

**PROPOSED RULEMAKING
ENVIRONMENTAL QUALITY BOARD
[25 PA. CODE CH. 121 and 127]
Additional Requirements for Control of Fine Particulate Matter
in the Nonattainment New Source Review Program**

The Environmental Quality Board (Board) proposes to amend Chapters 121 (relating to general provisions) and 127, Subchapters E and H (relating to new source review and general plan approvals and operating permits, respectively), to read as set forth in Annex A. This proposed rulemaking would incorporate recently promulgated Federal requirements for the regulation of volatile organic compounds (VOC) and ammonia as precursor emissions to the formation of fine particulate matter, which is particulate matter less than and equal to 2.5 micrometers in diameter (PM_{2.5}). The proposed rulemaking would also revise the application submission options for the use of general plan approvals and operating permits for portable sources in 25 Pa. Code § 127.641(c).

This proposed rulemaking is necessary to address a mandatory 18-month sanction clock, in accordance with section 179 of the Clean Air Act (CAA) (42 U.S.C.A. § 7509), following the United States Environmental Protection Agency's (EPA) determination that Pennsylvania has not met its obligations for the nonattainment new source review (NNSR) permit program, because its existing NNSR program does not include emissions of VOC and ammonia as PM_{2.5} precursors. To stop the sanction clock, the Commonwealth will need to submit this proposed rulemaking to EPA, for EPA's technical and administrative review, by November 7, 2019.

This proposed rulemaking is given under Board order at its meeting of **DATE**.

A. Effective Date

This proposed rulemaking will be effective upon final-form publication in the *Pennsylvania Bulletin*.

B. Contact Persons

For further information, contact Virendra Trivedi, Chief, Division of Permits, Bureau of Air Quality, Rachel Carson State Office Building, P.O. Box 8468, Harrisburg, PA 17105-8468, (717) 783-9476; or Elizabeth Davis, Assistant Counsel, Bureau of Regulatory Counsel, Rachel Carson State Office Building, P.O. Box 8464, Harrisburg, PA 17105-8464, (717) 787-7060. Information regarding submitting comments on this proposed rulemaking appears in Section J of this preamble. Persons with a disability may use the Pennsylvania AT&T Relay Service, (800) 654-5984 (TDD users) or (800) 654-5988 (voice users). This proposed rulemaking is available on the Department of Environmental Protection's (Department) web site at www.dep.pa.gov (select "Public Participation Center," then "Environmental Quality Board.")

C. Statutory Authority

The proposed rulemaking is authorized under section 5(a)(1) of the Air Pollution Control Act (APCA) (35 P.S. § 4005(a)(1)), which grants the Board the authority to adopt rules and regulations for the prevention, control, reduction and abatement of air pollution in this Commonwealth. Section 5(a)(8) of the APCA also grants the Board the authority to adopt rules and regulations designed to implement the provisions of the Clean Air Act (CAA) (42 U.S.C.A. §§ 7401—7671q).

D. Background and Purpose

On July 18, 1997, EPA revised the National Ambient Air Quality Standard (NAAQS) for particulate matter (PM) to add new standards for fine particles, using PM_{2.5} as the indicator. 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. See 62 FR 38652. Subsequently, on October 17, 2006, EPA revised the primary and secondary 24-hour NAAQS for PM_{2.5} to 35 µg/m³ from 65 µg/m³. See 71 FR 61236. On January 15, 2013, the EPA lowered the health-based (primary) PM_{2.5} annual standard from 15 µg/m³ to 12 µg/m³. See 78 FR 3086.

On January 15, 2015, EPA designated five areas in Pennsylvania as moderate nonattainment areas for the 2012 annual PM_{2.5} NAAQS, based on air quality monitoring data from 2011-2013. See 80 FR 2206. The nonattainment areas were the Allegheny County Area, Allentown Area (Lehigh and Northampton Counties), Delaware County Area, Johnstown Area (Cambria County and partial Indiana County), and Lebanon County Area.

