



**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Parts 52 and 81**

**[EPA-R05-OAR-2016-0479; FRL-9957-60-Region 5]**

**Air Plan Approval; Ohio; Redesignation of the Ohio Portion of the Cincinnati-Hamilton, OH-IN-KY Area to Attainment of the 1997**

**Annual Standard for Fine Particulate Matter**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** The Environmental Protection Agency (EPA) is proposing to redesignate the Ohio portion of the Cincinnati-Hamilton, OH-IN-KY, nonattainment area (hereafter, "the Cincinnati-Hamilton area") to attainment for the 1997 fine particulate matter (PM<sub>2.5</sub>) annual national ambient air quality standards (NAAQS or standard). The Ohio portion of the Cincinnati-Hamilton area includes Butler, Clermont, Hamilton, and Warren Counties. Because EPA has determined that the Cincinnati-Hamilton area is attaining the annual PM<sub>2.5</sub> standard, EPA is proposing to redesignate the area to attainment and also proposing several additional related actions. EPA is proposing to approve the Reasonably Available Control Measures (RACM)-Reasonably Available Control Technology (RACT) portion of Ohio's Cincinnati-Hamilton area attainment plan SIP revision as

providing adequate RACM/RACT. EPA is proposing to approve an update to the Ohio state implementation plan (SIP), by updating the state's approved plan for maintaining the 1997 annual PM<sub>2.5</sub> NAAQS through 2027. EPA previously approved the base year emissions inventory for the Cincinnati-Hamilton area, and is proposing to approve Ohio's updated emission inventory which includes emission inventories for volatile organic compounds (VOCs) and ammonia. Ohio's approved maintenance plan submission includes a budget for the mobile source contribution of PM<sub>2.5</sub> and nitrogen oxides (NO<sub>x</sub>) to the Cincinnati-Hamilton Ohio PM<sub>2.5</sub> area for transportation conformity purposes, which EPA is proposing to approve and update. EPA is proposing to take these actions in accordance with the Clean Air Act (CAA) and EPA's implementation rule regarding the 1997 PM<sub>2.5</sub> NAAQS.

**DATES:** Comments must be received on or before [**insert date 30 days after date of publication in the Federal Register**].

**ADDRESSES:** Submit your comments, identified by Docket ID No. EPA-R05-OAR-2016-0479 at <http://www.regulations.gov>, or via email to [aburano.douglas@epa.gov](mailto:aburano.douglas@epa.gov). For comments submitted at Regulations.gov, follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. For either manner of submission, EPA may

publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. EPA will generally not consider comments or comment contents located outside of the primary submission (i.e. on the web, cloud, or other file sharing system). For additional submission methods, please contact the person identified in the "For Further Information Contact" section. For the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <http://www2.epa.gov/dockets/commenting-epa-dockets>.

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**SUPPLEMENTARY INFORMATION:** This supplementary information section is arranged as follows:

I. Background

II. What are the Criteria for Redesignation to Attainment?

III. What is EPA's Analysis of the State's Request?

1. Attainment

2. Section 110 and Part D Requirements, and Approval SIP under Section 110(k) (Section 107(d)(3)(E)(ii) and (v))

3. Permanent and Enforceable Reductions in Emissions (Section 107(d)(3)(E)(iii))

4. Maintenance Plan Pursuant to Section 175A of the CAA (Section 107(d)(3)(E)(iv))

5. Motor Vehicle Emissions Budget (MVEBs) for the Mobile Source Contribution to PM<sub>2.5</sub> and NO<sub>x</sub>

6. Comprehensive Emissions Inventory

IV. EPA's Proposed Actions

V. Statutory and Executive Order Reviews

**I. Background**

The first air quality standards for PM<sub>2.5</sub> were promulgated on July 18, 1997, at 62 FR 38652. EPA promulgated an annual standard at a level of 15 micrograms per cubic meter (µg/m<sup>3</sup>) of ambient air, based on a three-year average of the annual mean PM<sub>2.5</sub> concentrations at each monitoring site.

On January 5, 2005, at 70 FR 944, EPA published air quality

area designations for the 1997 annual PM<sub>2.5</sub> standard based on air quality data for calendar years 2001-2003. In that rulemaking, EPA designated the Cincinnati-Hamilton area (the Ohio portion being Butler, Clermont, Hamilton, and Warren Counties) as nonattainment for the 1997 annual PM<sub>2.5</sub> standard.

In this proposed redesignation, EPA takes into account two decisions of the D.C. Circuit. On August 21, 2012, in *EME Homer City Generation, L.P. v. EPA*, 696 F.3d 7 (D.C. Cir. 2012), the D.C. Circuit vacated and remanded the Cross State Air Pollution Rule (CSAPR) and ordered EPA to continue administering the Clean Air Interstate Rule (CAIR) "pending . . . development of a valid replacement." *EME Homer City* at 38. The D.C. Circuit denied all petitions for rehearing in the case on January 24, 2013. In the second decision, on January 4, 2013, the D.C. Circuit remanded to EPA the "Final Clean Air Fine Particle Implementation Rule" (72 FR 20586, April 25, 2007) and the "Implementation of the New Source Review (NSR) Program for Particulate Matter Less than 2.5 Micrometers (PM<sub>2.5</sub>)" final rule (73 FR 28321, May 16, 2008). *Natural Resources Defense Council v. EPA*, 706 F.3d 428 (D.C. Cir. 2013).

## **II. What are the Criteria for Redesignation to Attainment?**

The CAA sets forth the requirements for redesignating a

nonattainment area to attainment. Specifically, section 107(d)(3)(E) of the CAA allows for redesignation provided that: (1) the Administrator determines that the area has attained the applicable NAAQS based on current air quality data; (2) the Administrator has fully approved an applicable SIP for the area under section 110(k) of the CAA; (3) the Administrator determines that the improvement in air quality is due to permanent and enforceable emission reductions resulting from implementation of the applicable SIP, Federal air pollution control regulations, or other permanent and enforceable emission reductions; (4) the Administrator has fully approved a maintenance plan for the area meeting the requirements of section 175A of the CAA; and (5) the state containing the area has met all requirements applicable to the area for purposes of redesignation under section 110 and part D of the CAA.

### **III. What is EPA's Analysis of the State's Request?**

EPA is proposing to redesignate the Ohio portion of the Cincinnati-Hamilton area to attainment of the 1997 annual PM<sub>2.5</sub> NAAQS, and is proposing to approve updates to Ohio's maintenance plan for the area and other related SIP revisions. EPA is also proposing to approve Ohio's RACM/RACT analysis. The bases for these proposed actions follow.

## 1. Attainment

In accordance with section 179(c) of the CAA, 42 U.S.C. 7509(c) and 40 CFR 51.1004(c), EPA is proposing to determine that the Cincinnati-Hamilton area has attained the 1997 annual PM<sub>2.5</sub> NAAQS. This proposed determination is based upon complete, quality-assured, and certified ambient air monitoring data for the 2013-2015 monitoring period that shows this area has monitored attainment of the 1997 PM<sub>2.5</sub> NAAQS.

Under EPA's regulations at 40 CFR 50.7, the annual primary and secondary PM<sub>2.5</sub> standards are met when the annual arithmetic mean concentration, as determined in accordance with 40 CFR part 50, appendix N, is less than or equal to 15.0 µg/m<sup>3</sup> at all relevant monitoring sites in the area.

EPA has reviewed the ambient air quality monitoring data in the Cincinnati-Hamilton area, consistent with the provisions of 40 CFR part 50, appendix T. EPA's review focused on data recorded in the EPA Air Quality System (AQS) database for the Cincinnati-Hamilton area for PM<sub>2.5</sub> nonattainment area from 2013-2015.

The Cincinnati-Hamilton area has nine monitors located in Butler (OH), Hamilton (OH), and Campbell (KY) Counties that reported design values from 2013-2015 for PM<sub>2.5</sub> that ranged from

9.5 to 11.2  $\mu\text{g}/\text{m}^3$  for the 1997 annual standard. The data are summarized shown in Table 1 below.

There are three additional monitor sites in Butler County that are not listed in Table 1 because the data from these sites are not used for redesignation purposes. On October 31, 2014, EPA determined that site 39-017-0020 was located within the immediate area of several facilities, and that the monitoring data from the site would no longer be compared to the annual  $\text{PM}_{2.5}$  standard. On February 5, 2015, monitor site 39-017-0022 in Bulter County became active, but since it is a "special purpose monitor", it cannot be used for comparison to the NAAQS before 24 months, per 40 CFR 58.20. Additionally, a new monitor site, 39-017-0016, became active in 2016 but it was not included in Ohio's analysis because it does not yet have three years of valid data.

All monitors in the Cincinnati-Hamilton area recorded complete data in accordance with criteria set forth by EPA in 40 CFR part 50 appendix N, where a complete year of air quality data comprises four calendar quarters, with each quarter containing data from at least 75% capture of the scheduled sampling days. Data available are considered to be sufficient for comparison to the NAAQS if three consecutive complete years

of data exist. Recently the state certified data for 2013-2015 show the area continues to attain the standard. Partial 2016 data for all relevant monitors also support a finding that the area continues to attain the standard.

