

<h1>Regulatory Analysis Form</h1> <p>(Completed by Promulgating Agency)</p> <p>(All Comments submitted on this regulation will appear on IRRC's website)</p>		<p><b>INDEPENDENT REGULATORY REVIEW COMMISSION</b></p>	
<p><b>(1) Agency</b> Environmental Protection</p>			
<p><b>(2) Agency Number: 7</b> Identification Number: 551</p>		<p><b>IRRC Number:</b> 3225</p>	
<p><b>(3) PA Code Cite:</b> 25 Pa. Code Chapters 121 and 127</p>			
<p><b>(4) Short Title:</b> Additional Requirements for Control of Fine Particulate Matter in the Nonattainment New Source Review Program</p>			
<p><b>(5) Agency Contacts (List Telephone Number and Email Address):</b>          Primary Contact: Laura Edinger, 783-8727, ledinger@pa.gov          Secondary Contact: Jessica Shirley, 783-8727, jesshirley@pa.gov</p>			
<p><b>(6) Type of Rulemaking (check applicable box):</b></p> <p><input type="checkbox"/> Proposed Regulation</p> <p><input checked="" type="checkbox"/> Final Regulation</p> <p><input type="checkbox"/> Final Omitted Regulation</p>		<p><input type="checkbox"/> Emergency Certification Regulation</p> <p><input type="checkbox"/> Certification by the Governor</p> <p><input type="checkbox"/> Certification by the Attorney General</p>	
<p><b>(7) Briefly explain the regulation in clear and nontechnical language. (100 words or less)</b></p> <p>This final-form rulemaking amends 25 Pa. Code Chapters 121 (relating to general provisions) and 127, Subchapter E (relating to new source review) to incorporate Federal requirements regulating volatile organic compounds (VOC) and ammonia as precursor emissions to the formation of fine particulate matter. This final-form rulemaking removes the requirement that applications for plan approvals for portable sources be submitted by hand delivery or certified mail return receipt requested in Chapter 127, Subchapter H (relating to general plan approvals and operating permits) to allow for greater flexibility in submitting these applications to the Department. This final-form rulemaking will be submitted to the United States Environmental Protection Agency (EPA) for approval as a revision to the Commonwealth's State Implementation Plan (SIP) following promulgation of the final-form regulation.</p>			
<p><b>(8) State the statutory authority for the regulation. Include <u>specific</u> statutory citation.</b></p> <p>This final-form rulemaking is authorized under section 5(a)(1) of the Air Pollution Control Act (APCA) (35 P.S. § 4005(a)(1)), which grants the Environmental Quality Board (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 (35 P.S. § 4005(a)(8)) 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).</p>			

**(9) Is the regulation mandated by any federal or state law or court order, or federal regulation? Are there any relevant state or federal court decisions? If yes, cite the specific law, case or regulation as well as any deadlines for action.**

Yes. The EPA published a final rule that requires states with nonattainment areas for particulate matter less than or equal to 2.5 micrometers in diameter (PM<sub>2.5</sub>) to amend their nonattainment new source review (NNSR) regulations to include emissions of VOC and ammonia as PM<sub>2.5</sub> precursors. See *Fine Particulate Matter National Ambient Air Quality Standards: State Implementation Plan Requirements*, 81 FR 58010 (August 24, 2016) (SIP Requirements Rule). The Federal regulation at 40 CFR 51.1003(a) requires all moderate nonattainment area elements to be submitted to the EPA for SIP approval by no later than 18 months from the date of designation. The designations were effective on April 15, 2015. See 80 FR 2206 (January 15, 2015) and 80 FR 18535 (April 7, 2015). Accordingly, the required elements were due to the EPA for SIP approval on October 15, 2016.

This final-form rulemaking amends the § 121.1 (relating to definitions) definition of “regulated NSR pollutant,” and the Chapter 127, Subchapter E NNSR permitting regulations to include the PM<sub>2.5</sub> precursor emissions provisions under the SIP Requirements Rule.

On April 6, 2018, the EPA published a notice of finding of failure to submit (FFS) SIP revisions for the 2012 annual PM<sub>2.5</sub> National Ambient Air Quality Standard (NAAQS), effective May 7, 2018. See 83 FR 14759 (April 6, 2018). The EPA's FFS included a determination that Pennsylvania has not met its obligations for the NNSR permit program for Allegheny, Delaware and Lebanon Counties, since emissions of VOCs and ammonia are not currently regulated as PM<sub>2.5</sub> precursors. In addition, 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 (ACHD) 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 the EPA. See also 25 Pa. Code Chapter 133 (Local Air Pollution Agencies). 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. See Question 10 for more details.

If the EPA Administrator finds that a state has failed to submit an acceptable implementation plan or has failed to implement the requirements of an approved plan, sanctions will be imposed, though sanctions cannot be imposed until 18 months after the Administrator makes the determination, and sanctions cannot be imposed if a deficiency has been corrected within the 18-month period.

Section 179 of the CAA authorizes the 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, the 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. See 40 CFR § 52.31(d).