On April 7, 2015, EPA issued updated designations, based on complete, quality-assured, and certified monitoring data from 2012-2014, which reduced the number of nonattainment areas in Pennsylvania to three: the Allegheny County Area, the Delaware County Area, and the Lebanon County Area. See 80 FR 18535, 18549.

EPA subsequently determined that two of these areas – Delaware and Lebanon – attained the 2012 annual PM_{2.5} NAAQS based on complete, quality-assured, and certified air quality data that shows that the area is monitoring attainment (Clean Data Determination). See 81 FR 89868 (December 13, 2016) and 82 FR 50851 (November 2, 2017) respectively. These final actions suspended the requirements for the Commonwealth to submit an attainment demonstration and associated reasonably available control measures, reasonable further progress plans, contingency measures and other planning SIP revisions related to the areas' attainment of the 2012 annual PM_{2.5} NAAQS for so long as these areas continues to attain the 2012 annual PM_{2.5} NAAQS.

Section 172(c)(3) of the CAA (42 U.S.C.A. § 7502(c)(3)) requires a comprehensive emissions inventory, which is not suspended by the Clean Data Determinations. The Department submitted emissions inventories for the Delaware County and Lebanon County nonattainment areas on May 5, 2017 and September 25, 2017, respectively. On July 3, 2018, EPA published a final rule that approved both Delaware County and Lebanon County emissions inventories. See 83 FR 31064.

EPA published its SIP Requirements Rule, which requires states with nonattainment areas for PM_{2.5} to amend their NNSR regulations to include emissions of VOC and ammonia as PM_{2.5} precursors. See *Fine Particulate Matter National Ambient Air Quality Standards: State Implementation Plan Requirements*, 81 FR 58010 (August 24, 2016). Section 189(a)(2)(B) of the CAA (42 U.S.C.A. § 7513a(a)(2)(B)) and its implementing regulations at 40 CFR 51.1003(a) requires all moderate nonattainment area elements to be submitted to EPA for SIP approval no later than 18 months from the date of designation. The designations were effective on April 15, 2015. See 80 FR 2206, 18535. Accordingly, the required elements were due to EPA for SIP approval on October 15, 2016. The Clean Data Determinations for the Delaware and Lebanon County Areas do not relieve the Commonwealth of its responsibilities to develop this SIP revision for the NNSR permit program.

This proposed rulemaking amends the 25 Pa. Code Chapter 121 definition of “Regulated NSR pollutant,” and the 25 Pa. Code Chapter 127 Subchapter E NNSR permitting regulations to include the PM_{2.5} precursor emissions provisions under the SIP Requirements Rule.

Consistent with EPA’s August 24, 2016, SIP Requirements Rule, EPA issued its Implementation Rule which defines a major facility as having the potential to emit: 100 tons per year (TPY) of emissions of VOC or ammonia, or both, in a moderate PM_{2.5} nonattainment area and 70 TPY of VOC or ammonia emissions, or both, in a serious PM_{2.5} nonattainment area. See *Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM_{2.5})*, 73 FR 28321 (May 16, 2008). EPA’s Implementation Rule also established a VOC significance threshold of 40 TPY. The Implementation Rule requires states to determine the ammonia significance threshold and the VOC and ammonia offset ratio. The Clean Data Determinations for the Delaware and Lebanon County Areas does not relieve the Commonwealth of its responsibilities to develop this SIP revision for the NNSR permit program.

This proposed rulemaking amends the 25 Pa. Code Chapter 121 definitions of “Major facility” and “Significant,” and the 25 Pa. Code Chapter 127 Subchapter E NNSR permitting regulations related to the VOC and ammonia offset ratio provisions under the Implementation Rule.