**Table 1. Annual PM<sub>2.5</sub> Design Values for the Cincinnati-Hamilton Area for 2013-2015**

		Annual Design Values (ug/m3)			
		Year			Average
Site	County	2013	2014	2015	2013-2015
39-017-0003	Butler, OH	11.1	11.3	10.3	10.9
39-017-0016		10.7	10.7	9.5	10.3
39-017-0019		11	11.2	10.2	10.8
39-061-0006	Hamilton, OH	10.1	10.3	9.3	9.9
39-061-0014		11.6	11.3	10.7	11.2
39-061-0040		10.6	10.4	9.2	10.1
39-061-0042		11.5	11.2	10.1	11
39-061-0010		10.5	10.4	9.2	10
21-037-3002	Campbell, KY	9.6	9.7	9.4*	9.5

\* less than 75% capture in one quarter at the primary monitor, but substitution using a secondary monitor was completed resulting in an AQS 'valid' design value

Based on the information summarized above, EPA has found that the Cincinnati-Hamilton area has attained the 1997 annual PM<sub>2.5</sub> NAAQS.

**2. Section 110 and Part D Requirements, and Approval SIP under Section 110(k) (Section 107(d)(3)(E)(ii) and (v))**

We have determined that, under section 110 of the CAA (general SIP requirements), Ohio has met all currently applicable SIP requirements for purposes of redesignation for the Cincinnati-Hamilton area. We are also proposing to find, in

accordance with section 107(d)(3)(E)(v), that the Ohio submittal meets all SIP requirements currently applicable for purposes of redesignation under part D of title I of the CAA. In addition, we are proposing to find, in accordance with section 107(d)(3)(E)(ii), that all applicable requirements of the Ohio SIP for purposes of redesignation have been approved. As discussed above, EPA previously approved Ohio's 2005 emissions inventory as meeting the section 172(c)(3) comprehensive emissions inventory requirement.

In making these proposed determinations, we have ascertained which SIP requirements are applicable for purposes of redesignation, and concluded that the Ohio SIP includes measures meeting those requirements and that they are fully approved under section 110(k) of the CAA.

**a. Section 110 General SIP Requirements**

Section 110(a) of title I of the CAA contains the general requirements for a SIP. Section 110(a)(2) provides that the implementation plan submitted by a state must have been adopted by the state after reasonable public notice and hearing, and, among other things, must: include enforceable emission limitations and other control measures, means or techniques necessary to meet the requirements of the CAA; provide for

establishment and operation of appropriate devices, methods, systems, and procedures necessary to monitor ambient air quality; provide for implementation of a source permit program to regulate the modification and construction of any stationary source within the areas covered by the plan; include provisions for the implementation of part C, Prevention of Significant Deterioration (PSD) and part D, NSR permit programs; include criteria for stationary source emission control measures, monitoring, and reporting; include provisions for air quality modeling; and provide for public and local agency participation in planning and emission control rule development.

Section 110(a)(2)(D) of the CAA requires that SIPs contain measures to prevent sources in a state from significantly contributing to air quality problems in another state. EPA believes that the requirements linked with a particular nonattainment area's designation are the relevant measures to evaluate in reviewing a redesignation request. The transport SIP submittal requirements, where applicable, continue to apply to a state regardless of the designation of any one particular area in the state. Thus, we believe that these requirements should not be construed as the applicable requirements for purposes of redesignation.

Further, we believe that the other section 110 elements described above that are not connected with nonattainment plan submissions and not linked with an area's attainment status are not applicable requirements for purposes of redesignation. A state remains subject to these requirements after an area is redesignated to attainment. We conclude that only the section 110 and part D requirements that are linked with a particular area's designation are the relevant measures which we may consider in evaluating a redesignation request. See Reading, Pennsylvania, proposed and final rulemakings (61 FR 53174-53176, October 10, 1996) and (62 FR 24826, May 7, 1997); Cleveland-Akron-Lorain, Ohio, final rulemaking (61 FR 20458, May 7, 1996); and Tampa, Florida, final rulemaking (60 FR 62748, December 7, 1995). See also the discussion on this issue in the Cincinnati, Ohio 1-hour ozone redesignation (65 FR 37890, June 19, 2000), and in the Pittsburgh, Pennsylvania 1-hour ozone redesignation (66 FR 50399, October 19, 2001).

We have reviewed the Ohio SIP and have concluded that it meets the general SIP requirements under section 110 of the CAA to the extent they are applicable for purposes of redesignation. EPA has previously approved provisions of Ohio's SIP addressing section 110 requirements (including provisions addressing

particulate matter), at 40 CFR 52.1870.

On December 5, 2007, Ohio made a submittal addressing "infrastructure SIP" elements required under CAA section 110(a)(2). EPA proposed approval of the December 5, 2007, submittal on April 28, 2011, at 76 FR 23757 and published final approval on July 13, 2011, at 76 FR 41075.

The remaining parts of the infrastructure SIPs required by section 110(a)(2) are not relevant to this redesignation, and are statewide requirements that are not linked to the PM<sub>2.5</sub> nonattainment status of the Cincinnati-Hamilton area. Therefore, EPA believes that these SIP elements are not applicable requirements for purposes of review of the state's PM<sub>2.5</sub> redesignation request.

#### **b. Part D Requirements**

EPA has determined that, upon approval of the base year emissions inventories discussed in section III.6 of this rulemaking, the Ohio SIP will meet the applicable SIP requirements for the Cincinnati-Hamilton area applicable for purposes of redesignation under part D of the CAA. Subpart 1 of part D, found in sections 172-176 of the CAA, sets forth the basic nonattainment requirements applicable to all nonattainment areas. Subpart 4 of part D, found in sections 189 of the CAA,

sets forth nonattainment requirements applicable for particulate matter nonattainment areas.

**i) RACM/RACT Requirements Under Section 172(c)(1)**

Section 172(c)(1) requires that each attainment plan "provide for the implementation of all reasonably available control measures as expeditiously as practicable (including such reductions in emissions from the existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology), and shall provide for attainment of the national primary ambient air quality standards." The PM<sub>2.5</sub> Implementation Rule (72 FR 20586) requires that the subpart 1 RACM portion of the attainment plan SIP revision include the list of potential measures that a state considered and additional information sufficient to show that the state has met all requirements for the determination of what constitutes RACM in a specific nonattainment area. See 40 CFR 51.1010(a). Any measures that are necessary to meet these requirements that are not already either federally promulgated, part of the SIP, or otherwise creditable in SIPs must be submitted in enforceable form as part of a state's attainment plan SIP revision for the area.

In 1972, 1980, and 1991, Ohio promulgated RACM rules for

particulate emissions from stationary sources. Ohio also has RACT rules found in OAC Chapter 3745-17. Lake Michigan Air Directors Consortium (LADCO), in consultation with two contractors, performed a series of studies exploring control measures for reducing both ozone precursors and PM<sub>2.5</sub> precursors in Ohio, Illinois, Indiana, Michigan, and Wisconsin. Photochemical modeling was then conducted to assess the air quality benefits of the candidate control measures. In its attainment demonstration submitted on July 18, 2008, Ohio demonstrated that attainment would be achieved in the Cincinnati-Hamilton area by 2009, based on the modeling conducted by the LADCO project team. Because of the projected 2009 attainment date, it would not have been reasonably possible or practicable for Ohio to develop RACM/RACT requirements, promulgate regulations and implement a control program prior to 2009. Ohio concluded that its RACM/RACT analysis, based on LADCO modeling, demonstrates that current control measures in Ohio satisfy RACM/RACT for the 1997 annual PM<sub>2.5</sub> standard.

EPA has reviewed Ohio's RACM/RACT analysis and agrees that it indicates that no other reasonably available measures were available, or necessary, to attain or advance attainment of the standard. Because Ohio has demonstrated with modeling that no

further control measures would advance the attainment date in the area, EPA is proposing to approve Ohio's RACM/RACT portion of the attainment plan SIP revision as providing adequate RACM/RACT consistent with the provisions of 40 CFR 51.1010(b).

EPA previously redesignated the Cincinnati-Hamilton area to attainment for the 1997 annual PM<sub>2.5</sub> standard, predicated in part on a finding that the RACM/RACT requirement (interpreted as reflecting those reasonable measures needed to attain the standard) was not an applicable requirement for purposes of redesignation of areas already meeting the standard. EPA has long interpreted that subpart 1 nonattainment planning requirements, including RACM, are not "applicable for purposes of section 107(d)(3)(E)(ii) and (v) when an area is attaining the NAAQS, and, therefore, need not be approved into the SIP before EPA can redesignate the area. See 76 FR 80258.

On July 14, 2015, the United States Court of Appeals for the Sixth Circuit (Sixth Circuit) issued an opinion in *Sierra Club v. EPA*, 793 F.3d 656 (6<sup>th</sup> Cir. 2015), vacating EPA's redesignation of the Indiana and Ohio portions of the Cincinnati-Hamilton area to attainment for the 1997 PM<sub>2.5</sub> NAAQS on the basis that EPA had not approved subpart 1 RACM for the

area into the SIP.<sup>1</sup> The Sixth Circuit vacated the redesignation of the Ohio and Indiana portion of the area based on its view that RACM/RACT must be considered an applicable requirement for designation purposes. Consistent with that ruling, EPA is now finding that Ohio has satisfied this applicable requirement.