Therefore, to stop the sanction clock and correct the deficiency that the Commonwealth has not met its obligations for the NNSR permit program, because the Commonwealth's existing NNSR program does not include VOC and ammonia as PM<sub>2.5</sub> 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 PM<sub>2.5</sub> precursors as a SIP revision, which the EPA determines to be technically and administratively complete; or
- 2) The Commonwealth submits a SIP revision for each nonattainment area, and the 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 pursuing both options to correct the deficiency to ensure that the sanction clock stops by November 7, 2019. The Department submitted the maintenance plans and redesignation requests to attainment for the Delaware and Lebanon County Areas on January 23, 2019 and February 11, 2019, respectively. On July 16, 2019, the EPA proposed to approve these SIP revisions and to determine that the Delaware and Lebanon County Areas meet the 2012 annual PM<sub>2.5</sub> NAAQS, based on the most recent three years of certified air quality data. See 84 FR 33886 (July 16, 2019). The EPA's proposed rule is open for a 30-day public comment period, closing on August 15, 2019. ACHD finalized its NNSR regulation and plans to submit an attainment demonstration SIP revision for Allegheny County. On May 23, 2019, the Department submitted ACHD's NNSR regulation to EPA and ACHD is currently reviewing public comments submitted on its attainment demonstration SIP revision. The EPA must determine that both portions are technically and administratively complete to stop the sanction clock in Allegheny County.

**(10) State why the regulation is needed. Explain the compelling public interest that justifies the regulation. Describe who will benefit from the regulation. Quantify the benefits as completely as possible and approximate the number of people who will benefit.**

Implementation of the final-form precursor pollutant requirements for NNSR for PM<sub>2.5</sub> will benefit the health and welfare of the approximately 12 million human residents of this Commonwealth. The health effects associated with exposure to elevated levels of PM<sub>2.5</sub> are significant. Epidemiological studies have shown a significant correlation between elevated PM<sub>2.5</sub> levels and premature mortality. Other important effects associated with PM<sub>2.5</sub> exposure include aggravation of respiratory and cardiovascular disease (as indicated by increased hospital admissions, emergency room visits, absences from school or work, and restricted activity days), lung disease, decreased lung function, asthma attacks, and certain cardiovascular problems. Individuals particularly sensitive to PM<sub>2.5</sub> exposure include older adults, people with heart and lung disease, and children. Environmental effects of PM<sub>2.5</sub> pollution include visibility impairment, soiling and materials damage.

On July 18, 1997, the EPA revised the NAAQS for particulate matter (PM) to add new standards for fine particles, using PM<sub>2.5</sub> as the indicator. The EPA set the health-based (primary) and welfare-based (secondary) PM<sub>2.5</sub> annual standard at a level of 15 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) and the 24-hour standard at a level of 65  $\mu\text{g}/\text{m}^3$ . See 62 FR 38652 (July 18, 1997). Subsequently, on October 17, 2006, the EPA revised the primary and secondary 24-hour NAAQS for PM<sub>2.5</sub> to 35  $\mu\text{g}/\text{m}^3$  from 65  $\mu\text{g}/\text{m}^3$ . See 71 FR

61236 (October 17, 2006). On January 15, 2013, the EPA lowered the health-based (primary) PM<sub>2.5</sub> annual standard from 15 µg/m<sup>3</sup> to 12 µg/m<sup>3</sup>. See 78 FR 3086 (January 15, 2013).

On January 15, 2015, the EPA designated five areas in Pennsylvania as moderate nonattainment areas for the 2012 annual PM<sub>2.5</sub> NAAQS, based on air quality monitoring data from 2011-2013. See 80 FR 2206 (January 15, 2015). 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, the 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 (April 7, 2015).

Section 189(a)(2)(B) of the CAA (42 U.S.C.A. § 7513a(a)(2)(B)) required Pennsylvania to develop a revision to the SIP by October 15, 2016, to demonstrate how the three Pennsylvania nonattainment areas will attain the 2012 annual PM<sub>2.5</sub> NAAQS as expeditiously as practicable but no later than 18 months from the effective date of designations.

On April 1, 2016, the Department sent a letter to the EPA, certifying that its 2015 air quality data had been submitted and quality assured. On December 13, 2016, the EPA determined that the Delaware County nonattainment area attained the 2012 annual PM<sub>2.5</sub> NAAQS based on 2013-2015 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). This final action 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 Delaware County Area's attainment of the 2012 annual PM<sub>2.5</sub> NAAQS for so long as the area continues to attain the 2012 annual PM<sub>2.5</sub> NAAQS.

On May 17, 2017, the Department sent a letter to the EPA, certifying that its 2016 air quality data had been submitted and quality assured. On November 2, 2017, the EPA issued a Clean Data Determination for the Lebanon County nonattainment area, as the area attained the 2012 annual PM<sub>2.5</sub> NAAQS based on 2014-2016 complete, quality-assured, and certified air quality data that shows that the area is monitoring attainment. See 82 FR 50851 (November 2, 2017). This final action 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 Lebanon County Area's attainment of the 2012 annual PM<sub>2.5</sub> NAAQS for so long as the area continues to attain the 2012 annual PM<sub>2.5</sub> 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, the EPA published a final rule that approved both Delaware County and Lebanon County emissions inventories. See 83 FR 31064 (July 3, 2018).

On April 6, 2018, the EPA published a FFS for the 2012 annual PM<sub>2.5</sub> NAAQS, effective May 7, 2018. See 83 FR 14759 (April 6, 2018). The EPA's FFS included a determination that Pennsylvania has not met its

obligations for the NNSR permit program for Allegheny, Delaware and Lebanon Counties, since emissions of VOCs and ammonia are not currently regulated as PM<sub>2.5</sub> 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. As previously discussed, the Allegheny County Health Department is developing a SIP revision to address these required SIP elements. In accordance with section 179 of the CAA, a mandatory 18-month sanction clock began on May 7, 2018, the effective date of the FFS. (See Question 9 for more information.)

The health-based primary standard is designed to protect human health from elevated levels of PM<sub>2.5</sub>, 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<sub>2.5</sub> such as visibility impairment, soiling, and materials damage.