On November 4, 2016, the South Coast Air Quality Management District (SCAQMD) amended its NNSR program to include ammonia and VOC as precursors to PM_{2.5} (SCAQMD Rule 1325). As part of that rulemaking, SCAQMD added a significance threshold for ammonia of 40 TPY, which is the same significance threshold in this proposed rulemaking. SCAQMD also included an offset ratio for VOC and ammonia of 1:1, which is the same offset ratio in this proposed rulemaking. On May 8, 2017, the California Air Resource Board submitted a SIP revision to EPA with the amendments to SCAQMD Rule 1325. On August 8, 2018, EPA proposed a conditional approval of the SIP revision. See 83 FR 39012.

The Department believes that SCAQMD’s technical rationale that 40 TPY for ammonia is conservative because NO_x emissions, with an established 40 TPY threshold, have a greater influence in the formation of secondary ambient PM_{2.5} than ammonia emissions is technically sound. See *Proposed Amended Rule 1302- Definitions and Proposed Amended Rule 1325- Federal PM_{2.5} New Source Review Program*, Final Staff Report, November 2016, Mike

Laybourn, Air Quality Specialist, South Coast Air Quality Management District. The Department adopts that rationale as its own for this proposed rulemaking.

This proposed rulemaking includes significant impact levels (SILs) of 1.2 $\mu\text{g}/\text{m}^3$ for 24-hour $\text{PM}_{2.5}$ and 0.2 $\mu\text{g}/\text{m}^3$ for annual $\text{PM}_{2.5}$ which conform with the EPA guidance document for SILs entitled, *Guidance on Significant Impact Levels for Ozone and Fine Particles in the Prevention of Significant Deterioration Permitting Program*, EPA memorandum, April 17, 2018, Peter Tsirigotis, Director, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC, 27711.

The addition of $\text{PM}_{2.5}$ SILs will mitigate the effects of $\text{PM}_{2.5}$ in nonattainment areas affected by $\text{PM}_{2.5}$ emissions from attainment areas. A SIL defines the level of ambient air impact that is considered a “significant contribution” to air quality. If the modeled maximum ambient impacts of a new source or modification are below the SILs, the source: (1) is presumed not to cause or contribute significantly to a Prevention of Significant Deterioration (PSD) increment or NAAQS violation, and (2) is not required to perform the multiple-source, cumulative impacts assessments that are otherwise required under PSD.

On April 6, 2018, EPA published a notice of finding of failure to submit (FFS) SIP revisions for the 2012 annual $\text{PM}_{2.5}$ NAAQS, effective May 7, 2018. See 83 FR 14759. EPA's FFS included a determination that Pennsylvania has not met its obligations for the NNSR permit program for Allegheny, Delaware and Lebanon Counties because emissions of VOCs and ammonia are not currently regulated as $\text{PM}_{2.5}$ precursors. In addition, the FFS included a determination that the following required SIP elements were not submitted for Allegheny County: emissions inventory, control strategy, attainment demonstration, reasonable further progress, qualitative milestones and contingency measures. Because the Allegheny County Health Department is an approved local air pollution control agency, under section 12(b) of the APCA, 35 P.S. § 4012(b), it is developing its own SIP revision to address these required SIP elements, which the Department will submit to EPA. In accordance with section 179 of the CAA (42 U.S.C.A. § 7509), a mandatory 18-month sanction clock began on May 7, 2018, the effective date of the FFS.

Therefore, to stop the sanction clock and correct the deficiency that Pennsylvania has not met its obligations for the NNSR permit program, because the Commonwealth's existing NNSR program does not include VOC and ammonia as $\text{PM}_{2.5}$ precursors, one of the following must occur by November 7, 2019:

- 1) The Commonwealth submits an updated NNSR regulation that addresses VOC and ammonia as $\text{PM}_{2.5}$ precursors as a SIP revision, which EPA determines to be technically and administratively complete; or
- 2) The Commonwealth submits a SIP revision for each area, and EPA fully approves and redesignates the area from nonattainment to attainment. Once an area is redesignated as attainment, NNSR would no longer apply.