**ii) Other Section 172 Requirements**

For purposes of evaluating this redesignation request, the applicable section 172 SIP requirements for the Cincinnati-Hamilton area are contained in sections 172(c)(1)-(9). A thorough discussion of the requirements contained in section 172 can be found in the General Preamble for Implementation of Title I (57 FR 13498, April 16, 1992).

Under section 172, states with nonattainment areas must submit plans providing for timely attainment and meeting a variety of other requirements. However, pursuant to 40 CFR 51.1004(c), EPA's determination that the area has attained the 1997 annual PM<sub>2.5</sub> standard suspends the requirement to submit certain planning SIPs related to attainment, including: attainment demonstration requirements, the RFP and attainment

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<sup>1</sup> The Court issued its initial decision in the case on March 18, 2015, and subsequently issued an amended opinion on July 14 after appeals for rehearing en banc and panel rehearing had been filed. The amended opinion revised some of the legal aspects of the Court's analysis of the relevant statutory provisions (section 107(d)(3)(E)(ii) and section 172(c)(1)), but the overall holding of the opinion was unaltered. On March 28, 2016, the Supreme Court denied a petition for certiorari from Ohio requesting review of the Sixth Circuit's decision.

demonstration requirements of sections 172(c)(2) and (6) and 182(b)(1) of the CAA, and the requirement for contingency measures of section 172(c)(9) of the CAA.

As a result, the only remaining requirements under section 172 to be considered are the emissions inventory requirement under section 172(c)(3), and the RACM/RACT requirement of section 172(c)(1) per the 6<sup>th</sup> circuit decision. As discussed previously, EPA is proposing to approve the VOCs and ammonia emissions inventories that Ohio submitted as satisfying the section 172(c)(3) requirement, and existing control measures as satisfying RACM/RACT requirements under section 172(c)(1).

No SIP provisions applicable for redesignation of the Cincinnati-Hamilton area are currently disapproved, conditionally approved, or partially approved. Ohio currently has a fully approved SIP for all requirements, as applicable for purposes of redesignation under the Sixth Circuit's Sierra Club decision.

Section 172(c)(1) requires the plans for all nonattainment areas to provide for the implementation of RACM as expeditiously as practicable and to provide for attainment of the primary NAAQS. EPA interprets this requirement to impose a duty on all states to consider all available control measures for all

nonattainment areas and to adopt and implement such measures as are reasonably available for implementation in each area as components of the area's attainment demonstration.

As noted above in the previous section, the Sixth Circuit concluded that "a State seeking redesignation 'shall provide for the implementation' of RACM/RACT, even if those measures are not strictly necessary to demonstrate attainment with the PM<sub>2.5</sub> NAAQS. . . . If a State has not done so, EPA cannot 'fully approve[]' the area's SIP, and redesignation to attainment status is improper." *Sierra Club*, 793 F.3d at 670.

EPA is adhering to the Sixth Circuit's decision. Ohio has demonstrated that no further control measures would be necessary to advance the attainment date in the Cincinnati-Hamilton area, and EPA is proposing to approve existing control measures as satisfying RACM/RACT requirements under section 172(c)(1). A further discussion on RACM/RACT requirements can be found in the previous section entitled "RACM/RACT Requirements Under Section 172(c)(1)."

The reasonable further progress (RFP) requirement under section 172(c)(2) is defined as progress that must be made toward attainment. This requirement is not relevant for purposes of the Cincinnati-Hamilton redesignation because the

area has monitored attainment of the 1997 annual PM<sub>2.5</sub> NAAQS. (General Preamble, 57 FR 13564). See also 40 CFR 51.918. The requirement to submit the section 172(c)(9) contingency measures is similarly not applicable for purposes of redesignation. *Id.*

Section 172(c)(3) requires submission and approval of a comprehensive, accurate and current inventory of actual emissions. Ohio submitted a 2005 base year emissions inventory in the required attainment plan, and also updated the emissions inventory with VOCs and ammonia emissions from 2007. EPA previously approved the 2005 base year emissions inventory (76 FR 64825), and is proposing to approve the emissions inventory for VOCs and ammonia.

Section 172(c)(4) requires the identification and quantification of allowable emissions for major new and modified stationary sources in an area, and section 172(c)(5) requires source permits for the construction and operation of new and modified major stationary sources anywhere in the nonattainment area. EPA approved Ohio's current NSR program on January 10, 2003 (68 FR 1366), but has not approved updates since that time. Nonetheless, since PSD requirements will apply after redesignation, the area need not have a fully-approved NSR program for purposes of redesignation, provided that the area

demonstrates maintenance of the NAAQS without part D NSR. A detailed rationale for this view is described in a memorandum from Mary Nichols, Assistant Administrator for Air and Radiation, dated October 14, 1994, entitled, "Part D New Source Review Requirements for Areas Requesting Redesignation to Attainment." Ohio has demonstrated that the Cincinnati-Hamilton area will be able to maintain the standard without part D NSR in effect; therefore, the state need not have a fully approved part D NSR program prior to approval of the redesignation request. The state's PSD program will become effective in the Cincinnati-Hamilton area upon redesignation to attainment. See rulemakings for Detroit, Michigan (60 FR 12467-12468, March 7, 1995); Cleveland-Akron-Lorain, Ohio (61 FR 20458, 20469-20470, May 7, 1996); Louisville, Kentucky (66 FR 53665, October 23, 2001); and Grand Rapids, Michigan (61 FR 31834-31837, June 21, 1996).

Section 172(c)(6) requires the SIP to contain control measures necessary to provide for attainment of the standard. Because attainment has been reached, no additional measures are needed to provide for attainment.

Section 172(c)(7) requires the SIP to meet the applicable provisions of section 110(a)(2). As noted above, we have found that Ohio's SIP meets the applicable requirements of section

110(a)(2) for purposes of redesignation.

**iii) Section 176 Conformity Requirements**

Section 176(c) of the CAA requires states to establish criteria and procedures to ensure that Federally-supported or funded activities, including highway projects, conform to the air quality planning goals in the applicable SIPs. The requirement to determine conformity applies to transportation plans, programs and projects developed, funded or approved under Title 23 of the U.S. Code and the Federal Transit Act (transportation conformity) as well as to all other Federally-supported or funded projects (general conformity). State transportation conformity regulations must be consistent with Federal conformity regulations relating to consultation, enforcement, and enforceability, which EPA promulgated pursuant to CAA requirements.

EPA approved Ohio's transportation conformity SIPs on March 2, 2015 (80 FR 11134). In April 2010, EPA promulgated changes to 40 CFR 51.851, eliminating the requirement for states to maintain a general conformity SIP. Following this promulgation, EPA granted Ohio's request to remove its general conformity regulations from the SIP. See 80 FR 29968. EPA confirms that Ohio has met the applicable conformity requirements under

section 176.

**iv) Subpart 4**

On January 4, 2013, in *Natural Resources Defense Council v. EPA*, the D.C. Circuit remanded to EPA the “Final Clean Air Fine Particle Implementation Rule” (72 FR 20586, April 25, 2007) and the “Implementation of the New Source Review (NSR) Program for Particulate Matter Less than 2.5 Micrometers (PM<sub>2.5</sub>)” final rule (73 FR 28321, May 16, 2008) (collectively, “1997 PM<sub>2.5</sub> Implementation Rule”). 706 F.3d 428 (D.C. Cir. 2013). The Court found that EPA erred in implementing the 1997 PM<sub>2.5</sub> NAAQS pursuant to the general implementation provisions of subpart 1 of part D of title I of the CAA, rather than the particulate-matter-specific provisions of subpart 4 of part D of title I.

EPA has longstanding general guidance that interprets the 1990 amendments to the CAA, making recommendations to states for meeting the statutory requirements for SIPs for nonattainment areas. See, “State Implementation Plans; General Preamble for the Implementation of Title I of the Clear Air Act Amendments of 1990,” 57 FR 13498 (April 16, 1992) (the “General Preamble”). In the General Preamble, EPA discussed the relationship of subpart 1 and subpart 4 SIP requirements, and pointed out that subpart 1 requirements were, to an extent, “subsumed by, or

integrally related to, the more specific PM-10 requirements." 57 FR 13538 (April 16, 1992). The subpart 1 requirements include, among other things, provisions for attainment demonstrations, RACM, RFP, emissions inventories, and contingency measures.

For the purposes of this redesignation, in order to identify any additional requirements which would apply under subpart 4, we are considering the Cincinnati-Hamilton area to be a "moderate" PM<sub>2.5</sub> nonattainment area. Under section 188 of the CAA, all areas designated nonattainment areas under subpart 4 would initially be classified by operation of law as "moderate" nonattainment areas, and would remain moderate nonattainment areas unless and until EPA reclassifies the area as a "serious" nonattainment area. Accordingly, EPA believes that it is appropriate to limit the evaluation of the potential impact of subpart 4 requirements to those that would be applicable to moderate nonattainment areas.

Section 189(a) and (c) of subpart 4 applies to moderate nonattainment areas and includes the following: (1) an approved permit program for construction of new and modified major stationary sources (section 189(a)(1)(A)); (2) an attainment demonstration (section 189(a)(1)(B)); (3) provisions for RACM (section 189(a)(1)(C)); and (4) quantitative milestones

demonstrating RFP toward attainment by the applicable attainment date (section 189(c)).