This final-form rulemaking helps assure that the citizens of this Commonwealth benefit from reduced emissions of PM<sub>2.5</sub> and PM<sub>2.5</sub> precursors from regulated sources. Attaining and maintaining levels of PM<sub>2.5</sub> below the health-based and welfare-based NAAQS is important to reduce premature mortality and other health and environmental effects associated with PM<sub>2.5</sub> exposure.

The addition of PM<sub>2.5</sub> significant impact levels (SILs) will mitigate the effects of PM<sub>2.5</sub> in nonattainment areas affected by PM<sub>2.5</sub> emissions from attainment areas.

This final-form rulemaking amends § 127.641(c) (relating to application for use of plan approvals and operating permits for portable sources) to remove the requirement that applications for plan approvals and operating permits for portable sources be submitted by hand delivery or certified mail return receipt requested. This amendment allows greater flexibility in submitting these applications to the Department.

Obligations under the CAA: Section 109(b) of the CAA provides that the Administrator of the EPA must set NAAQS for air pollutants at levels that protect public health and the environment. Section 109(d) of the CAA provides that the NAAQS be reviewed at periodic intervals to ensure the standards reflect the latest scientific knowledge on the effects of air pollutants.

Anticipated emission reductions: The Department does not anticipate any immediate emission reductions since this final-form rulemaking is only applicable to the owners and operators of new major sources of ammonia and VOC or existing major sources of ammonia and VOC to which there is a major modification. This final-form rulemaking may result in a reduction of ammonia that would have otherwise been emitted through the application of Lowest Achievable Emission Rate (LAER) and Emission Reduction Credits (ERCs). This final-form rulemaking will not result in any additional reduction in VOC emissions since the owner or operator of a facility subject to the VOC portion of this regulation will already be subject to NNSR for VOC emissions as ozone precursors.

The promulgation of this final-form rulemaking and submittal to the EPA as a SIP revision will avoid the economic sanctions imposed by the EPA. The "2:1 offsets" sanction will be burdensome not only to owners and operators subject to this final-form rulemaking, but also to any owner or operator subject to the existing NNSR requirements. The 2:1 offset sanction will be a financial burden to affected owners and operators as they must buy two times the amount of ERCs they would otherwise require. Additionally, the price of each ton of ERC would likely increase since the supply would not increase.

The highway funding sanction will impose an economic burden directly on the Commonwealth since it receives approximately \$1.7 billion in Federal transportation funding annually. Under Section 179(b)(1) of the CAA, the EPA Administrator may prohibit the United States Secretary of Transportation from approving or awarding any grants in the sanctioned area, with the exception of grants or projects for the purposes of safety, congressionally-authorized activities, or air quality improvement.

This final-form rulemaking is necessary to both avoid the economic sanctions (as discussed further in Question 9) and to attain and maintain the PM<sub>2.5</sub> NAAQS in this Commonwealth.

**(11) Are there any provisions that are more stringent than federal standards? If yes, identify the specific provisions and the compelling Pennsylvania interest that demands stronger regulations.**

No. The final amendments are not more stringent than the Federal regulations of 40 CFR 50.13; 40 CFR Part 51, Appendix A; 40 CFR 51.165; 40 CFR 51.1000-51.1016; 40 CFR Part 51, Appendix S; and 40 CFR 93.153.

**(12) How does this regulation compare with those of the other states? How will this affect Pennsylvania's ability to compete with other states?**

This final-form rulemaking is based on Federal requirements and guidance.

The EPA issued an 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<sub>2.5</sub> nonattainment area and 70 TPY of VOC or ammonia emissions, or both, in a serious PM<sub>2.5</sub> nonattainment area. See *Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM<sub>2.5</sub>)*, 73 FR 28321 (May 16, 2008) (Implementation Rule). The 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.

This final-form rulemaking amends the § 121.1 definitions of "Major facility" and "Significant," and the Chapter 127, Subchapter E NNSR permitting regulations related to the VOC and ammonia offset ratio provisions under the Implementation Rule. The definition of "major facility" is also amended to include facilities which emit or have the potential to emit: 70 TPY of PM<sub>2.5</sub> in a serious nonattainment area for PM<sub>2.5</sub>, 70 TPY of NO<sub>x</sub> in a serious nonattainment area for PM<sub>2.5</sub>, and 70 TPY of SO<sub>2</sub> in a serious nonattainment area for PM<sub>2.5</sub>.

Pennsylvania is one of four states with areas designated as nonattainment for the 2012 annual PM<sub>2.5</sub> NAAQS. Information is provided below for the other three states with nonattainment areas for the 2012 annual PM<sub>2.5</sub> NAAQS: California, Idaho, and Ohio.

**Idaho:** The state of Idaho was listed in the April 6, 2018, finding of failure to submit for the West Silver Valley nonattainment area. Idaho has not proposed a SIP revision to correct the required SIP elements to the EPA. Therefore, Idaho does not have a comparable regulation to this final-form rulemaking.

**Ohio:** On July 18, 2018, the EPA approved Ohio's determination that VOC and ammonia are insignificant sources of PM<sub>2.5</sub> as a SIP revision. See 83 FR 33844 (July 18, 2018). Therefore, Ohio does not have a comparable regulation to this final-form rulemaking.

***California:*** The state of California was listed in the EPA's April 6, 2018, finding of failure to submit required SIP elements for the 2012 annual PM<sub>2.5</sub> NAAQS. California has four areas that were designated as nonattainment areas for the 2012 annual PM<sub>2.5</sub> NAAQS. Details on each of the four areas are provided below.

