvania AT&T Relay Service at (800) 654-5984 (TDD) or (800) 654-5988 (voice users) to discuss how the Board may accommodate their needs.

JOHN HANGER
Chairperson