The permit requirements of subpart 4, as contained in section 189(a)(1)(A), refer to and apply the subpart 1 permit provisions requirements of sections 172 and 173 to PM<sub>10</sub>, without adding to them. Consequently, EPA believes that section 189(a)(1)(A) does not itself impose for redesignation purposes any additional requirements for moderate areas beyond those contained in subpart 1.<sup>2</sup> In any event, in the context of redesignation, EPA has long relied on the interpretation that a fully approved nonattainment new source review program is not considered an applicable requirement for redesignation, provided the area can maintain the standard with a PSD program after redesignation. A detailed rationale for this view is described in a memorandum from Mary Nichols, Assistant Administrator for Air and Radiation, dated October 14, 1994, entitled, "Part D New Source Review Requirements for Areas Requesting Redesignation to Attainment." See also rulemakings for Detroit, Michigan (60 FR 12467-12468, March 7, 1995); Cleveland-Akron-Lorain, Ohio (61 FR 20458, 20469-20470, May 7, 1996); Louisville, Kentucky (66 FR 53665, October 23, 2001); and Grand Rapids, Michigan

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<sup>2</sup> The potential effect of section 189(e) on section 189(a)(1)(A) for purposes of evaluating this redesignation is discussed below.

(61 FR 31834-31837, June 21, 1996).

With respect to the specific attainment planning requirements under subpart 4,<sup>3</sup> when EPA evaluates a redesignation request under subpart 1 and/or 4, any area that is attaining the PM<sub>2.5</sub> standard is viewed as having satisfied the attainment planning requirements for these subparts. For redesignations, EPA has for many years interpreted attainment-linked requirements as not applicable for areas attaining the standard. In the General Preamble, EPA stated that:

The requirements for RFP will not apply in evaluating a request for redesignation to attainment since, at a minimum, the air quality data for the area must show that the area has already attained. Showing that the State will make RFP towards attainment will, therefore, have no meaning at that point.

"General Preamble for the Interpretation of Title I of the CAA Amendments of 1990"; (57 FR 13498, 13564, April 16, 1992).

The General Preamble also explained that:

[t]he section 172(c)(9) requirements are directed at ensuring RFP and attainment by the applicable date.

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<sup>3</sup>I.e., attainment demonstration, RFP, RACM, milestone requirements, contingency measures.

These requirements no longer apply when an area has attained the standard and is eligible for redesignation. Furthermore, section 175A for maintenance plans . . . provides specific requirements for contingency measures that effectively supersede the requirements of section 172(c)(9) for these areas.

*Id.*

EPA similarly stated in its September 4, 1992 Calcagni memorandum (Calcagni memorandum) that, "[t]he requirements for reasonable further progress and other measures needed for attainment will not apply for redesignations because they only have meaning for areas not attaining the standard."

Elsewhere in this action, EPA proposes to determine that the area has attained the 1997 annual PM<sub>2.5</sub> standard. Under its longstanding interpretation, EPA is proposing to determine here that the area meets the attainment-related plan requirements of subparts 1 and 4. Thus, EPA is proposing to conclude that the requirements to submit an attainment demonstration under 189(a)(1)(B), a RACM determination under sections 172(c)(1) and 189(a)(1)(c), a RFP demonstration under section 189(c)(1), and contingency measure requirements under section 172(c)(9) are satisfied for purposes of evaluating the redesignation request.

PM<sub>2.5</sub> pollution can be emitted directly from a source (primary PM<sub>2.5</sub>) or formed secondarily through chemical reactions in the atmosphere involving precursor pollutants emitted from a variety of sources. Sulfates are a type of secondary particulate formed from SO<sub>2</sub> emissions from power plants and industrial facilities. Nitrates, another common type of secondary particulate, are formed from combustion emissions of NO<sub>x</sub> from power plants, mobile sources, and other combustion sources.

CAA section 189(e) specifically provides that control requirements for major stationary sources of direct PM<sub>10</sub> shall also apply to PM<sub>10</sub> precursors from those sources, except where EPA determines that major stationary sources of such precursors "do not contribute significantly to PM<sub>10</sub> levels which exceed the standard in the area."

For a number of reasons, EPA believes that this proposed redesignation of the Cincinnati-Hamilton area is consistent with the Court's decision on this aspect of subpart 4. First, while the Court, citing section 189(e), stated that "for a PM<sub>10</sub> area governed by subpart 4, a precursor is 'presumptively regulated,'" the Court expressly declined to decide the specific challenge to EPA's 1997 PM<sub>2.5</sub> implementation rule provisions

regarding ammonia and VOCs as precursors. The Court had no occasion to reach whether and how it was substantively necessary to regulate any specific precursor in a particular PM<sub>2.5</sub> nonattainment area, and did not address what might be necessary for purposes of acting upon a redesignation request.

The Cincinnati-Hamilton area has attained the standard without any specific additional controls of VOCs and ammonia emissions from any sources in the area.

Precursors in subpart 4 are specifically regulated under the provisions of section 189(e), which requires, with important exceptions, control requirements for major stationary sources of PM<sub>10</sub> precursors.<sup>4</sup> As explained below, we do not believe that any additional controls of ammonia and VOCs are required in the context of this redesignation.

In the General Preamble, EPA discusses its approach to implementing section 189(e). See 57 FR 13538-13542. With regard to precursor regulation under section 189(e), the General Preamble explicitly stated that control of VOCs under other CAA requirements may suffice to relieve a state from the need to adopt precursor controls under section 189(e) (57 FR 13542).

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<sup>4</sup> Under either subpart 1 or subpart 4, for purposes of demonstrating attainment as expeditiously as practicable, a state is required to evaluate all economically and technologically feasible control measures for direct PM emissions and precursor emissions, and adopt those measures that are deemed reasonably available.

EPA proposes to determine that Ohio has met the provisions of section 189(e) with respect to ammonia and VOCs as precursors. This proposed supplemental determination is based on our findings that: (1) the Cincinnati-Hamilton area contains no major stationary sources of ammonia, and (2) existing major stationary sources of VOCs are adequately controlled under other provisions of the CAA regulating the ozone NAAQS.<sup>5</sup> In the alternative, EPA proposes to determine that, under the express exception provisions of section 189(e), and in the context of the redesignation of the area, which is attaining the 1997 annual PM<sub>2.5</sub> standard, at present ammonia and VOCs precursors from major stationary sources do not contribute significantly to levels exceeding the 1997 PM<sub>2.5</sub> standard in the Cincinnati-Hamilton area. See 57 FR 13539-42.

EPA notes that its 1997 PM<sub>2.5</sub> implementation rule provisions in 40 CFR 51.1002 were not directed at evaluation of PM<sub>2.5</sub> precursors in the context of redesignation, but at SIP plans and control measures required to bring a nonattainment area into attainment of the 1997 annual PM<sub>2.5</sub> NAAQS. By contrast, redesignation to attainment primarily requires the area to have already attained due to permanent and enforceable emission

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<sup>5</sup>The Cincinnati-Hamilton area has reduced VOC emissions through the implementation of various SIP approved VOC control programs and various on-road and nonroad motor vehicle control programs.

reductions, and to demonstrate that controls in place can continue to maintain the standard. Thus, even if we regard the Court's January 4, 2013, decision as calling for "presumptive regulation" of ammonia and VOCs for PM<sub>2.5</sub> under the attainment planning provisions of subpart 4, those provisions do not require additional controls of these precursors for an area that already qualifies for redesignation. Nor does EPA believe that requiring Ohio to address precursors differently than it has already would result in a different redesignation outcome.

Although, as EPA has emphasized, its consideration here of precursor requirements under subpart 4 is in the context of a redesignation to attainment, EPA's existing interpretation of subpart 4 requirements with respect to precursors in attainment plans for PM<sub>10</sub> contemplates that states may develop attainment plans that regulate only those precursors that are necessary for purposes of attainment in the area in question, i.e., states may determine that only certain precursors need be regulated for attainment and control purposes.<sup>6</sup> Courts have upheld this

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<sup>6</sup>See, e.g., "Approval and Promulgation of Implementation Plans for California - San Joaquin Valley PM-10 Nonattainment Area; Serious Area Plan for Nonattainment of the 24-Hour and Annual PM-10 Standards," 69 FR 30006 (May 26, 2004) (approving a PM10 attainment plan that impose controls on direct PM10 and NO<sub>x</sub> emissions and did not impose controls on SO<sub>2</sub>, VOC, or ammonia emissions).

approach to the requirements of subpart 4 for PM<sub>10</sub>.<sup>7</sup> EPA believes that application of this approach to PM<sub>2.5</sub> precursors under subpart 4 is reasonable. Because the Cincinnati-Hamilton area has already attained the 1997 annual PM<sub>2.5</sub> NAAQS with its current approach to regulation of PM<sub>2.5</sub> precursors, EPA believes that, in the context of this redesignation, there is no need to revisit the attainment control strategy with respect to the treatment of precursors. Even if the Court's decision is construed to impose an obligation to consider additional precursors under subpart 4 in evaluating this redesignation request, it would not affect EPA's approval here of Ohio's request for redesignation of the Cincinnati-Hamilton area. Moreover, the state has shown, and EPA is proposing to determine, that attainment in this area is due to permanent and enforceable emissions reductions on all precursors necessary to provide for continued attainment. It follows that no further control of additional precursors is necessary. Accordingly, EPA does not view the January 4, 2013, Court decision as precluding redesignation of the Cincinnati-Hamilton area to attainment for the 1997 PM<sub>2.5</sub> NAAQS at this time.