***Los Angeles-South Coast Air Basin:*** This nonattainment area falls under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). On November 4, 2016, SCAQMD amended their NNSR program to include ammonia and VOC as precursors to PM<sub>2.5</sub> (SCAQMD Rule 1325). As part of the rulemaking, SCAQMD added a significance threshold for ammonia of 40 TPY, which is the same significance threshold in this final-form rulemaking. SCAQMD also included an offset ratio for VOC and ammonia of 1:1, which is the same offset ratio in this final-form rulemaking. On May 8, 2017, the California Air Resources Board (CARB) submitted a SIP revision to the EPA with the amendments to SCAQMD Rule 1325. On November 30, 2018, the EPA issued a conditional approval of the SIP revision. See 83 FR 61551 (November 30, 2018). The Department reviewed the technical data associated with the SCAQMD rule and adopts the data as its own technical review as part of this final-form rulemaking.

***Imperial County:*** This nonattainment area falls under the jurisdiction of the Imperial County Air Quality Management District (ICAQMD). On April 27, 2018, CARB released a staff report on a draft SIP revision for the ICAQMD. Within this draft SIP revision, it was determined that VOC and ammonia are insignificant sources of PM<sub>2.5</sub>. The EPA has not yet taken final action on this SIP revision. Therefore, ICAQMD does not have a comparable regulation to this final-form rulemaking.

***San Joaquin Valley Air Basin:*** This nonattainment area falls under the jurisdiction of the San Joaquin Valley Air Quality Management District (SJVAQMD). SJVAQMD proposed that VOC and ammonia should not be precursors to PM<sub>2.5</sub>. On August 31, 2016, the EPA agreed with the SJVAQMD assessment on VOC, but disagreed with the determination for ammonia. See 81 FR 59876 (August 31, 2016). In July 2018, CARB released a draft SIP revision for the 2012 annual PM<sub>2.5</sub> NAAQS that included a precursor demonstration that ammonia is not a significant contributor to PM<sub>2.5</sub>. The EPA has not taken action on this SIP revision. Therefore, SJVAQMD does not have a comparable regulation to this final-form rulemaking.

***Plumas County:*** This nonattainment area falls under the jurisdiction of the Northern Sierra Air Quality Management District (NSAQMD). NSAQMD determined that VOC and ammonia are not significant contributors to PM<sub>2.5</sub>. On February 28, 2017, CARB submitted the NSAQMD determination as a SIP revision to the EPA. On December 27, 2017, the EPA proposed approval of the SIP revision. See 82 FR 61203 (December 27, 2017). On April 2, 2018, the EPA issued a final action to approve the NSAQMD determination. See 83 FR 13871 (April 2, 2018). Therefore, NSAQMD does not have a comparable regulation to this final-form rulemaking.

This final-form rulemaking includes SILs of 1.2 µg/m<sup>3</sup> for 24-hour PM<sub>2.5</sub> and 0.2 µg/m<sup>3</sup> for annual PM<sub>2.5</sub> 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 PM<sub>2.5</sub> SILs will mitigate the effects of PM<sub>2.5</sub> in attainment areas affected by PM<sub>2.5</sub> emission from nonattainment areas. The SILs are necessary to make sure that attainment is maintained in these attainment areas.

This final-form rulemaking is consistent with Federal requirements, guidance, and the SCAQMD regulation. This consistency will ensure that Pennsylvania will not be at a competitive disadvantage.

**(13) Will the regulation affect any other regulations of the promulgating agency or other state agencies? If yes, explain and provide specific citations.**

No other regulations are affected by this final-form rulemaking.

**(14) Describe the communications with and solicitation of input from the public, any advisory council/group, small businesses and groups representing small businesses in the development and drafting of the regulation. List the specific persons and/or groups who were involved. (“Small business” is defined in Section 3 of the Regulatory Review Act, Act 76 of 2012.)**

The proposed rulemaking was adopted by the Board at its meeting on December 18, 2018, and published in the *Pennsylvania Bulletin* on March 16, 2019, with a 66-day public comment period (49 Pa.B. 1146). Three public hearings were held on April 16, 17 and 18, 2019, in Harrisburg, Pittsburgh, and Norristown, respectively. The public comment period closed on May 20, 2019. The Department received three comments. One commenter supported the proposed rulemaking, while the other two commenters made general comments proposing ways to improve air quality, which are beyond the scope of this rulemaking. On June 19, 2019, the Independent Regulatory Review Commission (IRRC) submitted a letter stating that it has no objections, comments, or recommendations to offer on the rulemaking, and that if the Board delivers the final-form regulation without revisions, and the House and Senate Environmental Resources and Energy committees do not take any action, it will be deemed approved.

This final-form rulemaking is scheduled to be presented to the Air Quality Technical Advisory Committee (AQTAC) on August 15, 2019, to the Citizens Advisory Council’s (CAC) Policy and Regulatory Oversight Committee on August 16, 2019, and to the full CAC on August 20, 2019. Previously, AQTAC and CAC voted unanimously to concur with the Department’s recommendation to present the proposed rulemaking to the Board for consideration. Since the Department has not changed the Annex A or made any significant changes to the other rulemaking documents, the same outcome is expected for this final-form rulemaking. Furthermore, the Department has not received any adverse public comments to present to the committees.

On July 25, 2018, the Small Business Compliance Advisory Committee (SBCAC) stated that the proposed rulemaking did not appear to impact small businesses, that the Committee considered the Department’s presentation on the Annex A as informational only, and that the members did not have comments on the proposed rulemaking. SBCAC then voted unanimously to concur with the Department’s recommendation to present the proposed rulemaking forward to the Board for consideration. Since SBCAC determined that the proposed rulemaking did not affect small businesses and the Department has not changed the Annex A from proposed to final-form, the Department has satisfied the requirement that SBCAC review and advise the Department on rulemakings which affect small business stationary sources, under section 7.8(a)(6) of the APCA (35 P.S. § 4007.8(a)(6)).