The Department is currently working on both options to correct the deficiency to ensure that the sanction clock stops by November 7, 2019. Section 179 of the CAA (42 U.S.C.A. § 7509) authorizes EPA to use two types of sanctions: 1) imposing what are called "2:1 offsets" on new or modified sources of emissions; and 2) withholding of certain Federal highway funds. Under

section 179 of the CAA and its implementing regulations, the Administrator first imposes “2:1 offsets” sanctions for new or modified major stationary sources in the nonattainment area, and then, if the deficiency has not been corrected within 6 months, also applies Federal highway funding sanctions. See 40 CFR 52.31 (relating to selection of sequence of mandatory sanctions for findings made pursuant to section 179 of the Clean Air Act). Therefore, if the deficiency is not corrected, EPA will impose mandatory “2:1 offsets” sanctions beginning November 7, 2019, and highway fund sanctions, beginning May 7, 2020. The Commonwealth receives approximately \$1.7 billion in Federal transportation funding annually, which would be at risk if the Commonwealth does not implement one of the options listed above.

This proposed rulemaking would also revise the application submission options for the use of general plan approvals and operating permits for portable sources in 25 Pa. Code § 127.641(c). Currently applications may only be delivered through hand delivery or certified mail return receipt requested. The proposed change would remove these options thereby allowing delivery by any means.

This proposed rulemaking would help assure that the citizens of this Commonwealth 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.

The proposed rulemaking was presented to the Small Business Compliance Advisory Committee (SBCAC) on July 25, 2018, and to the Air Quality Technical Advisory Committee (AQTAC) on August 2, 2018. Neither committee expressed concerns, and both committees voted unanimously to concur with the Department’s recommendation to present the proposed rulemaking to the Board for consideration.

On August 21, 2018, the proposed rulemaking was presented to the Citizens Advisory Council’s (CAC) Policy and Regulatory Oversight (PRO) Committee. The PRO Committee requested that clarity be provided in 25 Pa. Code § 121.1 under the definition of “major facility” to indicate that the proposed rulemaking language of “Seventy TPY of PM_{2.5}, NO_x, SO₂, VOCs or ammonia in a serious nonattainment area for PM_{2.5}” means 70 TPY for each pollutant individually and not combined. The Department agreed and revised the definition to provide the requested clarification. On September 18, 2018, the full CAC concurred with the Department’s recommendation to move the proposed rulemaking forward to the Board for consideration.

E. Summary of Regulatory Requirements

The proposed rulemaking would amend the existing definitions of “major facility,” “regulated NSR pollutant” and “significant,” under section 121.1 (relating to definitions) to include the requirements for PM_{2.5} precursors of VOC and ammonia.

Section 127.202 (relating to effective date) is proposed to be amended to include references to PM_{2.5} precursors. In addition, other minor editorial changes are proposed for this section.

Section 127.203 is proposed to be amended to include annual and 24-hour significance levels for PM_{2.5}.

Section 127.210 is proposed to be amended to include offset ratios for VOCs and ammonia as PM_{2.5} precursors.

This proposed rulemaking would amend 25 Pa. Code Chapter 127, Subchapter H (relating to general plan approvals and operating permits) to provide the regulated community with flexibility in submitting applications to use portable source general permits. Currently, 25 Pa. Code § 127.641(c) requires these applications to be either hand delivered or transmitted by certified mail return receipt requested. The amendment would remove these limited options and allow submission by any means.

F. Benefits, Costs and Compliance

Benefits

As noted in Section D of this preamble, overall, 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. 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. Also, regarding portable source general plan approvals and operating permits, allowing for additional flexibility would provide additional options for the regulated community to submit applications that may be faster and less expensive than what is currently available.