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<sup>7</sup>See, e.g., *Assoc. of Irrigated Residents v. EPA et al.*, 423 F.3d 989 (9<sup>th</sup> Cir. 2005).

EPA concludes that the area has met all applicable requirements for purposes of redesignation in accordance with section 107(d)(3)(E)(ii) and (v).

**c. Fully Approved Applicable SIP under Section 110(k) of the CAA**

Upon final approval of Ohio's comprehensive VOCs and ammonia emissions inventories, EPA will have fully approved the Ohio SIP for the Cincinnati-Hamilton area under section 110(k) of the CAA for all requirements applicable for purposes of redesignation. EPA may rely on prior SIP approvals in approving a redesignation request (See page 3 of the Calcagni memorandum; *Southwestern Pennsylvania Growth Alliance v. Browner*, 144 F.3d 984, 989-990 (6th Cir. 1998); *Wall v. EPA*, 265 F.3d 426 (6th Cir. 2001)) plus any additional measures it may approve in conjunction with a redesignation action. See 68 FR 25413, 25426 (May 12, 2003). Since the passage of the CAA of 1970, Ohio has adopted and submitted, and EPA has fully approved, provisions addressing various required SIP elements under particulate matter standards. In this action, EPA is approving Ohio's VOCs and ammonia comprehensive emissions inventories for the Cincinnati-Hamilton area as meeting the requirement of section 172(c)(3) of the CAA.

### **3. Permanent and Enforceable Reductions in Emissions**

#### **(Section 107(d)(3)(E)(iii))**

EPA believes that Ohio has demonstrated that the observed air quality improvement in the Cincinnati-Hamilton area is due to permanent and enforceable reductions in emissions resulting from implementation of the SIPs, Federal measures, and other state-adopted measures.

In making this demonstration, Ohio has calculated the change in emissions between 2005, one of the years used to designate the area as nonattainment, and 2008, one of the years the Cincinnati-Hamilton area monitored attainment. The reduction in emissions and the corresponding improvement in air quality over this time period can be attributed to a number of regulatory control measures that the Cincinnati-Hamilton area and contributing areas have implemented, as discussed below.

#### **a. Permanent and Enforceable Controls Implemented**

The following is a discussion of permanent and enforceable measures that have been implemented in the area:

##### **i. Federal Emission Control Measures**

Reductions in direct emissions of PM<sub>2.5</sub> and in emissions of PM<sub>2.5</sub> precursors have occurred statewide and in upwind areas as a result of Federal emission control measures, with additional

emission reductions expected to occur in the future. Federal emission control measures include the following.

*Tier 2 Emission Standards for Vehicles and Gasoline Sulfur Standards.* EPA finalized this Federal rule in February 2000. These emission control requirements result in lower NO<sub>x</sub> and SO<sub>2</sub> emissions from new cars and light duty trucks, including sport utility vehicles. Emission standards established under EPA's rules became effective between 2004 and 2009. EPA has estimated that, emissions of NO<sub>x</sub> from new vehicles have decreased by the following percentages: passenger cars (light duty vehicles) - 77 percent; light duty trucks, minivans, and sports utility vehicles - 86 percent; and, larger sports utility vehicles, vans, and heavier trucks - 69 to 95 percent. EPA expects fleet-wide average emissions to decline by similar percentages as new vehicles replace older vehicles. The Tier 2 standards also reduced the sulfur content of gasoline by up to 90 percent. VOCs emissions reductions will be approximately 12 percent for passenger cars; 18 percent for smaller SUVs, light trucks, and minivans; and 15 percent for larger SUVs, vans, and heavier trucks.

*Heavy-Duty Diesel Engine Rule.* EPA issued this rule in July 2000. This rule, which was phased in between 2004 and

2007, includes standards limiting the sulfur content of diesel fuel. This rule is estimated to reduce NO<sub>x</sub> emissions from diesel trucks and buses by approximately 40 percent. The level of sulfur in highway diesel fuel is also estimated to have dropped by 97 percent by mid-2006 due to this rule.

*Nonroad Diesel Rule.* In May 2004, EPA promulgated a new rule for large nonroad diesel engines, such as those used in construction, agriculture, and mining equipment, to be phased in between 2008 and 2014. Prior to 2006, nonroad diesel fuel averaged approximately 3,000 ppm sulfur. This rule limited nonroad diesel sulfur content to 15 ppm by 2010. It is estimated that compliance with this rule has cut emissions from nonroad diesel engines by more than 90%. This rule achieved some emission reductions by 2008 and was fully implemented by 2010. The reduction in fuel sulfur content also yielded an immediate reduction in sulfate particle emissions from all diesel vehicles.

#### **ii. Control Measures in Contributing Areas**

Given the significance of sulfates and nitrates in the Cincinnati-Hamilton area, the area's air quality is strongly affected by regulated emissions from power plants.

*NO<sub>x</sub> SIP Call.* On October 27, 1998 (63 FR 57356), EPA issued

a NO<sub>x</sub> SIP Call requiring the District of Columbia and 22 states to reduce emissions of NO<sub>x</sub>. Affected states were required to comply with Phase I of the SIP Call beginning in 2004, and Phase II beginning in 2007. Emission reductions resulting from regulations developed in response to the NO<sub>x</sub> SIP Call are permanent and enforceable.

*CAIR and CSAPR.* EPA proposed CAIR on January 30, 2004, at 69 FR 4566, promulgated CAIR on May 12, 2005, at 70 FR 25162, and promulgated associated Federal Implementation Plans (FIPs) on April 28, 2006, at 71 FR 25328, in order to reduce SO<sub>2</sub> and NO<sub>x</sub> emissions and improve air quality in many areas across the Eastern United States. However, on July 11, 2008, the United States Court of Appeals for the District of Columbia Circuit (DC Circuit or Court) issued its decision to vacate and remand both CAIR and the associated CAIR FIPs in their entirety (*North Carolina v. EPA*, 531 F.3d 836 (DC Cir. 2008)). EPA petitioned for a rehearing, and the Court issued an order remanding CAIR and the CAIR FIPs to EPA without vacatur (*North Carolina v. EPA*, 550 F.3d 1176 (DC Cir. 2008)). The Court, thereby, left CAIR in place in order to "temporarily preserve the environmental values covered by CAIR" until EPA replaced it with a rule consistent with the Court's opinion (*id.* at 1178). The Court directed EPA

to “remedy CAIR's flaws” consistent with the July 11, 2008, opinion, but declined to impose a schedule on EPA for completing this action (id).

On August 8, 2011 (76 FR 48208), acting on the D.C. Circuit's remand, EPA promulgated CSAPR to replace CAIR and, thus, to address the interstate transport of emissions contributing to nonattainment and interfering with maintenance of the two air quality standards covered by CAIR as well as the 2006 PM<sub>2.5</sub> NAAQS. CSAPR requires substantial reductions of SO<sub>2</sub> and NO<sub>x</sub> emissions from electric generating units (EGUs) in 28 states in the eastern United States. As a general matter, because CSAPR is CAIR's replacement, emissions reductions associated with CAIR will for most areas be made permanent and enforceable through implementation of CSAPR.

Numerous parties filed petitions for review of CSAPR in the D.C. Circuit, and on August 21, 2012, the court issued its ruling, vacating and remanding CSAPR to EPA and ordering continued implementation of CAIR. *EME Homer City Generation, L.P. v. EPA*, 696 F.3d 7, 38 (D.C. Cir. 2012). The D.C. Circuit's vacatur of CSAPR was reversed by the United States Supreme Court on April 29, 2014, and the case was remanded to the D.C. Circuit to resolve remaining issues in accordance with

the high court's ruling. *EPA v. EME Homer City Generation, L.P.*, 134 S. Ct. 1584 (2014).

On remand, the D.C. Circuit affirmed CSAPR in most respects, but invalidated without vacating some of the CSAPR budgets as to a number of states. *EME Homer City Generation, L.P. v. EPA*, 795 F.3d 118 (D.C. Cir. 2015) (*EME Homer City II*). The litigation over CSAPR ultimately delayed implementation of that rule for three years, from January 1, 2012, when CSAPR's cap-and-trade programs were originally scheduled to replace the CAIR cap-and-trade programs, to January 1, 2015. CSAPR's Phase 2 budgets were originally promulgated to begin on January 1, 2014, and are now scheduled to begin on January 1, 2017. As part of the remand, the D.C. Circuit found the Ohio 2014 NO<sub>x</sub> budget was invalid, stating that based on EPA's own data, Ohio made no contribution to downwind states' nonattainment. On November 16, 2015, EPA proposed the CSAPR Update Rule (80 FR 75706) which, when finalized, will establish permanent and enforceable reduction through revised NO<sub>x</sub> ozone season budgets for Ohio.

Because the emission reduction requirements of CAIR were enforceable through the 2011 control period, and because CSAPR has been promulgated to address the requirements previously

addressed by CAIR and will achieve similar or greater reductions once finalized, EPA has determined that the EGU emission reductions that helped lead to attainment in the Cincinnati-Hamilton area can now be considered permanent and enforceable and that the requirement of CAA section 107(d)(3)(E)(iii) has been met.