**(15) Identify the types and number of persons, businesses, small businesses (as defined in Section 3 of the Regulatory Review Act, Act 76 of 2012) and organizations which will be affected by the regulation. How are they affected?**

This final-form rulemaking applies to owners and operators of new or modified major facilities with emissions of VOC or ammonia as PM<sub>2.5</sub> precursors located within a PM<sub>2.5</sub> nonattainment area or a PM<sub>2.5</sub> attainment area that has a significant impact on a PM<sub>2.5</sub> nonattainment area. The Department does not expect any facilities within PM<sub>2.5</sub> attainment areas to have a significant impact on PM<sub>2.5</sub> nonattainment areas.

The Department reviewed its databases, including the Environmental Facility Application Compliance Tracking System (eFACTS) and the Air Information Management System (AIMS), to gather information about potentially affected facilities. Within the PM<sub>2.5</sub> nonattainment areas, 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 will be subject to the final rulemaking if major modifications occur at the affected facilities. See Question 16 for the list of facilities.

The Department's analysis of potentially affected entities relied on the North American Industry Classification System (NAICS) codes for the subject industry sectors. The NAICS codes were used to determine the size standard for each business in accordance with the U.S. Small Business Administration (SBA) Small Business Size Regulations under 13 CFR Chapter 1, Part 121 (relating to small business size regulations). The small business size standard for most of these NAICS categories was based on number of employees and ranged from 500 to 1,500 employees; that is, the business could have as many as 500 to 1,500 employees and be considered a small business. In a few instances the small business size standard for the affected NAICS code was annual product sales in the millions of dollars. The Department determined that of these 17 potentially subject facilities, two facilities (12%) are small businesses that could potentially be subject to this final-form rulemaking, while 15 facilities were determined to not be small businesses. The owner and operator of a facility in these industry sectors may be classified as a small business under the Federal Small Business Size Regulations under 13 CFR Chapter 1, Part 121, while still having the potential to emit sufficient PM<sub>2.5</sub> precursor emissions of VOC, ammonia, or both, to be subject to this final-form rulemaking. A new facility will be affected by this final-form rulemaking if the facility has the potential to emit 100 tons per year or greater of emissions of VOCs, ammonia, or both.

Owners and operators of facilities that become subject to the VOC portion of this regulation will not incur any additional costs. Since the entire Commonwealth is located within the Ozone Transport Region, all counties are considered to be nonattainment for ozone. The emission thresholds for major facility and significant modification for VOC as an ozone precursor are the same or less than those for VOC as a PM<sub>2.5</sub> precursor. As such, the owners and operators are currently, and will remain, subject to NNSR for VOCs. The LAER and alternate sites, sizes, and processes analyses are already required for VOCs. In addition, no additional ERCs will be required since the ERCs are on a pollutant-by-pollutant basis, not a standard-by-standard basis. ERC requirements are met for a given pollutant even where the same pollutant is subject to NNSR in multiple paths, as long as the most stringent requirements for ERC generation location and offset ratios are met. The preamble to the EPA's Implementation Rule confirmed this by stating the following:

*Two commenters requested that we make clear in the final rule that an increase in precursor emissions need only be offset once, even if the increase triggers nonattainment NSR under, for example, both the ozone and PM<sub>2.5</sub> programs. We agree with these commenters and are clarifying*

*that a precursor emissions increase only needs to be offset once. A permit applicant will not, for example, need to obtain two sets of offsets for NOx emissions if NOx is regulated as a precursor both for ozone and PM<sub>2.5</sub> in the area. The NOx precursor emissions need only be offset once in accordance with the applicable ratio. To the extent a higher ratio applies for ozone under subpart 2, the applicant would have to obtain offsets at the higher ratio. However, when the offset ratios are the same, both requirements can be met with a single set of NOx offsets. See 73 FR 28338.*

Owners and operators of facilities that become subject to the ammonia portion of this regulation will be required to perform LAER and alternate sites, sizes, and processes analyses. Additionally, they will be required to obtain ammonia ERCs. Currently, there are no ammonia ERCs in the ERC registry. Therefore, an owner or operator will most likely comply through the purchase and use of other precursor ERCs and make a demonstration for interprecursor trading.

Should an owner or operator become subject to the ammonia portion of this final-form rulemaking, it is probable that the owner or operator will also be subject to existing NNSR provisions for emissions of oxides of nitrogen (NOx), VOC, or both. The owner or operator will already be required to perform LAER and alternate sites, sizes, and processes analyses under the existing regulations. Additionally, NOx and VOC ERCs purchased and used as emission offsets could be used for ammonia ERCs through interprecursor trading.

Owners and operators of portable sources will 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. This final-form rulemaking removes the language on specific requirements and replaces it with the ability to submit applications to the Department by any means.

**(16) List the persons, groups or entities, including small businesses, which will be required to comply with the regulation. Approximate the number that will be required to comply.**

As noted in the response to Question 15, this final-form rulemaking applies to owners and operators of new or modified major facilities with emissions of VOCs or ammonia as PM<sub>2.5</sub> precursors located within PM<sub>2.5</sub> nonattainment areas or that are located within PM<sub>2.5</sub> attainment areas and have a significant impact on a PM<sub>2.5</sub> nonattainment area. It is not expected that any facilities within PM<sub>2.5</sub> attainment areas will have a significant impact on PM<sub>2.5</sub> nonattainment areas. No new facilities are known to be constructed, or planned to be constructed, within PM<sub>2.5</sub> nonattainment areas that will emit major amounts of VOCs or ammonia. Existing facilities that currently have the potential to emit 100 tons per year or greater of emissions of VOCs, ammonia, or both, will only become subject to this final-form rulemaking if there is a major modification for VOCs, ammonia, or both, at the facility. The Department is not aware of any upcoming major modifications at these facilities. The identified facilities are listed below.