Compliance costs

This proposed rulemaking would apply to owners and operators of new or modified major facilities with emissions of VOCs or ammonia as PM_{2.5} precursors located within PM_{2.5} nonattainment areas or that are located within PM_{2.5} attainment areas and would have a significant impact to a PM_{2.5} nonattainment area. The significant impact is determined by the proposed SIL of 1.2 µg/m³ for 24-hour PM_{2.5} and 0.2 µg/m³ for annual PM_{2.5}. It is not expected that any facilities within PM_{2.5} attainment areas will have a significant impact on PM_{2.5} nonattainment areas. No new facilities are known to be constructed, or planned to be constructed, within PM_{2.5} nonattainment areas that will emit major amounts of VOCs or ammonia. There are 17 facilities that have the potential to emit 100 tons per year or greater of emissions of VOCs, ammonia, or both. The owners and operators of these facilities would be subject to the proposed rulemaking if major modifications occur at the affected facilities for VOCs, ammonia, or both at the facility. The Department is not aware of any upcoming major modifications at these facilities.

In addition, owners and operators of portable sources would be affected when submitting applications to the Department for a general plan approval or operating permit. Currently, these applications are required to be either hand delivered or transmitted by certified mail return

receipt requested. The proposed rulemaking would remove the language on specific requirements and replace it with the ability to submit applications to the Department by any means.

Compliance assistance plan

The Department plans to educate and assist the public and regulated community in understanding the proposed requirements and how to comply with them. This would be accomplished through the Department's ongoing compliance assistance program. The Department would also work with the Small Business Assistance Program to aid the facilities less able to handle matters with their in-house staff.

Paperwork requirements

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

G. Pollution Prevention

The Pollution Prevention Act of 1990 (42 U.S.C.A. §§ 13101—13109) 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.

This 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. Reduced levels of PM_{2.5} would promote improved visibility, decreased soiling, and decreased materials damage.

H. Sunset Review

The Board is not establishing a sunset date for this proposed regulation, since it is needed for the Department to carry out its statutory authority. The Department will closely monitor this proposed regulation after promulgation as a final-form rulemaking in the *Pennsylvania Bulletin* for its effectiveness and recommend updates to the Board as necessary.

I. Regulatory Review

Under section 5(a) of the Regulatory Review Act (71 P.S. § 745.5(a)), on **DATE**, the Department submitted a copy of this proposed rulemaking and a copy of a Regulatory Analysis Form to the

Independent Regulatory Review Commission (IRRC) and to the Chairpersons of the House and Senate Environmental Resources and Energy Committees. In addition to submitting the proposed amendments, the Department has provided 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, IRRC may convey any comments, recommendations or objections to the proposed rulemaking within 30 days of the close of the public comment period. The comments, recommendations or objections must specify the regulatory review criteria which have not been met. The Regulatory Review Act specifies detailed procedures for review, prior to final publication of the rulemaking by the Department, the General Assembly and the Governor.

J. Public Comments

Interested persons are invited to submit to the Board written comments, suggestions, support or objections regarding this proposed rulemaking. Comments, suggestions, support or objections must be received by the Board by **DATE**.

Comments may be submitted to the Board online, by e-mail, by mail or express mail as follows.

Comments may be submitted to the Board by accessing the Board’s online comment system at <http://www.ahs.dep.pa.gov/eComment>.

Comments may be submitted to the Board by e-mail at RegComments@pa.gov. A subject heading of this proposed rulemaking and a return name and address must be included in each transmission.

If an acknowledgement of comments submitted online or by e-mail is not received by the sender within 2 working days, the comments should be retransmitted to the Board to ensure receipt. Comments submitted by facsimile will not be accepted.

Written comments should be mailed to the Environmental Quality Board, P.O. Box 8477, Harrisburg, PA 17105-8477. Express mail should be sent to the Environmental Quality Board, Rachel Carson State Office Building, 16th Floor, 400 Market Street, Harrisburg, PA 17101-2301.

K. Public Hearings

The Board will hold three public hearings for the purpose of accepting comments on this proposed rulemaking. The hearings will be held at ___ p.m. on the following dates:

_____ (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 5 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 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.

Patrick McDonnell,
Chairperson