**b. Emission Reductions**

Ohio developed an emissions inventory for NO<sub>x</sub>, direct PM<sub>2.5</sub>, and SO<sub>2</sub> for 2005, one of the years used to designate the area as nonattainment, and 2008, one of the years the Cincinnati-Hamilton area monitored attainment of the standard.

Emissions of SO<sub>2</sub> and NO<sub>x</sub> from EGUs were derived from EPA's Clean Air Market's acid rain database. These emissions reflect Ohio's NO<sub>x</sub> emission budgets resulting from EPA's NO<sub>x</sub> SIP call. The 2008 emissions from EGUs reflect Ohio's emission caps under CAIR. All other point source emissions were obtained from Ohio's source facility emissions reporting.

Area source emissions for the Cincinnati-Hamilton area for 2005 were taken from periodic emissions inventories.<sup>8</sup> These 2005 area source emission estimates were extrapolated to 2008.

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<sup>8</sup> Periodic emission inventories are derived by states every three years and reported to EPA. These periodic emission inventories are required by the Federal Consolidated Emissions Reporting Rule, codified at 40 CFR Subpart A. EPA revised these and other emission reporting requirements in a final rule published on December 17, 2008, at 73 FR 76539.

Source growth factors were supplied by LADCO. These growth factors were based on the U.S Department of Commerce Bureau of Economic Analysis (BEA) growth factors, with some updated local information.

Nonroad mobile source emissions were extrapolated from nonroad mobile source emissions reported in EPA's 2005 National Emissions Inventory (NEI). Contractors were employed by LADCO to estimate emissions for commercial marine vessels and railroads.

On-road mobile source emissions were calculated using EPA's mobile source emission factor model, MOVES2010, in conjunction with transportation model results developed by the Ohio-Kentucky-Indiana Regional Council of Governments (OKI).

All emissions estimates discussed below were documented in the submittals and appendices to Ohio's redesignation request submittal of July 22, 2016. For these data and additional emissions inventory data, the reader is referred to EPA's digital docket for this rule, <http://www.regulations.gov>, for docket number EPA-R05-OAR-2016-0479, which includes a digital copy of Ohio's submittal.

Emissions data in tons per year (tpy) for the Cincinnati-Hamilton area are shown in Tables 2, 3, and 4 below.

Table 2. Comparison of 2005 emissions from the nonattainment year and 2008 emissions for an attainment year for NO<sub>x</sub> in the Cincinnati-Hamilton area (tpy).

<b>Sector</b>	<b>2005</b>	<b>2008</b>	<b>Net Change (2008-2005)</b>
EGU Point	55,930.44	46,853.89	-9,076.55
Non-EGU	10,371.70	9,790.50	-581.20
Non-road	12,417.57	10,561.92	-1,855.65
Other (Area)	7,810.74	7,975.67	164.93
Marine, Air, and Rail (MAR)	9,352.60	9,052.95	-299.65
On-road	71,919.89	64,471.22	-7,448.67
Total	167,802.94	148,706.15	-19,096.79

Table 3. Comparison of 2005 emissions from the nonattainment year and 2008 emissions for an attainment year for SO<sub>2</sub> in the Cincinnati-Hamilton area (tpy).

<b>Sector</b>	<b>2005</b>	<b>2008</b>	<b>Net Change (2008-2005)</b>
EGU Point	218,395.56	98,334.17	-120,061.39
Non-EGU	15,532.09	13,483.92	-2,048.17
Non-road	1,057.16	416.87	-640.29
Area	3,494.39	3,520.77	26.38
MAR	1,092.58	982.82	-109.76
On-road	392.00	277.59	-114.41
Total	239,963.78	117,016.14	-122,947.64

Table 4. Comparison of 2005 emissions from the nonattainment year and 2008 emissions for an attainment year for direct PM<sub>2.5</sub> in the Cincinnati-Hamilton area (tpy).

<b>Sector</b>	<b>2005</b>	<b>2008</b>	<b>Net Change (2008-2005)</b>
EGU Point	2,062.91	1,633.15	-429.76
Non-EGU	1,352.79	1,458.52	105.73
Non-road	984.35	853.89	-130.46
Area	1,828.85	1,864.80	35.95
MAR	416.20	414.43	-1.77
On-road	2,810.30	2,679.85	-130.45
Total	9,455.40	8,904.64	-550.76

Table 2 shows reductions in NO<sub>x</sub> emissions for the Cincinnati-Hamilton area by 19,096.79 tpy between 2005 (nonattainment year) and 2008 (attainment year). Table 3 shows that the Cincinnati-Hamilton area reduced SO<sub>2</sub> emissions by 122,947.64 tpy between 2005 and 2008. Table 4 shows reductions in direct PM<sub>2.5</sub> emissions for the Cincinnati-Hamilton area by 550.76 tpy between 2005 and 2008.

#### **4. Maintenance Plan Pursuant to Section 175A of the CAA (Section 107(d) (3) (E) (iv))**

EPA has fully approved an applicable maintenance plan that meets the requirements of section 175(a) on December 23, 2011. See 76 FR 80253. In conjunction with Ohio's request to redesignate the Cincinnati-Hamilton nonattainment area to attainment, Ohio has submitted an updated attainment inventory of the maintenance plan to reflect the provisions of subpart 4 (Title I, Part D) of the CAA, and EPA is updating the maintenance plan to 2027.

##### **a. What Is Required in a Maintenance Plan?**

Section 175A of the CAA sets forth the required elements of a maintenance plan for areas seeking redesignation from nonattainment to attainment. Under section 175A, the plan must demonstrate continued attainment of the applicable NAAQS for at

least ten years after EPA approves a redesignation to attainment. Eight years after redesignation, the state must submit a revised maintenance plan which demonstrates that attainment will continue to be maintained for ten years following the initial ten year maintenance period. To address the possibility of future NAAQS violations, the maintenance plan must contain contingency measures with a schedule for implementation as EPA deems necessary to assure prompt correction of any future PM<sub>2.5</sub> violations.

The Calcagni memorandum provides additional guidance on the content of a maintenance plan. The memorandum states that a maintenance plan should address the following items: the attainment emissions inventory, a maintenance demonstration showing maintenance for the ten years of the maintenance period, a commitment to maintain the existing monitoring network, factors and procedures to be used for verification of continued attainment of the NAAQS, and a contingency plan to prevent or correct future violations of the NAAQS.

Section 175A requires a state seeking redesignation to attainment to submit a SIP revision to provide for the maintenance of the NAAQS in the area "for at least 10 years after the redesignation." EPA has interpreted this as a showing

of maintenance "for a period of ten years following redesignation." Calcagni memorandum, p. 9. Where the emissions inventory method of showing maintenance is used, its purpose is to show that emissions during the maintenance period will not increase over the attainment year inventory. Calcagni memorandum, pp. 9-10.

As discussed in detail in the section below, the state's maintenance plan submission expressly documents that the area's emissions inventories will remain below the attainment year inventories through 2021. In addition, for the reasons set forth below, EPA believes that the state's submission, in conjunction with additional supporting information, further demonstrates that the area will continue to maintain the 1997 annual SO<sub>2</sub> NAAQS at least through 2027. Thus, any EPA action to finalize its proposed approval of the redesignation request and maintenance plans in 2017, will be based on a showing, in accordance with section 175A, that the state's maintenance plan provides for maintenance for at least ten years after redesignation.

#### **b. Attainment Inventory**

Ohio developed an emissions inventory for NO<sub>x</sub>, direct PM<sub>2.5</sub>, and SO<sub>2</sub> for 2008, one of the years in the period during which the

Cincinnati-Hamilton area monitored attainment of the 1997 annual  $PM_{2.5}$  standard, as described previously. The attainment level of emissions is summarized in Tables 2, 3, and 4, above. Ohio also included emissions inventories for VOCs and ammonia from 2007, in accordance with the provisions of Subpart 4 (Title I, Part D) of the CAA. These emissions are summarized in Table 6, in discussion of the maintenance plan below.

### **c. Demonstration of Maintenance**

Ohio has a fully approved maintenance plan that meets the requirements of Section 175(A). See 76 FR 80253. Along with the redesignation request, Ohio submitted an updated attainment inventory to reflect the provision of subpart 4. Ohio's plan demonstrates maintenance of the 1997 annual  $PM_{2.5}$  standard through 2021 by showing that current and future emissions of  $NO_x$ , directly emitted  $PM_{2.5}$  and  $SO_2$  in the area remain at or below attainment year emission levels. Section 175A requires a state seeking redesignation to attainment to submit a SIP revision to provide for the maintenance of the NAAQS in the area "for at least 10 years after the redesignation." EPA has interpreted this as a showing of maintenance "for a period of ten years following redesignation." Calcagni memorandum, p. 9. Where the emissions inventory method of showing maintenance is used, its

purpose is to show that emissions during the maintenance period will not increase over the attainment year inventory. Calcagni memorandum, pp. 9-10.