<b>County</b>	<b>Facility</b>	<b>Pollutant</b>
Allegheny	ALLEGHENY ENERGY SUPPLY/SPRINGDALE	Ammonia
Allegheny	USS/CLAIRTON WORKS	Ammonia and VOC
Allegheny	ATI FLAT ROLLED PRODUCTS/BRACKENRIDGE	VOC
Allegheny	EASTMAN CHEM RESINS INC/JEFFERSON SITE	VOC
Allegheny	NEVILLE CHEM CO/PGH	VOC
Allegheny	PPG IND INC/SPRINGDALE	VOC

Allegheny	US STEEL CORP/IRVIN PLT	VOC
Delaware	DELAWARE CNTY REG WA/ WESTERN REG TRMT PLT	Ammonia
Delaware	BOEING CO PHILA/ RIDLEY PARK PA FAC	VOC
Delaware	BRASKEM AMER INC/MARCUS HOOK	VOC
Delaware	CONGOLEUM CORP/TRAINER PLT	VOC
Delaware	LAUREL PIPELINE CO LP/BOOTHWYN BREAKOUT STATION	VOC
Delaware	MONROE ENERGY LLC/TRAINER	VOC
Delaware	SPMT / MARCUS HOOK IND COMPLEX	VOC
Delaware	SUNOCO PARTNERS MKT & TERM LP/TANK FARM 2	VOC
Delaware	SUNOCO PARTNERS MKT & TERM LP/TWIN OAKS TERM	VOC
Lebanon	BEMIS PKG INC/LEBANON	VOC

Of these facilities, Neville Chemical Company in Allegheny County and Congoleum Corporation in Delaware County are identified as small businesses.

**(17) Identify the financial, economic and social impact of the regulation on individuals, small businesses, businesses and labor communities and other public and private organizations. Evaluate the benefits expected as a result of the regulation.**

This final-form rulemaking only has a direct financial impact on the regulated community and any business engaged in the manufacturing or distribution of control equipment for VOC and ammonia emissions. Other businesses that have generated ERCs may benefit financially through the sale of those ERCs to affected owners and operators.

Economic and social impact will be demonstrated by reduced levels of PM<sub>2.5</sub> in nonattainment areas of this Commonwealth. Effectiveness will also be demonstrated through reduced incidence of respiratory and cardiovascular disease (as indicated by reduced hospital admissions, emergency room visits, absences from school and work, and restricted activity days) and reduced incidence of lung disease, decreased lung function, asthma attacks and certain cardiovascular problems. Other indicators of effectiveness will be improved visibility, decreased soiling and decreased materials damage.

**(18) Explain how the benefits of the regulation outweigh any cost and adverse effects.**

It is not anticipated that any additional costs to the regulated community will be incurred as a result of these final-form amendments. Any costs to the industry to comply with this final-form rulemaking will be outweighed by the health and welfare benefits and economic benefits of this final-form rulemaking. The health and welfare benefits are from the reduction of the emissions of pollutants into the atmosphere and subsequent formation of PM<sub>2.5</sub> by the imposition of LAER, which reduce human and animal exposure to harmful fine particulate pollution.

**(19) Provide a specific estimate of the costs and/or savings to the regulated community associated with compliance, including any legal, accounting or consulting procedures which may be required. Explain how the dollar estimates were derived.**

Owners and operators of facilities that become subject to the VOC portion of this final-form rulemaking will not incur any additional costs.

The cost of complying with the requirements in this final-form rulemaking primarily affects owners and operators of facilities that become subject to the ammonia portion of this final-form rulemaking, as they will

be required to perform LAER and alternate sites, sizes, and processes analyses. Additionally, they will be required to obtain ammonia ERCs. Currently, there are no ammonia ERCs in the ERC registry. Therefore, an owner or operator will most likely comply through the purchase and use of other precursor ERCs and make a demonstration for interprecursor trading.

Should an owner or operator become subject to the ammonia portion of this final-form rulemaking, it is probable that the owner or operator will also be subject to existing NNSR provisions for emissions of NO<sub>x</sub>, VOC, or both. The owner or operator will already be required to perform LAER and alternate sites, sizes, and processes analyses under the existing regulations. Additionally, NO<sub>x</sub> and VOC ERCs purchased and used as emission offsets could be used for ammonia ERCs through interprecursor trading.

Depending on the delivery method chosen by the regulated community, the submittal of portable source general plan approvals and operating permits applications may be cheaper than what is currently required.

New legal, accounting or consulting procedures will not be required.

Please also see the response to Question 15.

**(20) Provide a specific estimate of the costs and/or savings to local governments associated with compliance, including any legal, accounting or consulting procedures which may be required. Explain how the dollar estimates were derived.**

It is not anticipated that any additional costs to local governments will be incurred as a result of this final-form rulemaking.

**(21) Provide a specific estimate of the costs and/or savings to state government associated with the implementation of the regulation, including any legal, accounting, or consulting procedures which may be required. Explain how the dollar estimates were derived.**

It is not anticipated that any additional costs to state government will be incurred as a result of this final-form rulemaking.