As discussed in detail in the section below, Ohio's maintenance plan expressly documents that the area's emissions inventories will remain below the attainment year inventories through 2021. In addition, for the reasons set forth below, EPA believes that the state's submission, in conjunction with additional supporting information, further demonstrates that the area will continue to maintain the PM<sub>2.5</sub> standard at least through 2027. Thus, if EPA finalizes its proposed approval of the redesignation request in 2017, it will be based on a showing, in accordance with section 175A, that the state's maintenance plan provides for maintenance for at least ten years after redesignation.

Ohio's plan demonstrates maintenance of the 1997 annual PM<sub>2.5</sub> NAAQS through 2021 by showing that current and future emissions of NO<sub>x</sub>, directly emitted PM<sub>2.5</sub> and SO<sub>2</sub> for the area remain at or below attainment year emission levels.

The rate of decline in emissions of PM<sub>2.5</sub>, NO<sub>x</sub>, and SO<sub>2</sub> from the attainment year 2008 through 2021 indicates that the emissions inventory levels not only significantly decline

between 2008 and 2021, but also will continue to decline through 2027 and beyond. PM<sub>2.5</sub> emissions in the nonattainment area are projected to decrease by 270.09 tpy in 2015 and 702.01 tpy in 2021. NO<sub>x</sub> emissions in the nonattainment area are projected to decrease by 42,994.13 tpy in 2015 and 69,887.02 tpy in 2021. SO<sub>2</sub> emissions in the nonattainment area are projected to decline by 4,765.88 tpy in 2015 and 28,505.87 in 2021. These rates of decline are consistent with monitored and projected air quality trends; and emissions reductions achieved through emissions controls and regulations that will remain in place beyond 2027, and through fleet turnover that will continue beyond 2027, among other factors. EPA is proposing that the previously approved MVEBs are adequate for conformity purposes. See section 5 below for further details regarding MVEBs.

A maintenance demonstration need not be based on modeling. See *Wall v. EPA*, 265 F.3d 426 (6th Cir. 2001), *Sierra Club v. EPA*, 375 F. 3d 537 (7th Cir. 2004). See also 66 FR 53094, 53099-53100 (October 19, 2001), 68 FR 25413, 25430-25432 (May 12, 2003). Ohio uses emissions inventory projections for the years 2018 and 2021 to demonstrate maintenance for the entire Cincinnati-Hamilton area. The projected emissions were estimated by Ohio, with assistance from LADCO and OKI, who used

the MOVES2010 model for mobile source projections. Projection modeling of inventory emissions was done for the 2018 interim year emissions using estimates based on the 2009 and 2018 LADCO modeling inventory, using LADCO's growth factors, for all sectors. The 2021 maintenance year emission estimates were based on emissions estimates from the 2018 LADCO modeling. Table 5 shows the 2008 attainment base year emission estimates and the 2015 and 2021 emission projections for the Cincinnati-Hamilton area, taken from Ohio's July 22, 2016, submission.

Table 5. Comparison of 2008, 2015 and 2021 NO<sub>x</sub>, Direct PM<sub>2.5</sub>, and SO<sub>2</sub> Emission Totals (tpy) for the Cincinnati-Hamilton Area.

	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>
2008 (baseline)	117,016.14	148,706.15	8,904.64
2015 (interim)	112,250.26	105,712.02	8,634.55
2021 (maintenance)	88,510.27	78,819.13	8,202.63
Projected Decrease (2021-2008)	28,505.87 24% decrease	69,887.02 47% decrease	702.01 8% decrease

Table 5 shows that, for the period between 2008 and the maintenance projection for 2021, the Cincinnati-Hamilton area will reduce NO<sub>x</sub> emissions by 69,887.02 tpy; direct PM<sub>2.5</sub> emissions by 702.01 tpy; and SO<sub>2</sub> emissions by 28,505.87 tpy. The 2021 projected emissions levels are significantly below attainment year inventory levels, and, based on the rate of decline, it is highly improbable that any increases in these levels will occur in 2027 and beyond. Thus, the emissions inventories set forth

in Table 5 show that the area will continue to maintain the 1997 annual PM<sub>2.5</sub> standard during the maintenance period and at least through 2027.

As Table 1 demonstrates, monitored PM<sub>2.5</sub> design value concentrations in the Cincinnati-Hamilton area are well below the NAAQS in the years beyond 2008, the attainment year for the area. Further, those values are trending downward as time progresses. Based on the future projections of emissions in 2015 and 2021 showing significant emissions reductions in direct PM<sub>2.5</sub>, NO<sub>x</sub>, and SO<sub>2</sub>, it is very unlikely that monitored PM<sub>2.5</sub> values in 2027 and beyond will show violations of the NAAQS. Additionally, the 2013-2015 design values, which range from 9.5 to 11.2 µg/m<sup>3</sup>, provide a sufficient margin in the unlikely event emissions rise slightly in the future.

***Maintenance Plan Evaluation of Ammonia and VOCs***

With regard to the redesignation of the Cincinnati-Hamilton area, in evaluating the effect of the Court's remand of EPA's implementation rule, which included presumptions against consideration of VOCs and ammonia as PM<sub>2.5</sub> precursors, EPA in this proposal is also considering the impact of the decision on the maintenance plan required under sections 175A and 107(d)(3)(E)(iv). To begin with, EPA notes that the area has

attained the 1997 annual PM<sub>2.5</sub> standard and that the state has shown that attainment of the standard is due to permanent and enforceable emission reductions.

EPA proposes to confirm that the state's maintenance plan shows continued maintenance of the standard by tracking the levels of the precursors whose control brought about attainment of the 1997 PM<sub>2.5</sub> standard in the Cincinnati-Hamilton area. EPA therefore believes that the only additional consideration related to the maintenance plan requirements that results from the Court's January 4, 2013 decision is that of assessing the potential role of VOCs and ammonia in demonstrating continued maintenance in this area. As explained below, based upon documentation provided by the state and supporting information, EPA believes that the maintenance plan for the Cincinnati-Hamilton area need not include any additional emission reductions of VOCs or ammonia in order to provide for continued maintenance of the standard.

First, as noted above in EPA's discussion of section 189(e), VOCs emission levels in this area have historically been well-controlled under SIP requirements related to ozone and other pollutants. Second, total ammonia emissions throughout the Cincinnati-Hamilton area are very low, estimated to be less

than 3,200 tpy. See Table 6 below. This amount of ammonia emissions appears especially small in comparison to the total amounts of SO<sub>2</sub>, NO<sub>x</sub>, and even direct PM<sub>2.5</sub> emissions from sources in the area. Third, as described below, available information shows that no precursor, including VOCs and ammonia, is expected to increase over the maintenance period so as to interfere with or undermine the state's maintenance demonstration.

Ohio's maintenance plan shows that emissions of direct PM<sub>2.5</sub>, SO<sub>2</sub>, and NO<sub>x</sub> are projected to decrease by 702.01 tpy, 28,505.87 tpy, and 69,887.022 tpy, respectively, over the maintenance period. See Table 5 above. In addition, emissions inventories used in the regulatory impact analysis (RIA) for the 2012 PM<sub>2.5</sub> NAAQS show that VOCs and ammonia emissions are projected to decrease by 16,716 tpy and 119 tpy, respectively between 2007 and 2020. See Table 6 below. While the RIA emissions inventories are only projected out to 2020, there is no reason to believe that this downward trend would not continue through 2027. Given that the Cincinnati-Hamilton area is already attaining the 1997 annual PM<sub>2.5</sub> NAAQS even with the current level of emissions from sources in the area, the downward trend of emissions inventories would be consistent with continued attainment. Indeed, projected emissions reductions

for the precursors that the state is addressing for purposes of the 1997 PM<sub>2.5</sub> NAAQS indicate that the area should continue to attain the NAAQS following the precursor control strategy that the state has already elected to pursue. Even if VOCs and ammonia emissions were to increase unexpectedly between 2020 and 2027, the overall emissions reductions projected in direct PM<sub>2.5</sub>, SO<sub>2</sub>, and NO<sub>x</sub> would be sufficient to offset any increases. For these reasons, EPA believes that local emissions of all of the potential PM<sub>2.5</sub> precursors will not increase to the extent that they will cause monitored PM<sub>2.5</sub> levels to violate the 1997 PM<sub>2.5</sub> standard during the maintenance period.

**Table 6. Comparison of 2007 and 2020 VOC and Ammonia Emission Totals by Source Sector (tpy) for the Cincinnati-Hamilton Area<sup>9</sup>**

Sector	VOC			Ammonia		
	2007	2020	Net Change 2020-2007	2007	2020	Net Change 2020-2007
fires	224	224	0	16	16	0
nonpoint	24,149	24,080	-69	2,158	2,223	65
nonroad	9,294	5,228	-4,066	13	15	2
onroad	20,317	8,041	-12,275	890	481	-409
point	5,138	4,831	-306	109	332	222
Total	59,121	42,404	-16,716	3,186	3,067	-119

In addition, available air quality modeling analyses show continued maintenance of the standard during the maintenance

<sup>9</sup> These emissions estimates were taken from the emissions inventories developed for the RIA for the 2012 PM<sub>2.5</sub> NAAQS which can be found in the docket.

period. The current annual design values for the area range from 9.5 to 11.2  $\mu\text{g}/\text{m}^3$  (based on 2013-2015 air quality data), which are well below the 1997 annual  $\text{PM}_{2.5}$  NAAQS of 15  $\mu\text{g}/\text{m}^3$ . Moreover, the modeling analysis conducted for the RIA for the 2012  $\text{PM}_{2.5}$  NAAQS indicates that the design values for this area are expected to continue to decline through 2020. In the RIA analysis, the highest 2020 modeled design value for the Cincinnati-Hamilton area is 10.5  $\mu\text{g}/\text{m}^3$ . Given that precursor emissions are projected to decrease through 2027, it is reasonable to conclude that monitored  $\text{PM}_{2.5}$  levels in this area will also continue to decrease through 2027.