**(22) For each of the groups and entities identified in items (19)-(21) above, submit a statement of legal, accounting or consulting procedures and additional reporting, recordkeeping or other paperwork, including copies of forms or reports, which will be required for implementation of the regulation and an explanation of measures which have been taken to minimize these requirements.**

No additional legal, accounting, or consulting procedures are expected for the groups identified in items (19)-(21) above.

**(22a) Are forms required for implementation of the regulation?**

There are no forms required for implementation of the regulation.

**(22b) If forms are required for implementation of the regulation, attach copies of the forms here. If your agency uses electronic forms, provide links to each form or a detailed description of the information required to be reported. Failure to attach forms, provide links, or provide a detailed description of the information to be reported will constitute a faulty delivery of the regulation.**

N/A

**(23) In the table below, provide an estimate of the fiscal savings and costs associated with implementation and compliance for the regulated community, local government, and state government for the current year and five subsequent years.**

	<b>Current FY 19/20</b>	<b>FY+1 20/21</b>	<b>FY+2 21/22</b>	<b>FY+3 22/23</b>	<b>FY+4 23/24</b>	<b>FY+5 24/25</b>
<b>SAVINGS:</b>	\$	\$	\$	\$	\$	\$
<b>Regulated Community</b>	0.00	0.00	0.00	0.00	0.00	0.00
<b>Local Government</b>	0.00	0.00	0.00	0.00	0.00	0.00
<b>State Government</b>	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Savings</b>	0.00	0.00	0.00	0.00	0.00	0.00
<b>COSTS:</b>	\$	\$	\$	\$	\$	\$
<b>Regulated Community</b>	0.00	0.00	0.00	0.00	0.00	0.00
<b>Local Government</b>	0.00	0.00	0.00	0.00	0.00	0.00
<b>State Government</b>	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Costs</b>	0.00	0.00	0.00	0.00	0.00	0.00
<b>REVENUE LOSSES:</b>	\$	\$	\$	\$	\$	\$
<b>Regulated Community</b>	0.00	0.00	0.00	0.00	0.00	0.00
<b>Local Government</b>	0.00	0.00	0.00	0.00	0.00	0.00
<b>State Government</b>	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Revenue Losses</b>	0.00	0.00	0.00	0.00	0.00	0.00

**(23a) Provide the past three-year expenditure history for programs affected by the regulation.**

<b>Program</b>	<b>FY-4 (15/16)</b>	<b>FY-3 (16/17)</b>	<b>FY-2 (17/18)</b>	<b>FY-1 (18/19)</b>
Environmental Program Management (161-10382)	\$28,277,000	\$26,885,000	\$29,413,000	\$30,932,000
Clean Air Fund Major Emission Facilities (215-20077)	\$17,373,000	\$16,931,000	\$16,358,000	\$17,878,000

Clean Air Fund Mobile and Area Facilities (233-20084)	\$10,142,000	\$8,228,000	\$8,078,000	\$9,369,000
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**(24) For any regulation that may have an adverse impact on small businesses (as defined in Section 3 of the Regulatory Review Act, Act 76 of 2012), provide an economic impact statement that includes the following:**

**(a) An identification and estimate of the number of small businesses subject to the regulation.**

This final-form rulemaking applies to owners and operators of new or modified major facilities with emissions of VOC or ammonia as PM<sub>2.5</sub> precursors located within a PM<sub>2.5</sub> nonattainment area or a PM<sub>2.5</sub> attainment area that has a significant impact on a PM<sub>2.5</sub> nonattainment area. It is not expected that any facilities within PM<sub>2.5</sub> attainment areas will have a significant impact on PM<sub>2.5</sub> nonattainment areas.

Within the PM<sub>2.5</sub> nonattainment areas, there are 17 facilities that have the potential to emit 100 tons per year or greater of emissions of VOCs, ammonia, or both, as discussed in the response to Question 16. No small businesses within PM<sub>2.5</sub> nonattainment areas are major facilities for ammonia. Two small businesses have been identified that have facilities within PM<sub>2.5</sub> nonattainment areas and those facilities are major for VOC: Neville Chemical Company in Allegheny County and Congoleum Corporation in Delaware County. These businesses will only become subject to this final-form rulemaking if there is a major modification of a VOC source at the facility. In this case, since the owners and operators are already subject to the existing NNSR provisions, there will be no additional burden placed on these small businesses.

**(b) The projected reporting, recordkeeping, and other administrative costs required for compliance with the final regulation, including the type of professional skills necessary for preparation of the report or record.**

The recordkeeping and reporting requirements for owners and operators of affected small businesses will not change from what is already required. Depending on the delivery method chosen by the regulated community, the submittal of portable source general permit applications may be cheaper than what is currently required. There are no further legal, accounting or consulting procedures established in this final-form rulemaking.

**(c) A statement of probable effect on impacted small businesses.**

Neither of the small businesses identified in the responses to Questions 16 and 24(a) are expected to be subject to this final-form rulemaking since there is no indication of a major modification that will be taking place at either small business.

**(d) A description of any less intrusive or less costly alternative methods of achieving the purpose of the final regulation.**

There are no less intrusive or less costly alternative regulatory provisions available.

**(25) List any special provisions which have been developed to meet the particular needs of affected groups or persons including, but not limited to, minorities, the elderly, small businesses, and farmers.**

No special provisions were developed. This final-form rulemaking was developed to satisfy the SIP Requirements Rule promulgated by the EPA. The EPA's Implementation Rule does not allow for the development of special provisions.

**(26) Include a description of any alternative regulatory provisions which have been considered and rejected and a statement that the least burdensome acceptable alternative has been selected.**

No alternative regulatory provisions were considered. The provisions of this final-form rulemaking are the least burdensome allowed by the EPA's Implementation Rule.

**(27) In conducting a regulatory flexibility analysis, explain whether regulatory methods were considered that will minimize any adverse impact on small businesses (as defined in Section 3 of the Regulatory Review Act, Act 76 of 2012), including:**

**(a) The establishment of less stringent compliance or reporting requirements for small businesses.**

Less stringent compliance or reporting requirements are not available for small businesses. The small businesses that could be potentially subject to this final-form rulemaking are already subject to the existing NNSR regulations. The recordkeeping and reporting requirements for owners and operators of affected small businesses are not changed from what is already required.

**(b) The establishment of less stringent schedules or deadlines for compliance or reporting requirements for small businesses.**

Establishment of a less stringent compliance schedule or deadline for small businesses is not possible. Existing facilities that currently have the potential to emit 100 tons per year or greater of emissions of VOCs, ammonia, or both will only become subject to this final-form rulemaking if there is a major modification of a source of emissions for VOCs, ammonia, or both, at the facility. This final-form rulemaking does not amend the current regulatory recordkeeping and reporting requirements.

**(c) The consolidation or simplification of compliance or reporting requirements for small businesses.**

This final-form rulemaking does not amend the current regulatory recordkeeping and reporting requirements.

**(d) The establishment of performing standards for small businesses to replace design or operational standards required in the regulation.**

The standards included in this final-form rulemaking are required by the EPA's Implementation Rule. The SILs are based on the EPA guidance; neither has a provision to allow a different type of standard.

**(e) The exemption of small businesses from all or any part of the requirements contained in the regulation.**

The owners and operators of small businesses may not be exempted from the final-form requirements because this final-form rulemaking is developed to satisfy the SIP Requirements Rule as promulgated by the EPA. The small businesses that could be potentially subject to this final-form rulemaking are already subject to the existing NNSR regulations.

**(28) If data is the basis for this regulation, please provide a description of the data, explain in detail how the data was obtained, and how it meets the acceptability standard for empirical, replicable and testable data that is supported by documentation, statistics, reports, studies or research. Please submit data or supporting materials with the regulatory package. If the material exceeds 50 pages, please provide it in a searchable electronic format or provide a list of citations and internet links that, where possible, can be accessed in a searchable format in lieu of the actual material. If other data was considered but not used, please explain why that data was determined not to be acceptable.**

The Commonwealth's SIP must include emissions of VOC and ammonia as PM<sub>2.5</sub> precursors in its NNSR regulations. The basis for this regulation is the Federal requirements and guidance, as well as SCAQMD's Rule 1325, as described in the responses to Questions 9 and 12, above.

The Department reviewed the information provided by the EPA in its SIP Requirements Rule and Implementation Rule, and believes that the data used meet the acceptability standard for empirical, replicable, and testable data. Additionally, according to the EPA's Scientific Integrity Policy, at [https://www.epa.gov/sites/production/files/2014-02/documents/scientific\\_integrity\\_policy\\_2012.pdf](https://www.epa.gov/sites/production/files/2014-02/documents/scientific_integrity_policy_2012.pdf), the EPA adheres to the 2002 Office of Management and Budget (OMB) Information Quality Guidelines, the 2005 OMB Information Quality Bulletin for Peer Review, the EPA's Quality Policy (CIO 2106) for assuring the collection and use of sound, scientific data and information, the EPA's Peer Review Handbook for internal and external review of scientific products, and the EPA's Information Quality Guidelines for maximizing the transparency, integrity and utility of information published on the Agency's website.

The following list provides more complete citations for sources referenced in this Regulatory Analysis Form:

*Fine Particulate Matter National Ambient Air Quality Standards: State Implementation Plan Requirements*, 81 FR 58010 (August 24, 2016).

*Guidance on Significant Impact Levels for Ozone and Fine Particles in the Prevention of Significant Deterioration Permitting Program*, April 17, 2018, EPA memorandum, Peter Tsirigotis, Director, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC, 27711.

*Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM<sub>2.5</sub>)*, 73 FR 28321 (May 16, 2008).

North American Industry Classification Standards, <http://www.naics.com/>.



*Regulatory Impact Analysis of the Final Revisions to the National Ambient Air Quality Standards for Particulate Matter*, December 2012, EPA-452/R-12-005, U.S. Environmental Protection Agency, Office of Air and Radiation, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711, <https://www3.epa.gov/ttnecas1/regdata/RIAs/finalria.pdf>.

*Revisions to California State Implementation Plan; South Coast Air Quality Management District; Stationary Source Permits*, 83 FR 39012 (August 8, 2018).

South Coast Air Quality Management District (SCAQMD), Regulation XIII - New Source Review, Rule 1325, Amended November 4, 2016, <http://www.aqmd.gov/docs/default-source/rule-book/reg-xiii/rule-1325.pdf?sfvrsn=4>.

**(29) Include a schedule for review of the regulation including:**

- |   |                                   |
|---|-----------------------------------|
| A. The length of the public comment period:   | <u>66 days</u>                    |
| B. The date or dates on which any public meetings or hearings were held:                      | <u>April 16, 17, and 18, 2019</u> |
| C. The expected date of delivery of the final-form regulation:                                | <u>Quarter 3, 2019</u>            |
| D. The expected effective date of the final-form regulation:                                  | <u>Date of publication</u>        |
| E. The expected date by which compliance with the final-form regulation will be required:     | <u>Date of publication</u>        |
| F. The expected date by which required permits, licenses or other approvals must be obtained: | <u>N/A</u>                        |

**(30) Describe the plan developed for evaluating the continuing effectiveness of the regulations after its implementation.**

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