Thus, EPA believes that there is ample justification to conclude that the Cincinnati-Hamilton area should be redesignated, even taking into consideration the emissions of other precursors potentially relevant to  $\text{PM}_{2.5}$ . After consideration of the D.C. Circuit's January 4, 2013 decision, and for the reasons set forth in this notice, EPA proposes to approve the state's revised attainment inventory into the previously approved maintenance plan.

Based on the information summarized above, Ohio has adequately demonstrated maintenance of the 1997  $\text{PM}_{2.5}$  standard in this area for a period extending in excess of ten years from

expected final action on Ohio's redesignation request. EPA finds that currently approved plan will provide for maintenance.

**d. Monitoring Network**

Ohio's approved maintenance plan includes additional elements. Ohio's plan includes a commitment to continue to operate its EPA-approved monitoring network, as necessary to demonstrate ongoing compliance with the NAAQS. As detailed above, there are nine monitors measuring PM<sub>2.5</sub> concentrations in the Cincinnati-Hamilton area, and eight of the nine are operated by Ohio. The one other monitor is located in Kentucky.

**e. Verification of Continued Attainment**

Ohio remains obligated to continue to quality-assure monitoring data and enter all data into the AQS in accordance with Federal guidelines. Ohio will use these data, supplemented with additional information as necessary, to assure that the area continues to attain the standard. Ohio will also continue to develop and submit periodic emission inventories as required by the Federal Consolidated Emissions Reporting Rule (67 FR 39602, June 10, 2002) to track future levels of emissions. Both of these actions will help to verify continued attainment in accordance with 40 CFR part 58.

**f. Contingency Plan**

The contingency plan provisions are designed to promptly correct or prevent a violation of the NAAQS that might occur after redesignation of an area to attainment. Section 175A of the CAA requires that a maintenance plan include such contingency measures as EPA deems necessary to assure that the state will promptly correct a violation of the NAAQS that occurs after redesignation. The maintenance plan should identify the contingency measures to be adopted, a schedule and procedure for adoption and implementation of the contingency measures, and a time limit for action by the state. The state should also identify specific indicators to be used to determine when the contingency measures need to be adopted and implemented. The maintenance plan must include a requirement that the state will implement all pollution control measures that were contained in the SIP before redesignation of the area to attainment. See section 175A(d) of the CAA. As described above in section III.4, Ohio's previously approved maintenance plan includes all necessary contingency measures required under section 175A(d). See 76 FR 80253.

Ohio further commits to conduct ongoing review of its data, and if monitored concentrations or emissions are trending

upward, Ohio commits to take appropriate steps to avoid a violation if possible. Ohio commits to continue implementing SIP requirements upon and after redesignation.

EPA believes that Ohio's approved contingency measures, as well as the commitment to continue implementing any SIP requirements, satisfy the pertinent requirements of section 175A(d).

As required by section 175A(b) of the CAA, Ohio commits to submit to EPA an updated PM<sub>2.5</sub> maintenance plan eight years after redesignation of the Cincinnati-Hamilton area to cover an additional ten year period beyond the initial ten year maintenance period. As required by section 175A of the CAA, Ohio has also committed to retain the PM<sub>2.5</sub> control measures contained in the SIP prior to redesignation.

For all of the reasons set forth above, EPA determines that the approved maintenance plan is still applicable and meets all the contingency plan requirements of CAA section 175A.

## **5. Motor Vehicle Emissions Budget (MVEBs) for the Mobile Source Contribution to PM<sub>2.5</sub> and NO<sub>x</sub>**

### **a. How Are MVEBs Developed and What Are the MVEBs for the Cincinnati-Hamilton Area?**

Under the CAA, states are required to submit, at various

times, control strategy SIP revisions and maintenance plans for PM<sub>2.5</sub> nonattainment areas and for areas seeking redesignation to attainment of the PM<sub>2.5</sub> standard. These emission control strategy SIP revisions (e.g., RFP and attainment demonstration SIP revisions) and maintenance plans create MVEBs based on on-road mobile source emissions for criteria pollutants and/or their precursors to address pollution from on-road transportation sources. The MVEBs are the portions of the total allowable emissions that are allocated to highway and transit vehicle use that, together with emissions from other sources in the area, will provide for attainment, RFP, or maintenance, as applicable.

Under 40 CFR part 93, a MVEB for an area seeking a redesignation to attainment is established for the last year of the maintenance plan and could also be established for an interim year or years. The MVEB serves as a ceiling on emissions from an area's planned transportation system. The MVEB concept is further explained in the preamble to the November 24, 1993 transportation conformity rule (58 FR 62188).

Under section 176(c) of the CAA, new transportation plans and transportation improvement programs (TIPs) must be evaluated to determine if they conform to the purpose of the area's SIP.

Conformity to the SIP means that transportation activities will not cause new air quality violations, worsen existing air quality violations, or delay timely attainment of the NAAQS or any required interim milestone. If a transportation plan or TIP does not conform, most new transportation projects that would expand the capacity of roadways cannot go forward. Regulations at 40 CFR part 93 set forth EPA policy, criteria, and procedures for demonstrating and assuring conformity of such transportation activities to a SIP.

When reviewing SIP revisions containing MVEBs, including attainment strategies, rate-of-progress plans, and maintenance plans, EPA must affirmatively find adequate and/or approve the MVEBs for use in determining transportation conformity before the MVEBs can be used. Once EPA affirmatively approves and/or finds the submitted MVEBs to be adequate for transportation conformity purposes, the MVEBs must be used by state and Federal agencies in determining whether proposed transportation plans and TIPs conform to the SIP as required by section 176(c) of the CAA. EPA's substantive criteria for determining the adequacy of MVEBs are set out in 40 CFR 93.118(e)(4). Additionally, to approve a MVEB, EPA must complete a thorough review of the SIP and conclude that the SIP will achieve its overall purpose. In

this case, EPA must review Ohio's PM<sub>2.5</sub> maintenance plan and conclude that it will provide for maintenance of the 1997 annual PM<sub>2.5</sub> standard in the Cincinnati-Hamilton area.

The maintenance plans previously submitted by Ohio for the area contained PM<sub>2.5</sub> and NO<sub>x</sub> MVEBs for the area for the year 2021. Ohio calculated the MVEBs using MOVES2010. These approved budgets are used in future conformity determinations and regional emissions analyses prepared by the OKI, and will have to be based on the use of MOVES2010 or the most recent version of MOVES required to be used in transportation conformity determinations.<sup>10</sup> The state has determined the 2021 MVEBs for the combined Ohio and Indiana portions of the Cincinnati-Hamilton area to be 1,241.19 tpy for primary PM<sub>2.5</sub> and 21,747.71 tpy for NO<sub>x</sub>. The Ohio and Indiana portion of the area included "safety margins" as provided for in 40 CFR 93.124(a) (described below) of 112.84 tpy for primary PM<sub>2.5</sub> and 2,836.65 tpy for NO<sub>x</sub> in the 2021 MVEBs, respectively, to provide for on-road mobile source growth. Ohio did not provide emission budgets for SO<sub>2</sub>, VOCs, and ammonia because it concluded, consistent with EPA's presumptions regarding these precursors, that emissions of these

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<sup>10</sup> EPA described the circumstances under which an area would be required to use MOVES in transportation conformity determinations in its March 2, 2010, Federal Register notice officially releasing MOVES2010 for use in SIPs and transportation conformity determinations. (75 FR 9413)

precursors from on-road motor vehicles are not significant contributors to the area's PM<sub>2.5</sub> air quality problem.

In the Cincinnati-Hamilton area, the motor vehicle budgets including the safety margins and motor vehicle emission projections for both NO<sub>x</sub> and PM<sub>2.5</sub> are equal to the levels in the attainment year.

EPA has reviewed the previously approved budgets for 2021 including the added safety margins using the conformity rule's adequacy criteria found at 40 CFR 93.118(e)(4) and the conformity rule's requirements for safety margins found at 40 CFR 93.124(a). EPA has reviewed the approved budgets and the maintenance plan, and EPA is determining that the 2021 direct PM<sub>2.5</sub> and NO<sub>x</sub> budgets, including the requested safety margins for the Cincinnati-Hamilton area, are adequate for use in conformity.

**b. What Action is EPA Taking on the Submitted Motor Vehicle Emissions Budgets?**

EPA previously approved Ohio's MVEBs for use to determine transportation conformity in the Cincinnati-Hamilton area and these budgets remain applicable. EPA has determined that the area can maintain attainment of the 1997 annual PM<sub>2.5</sub> NAAQS for the relevant maintenance period and no changes to the plan have

been made. See 76 FR 80253.

## **6. Comprehensive Emissions Inventory**

As discussed above, section 172(c)(3) of the CAA requires areas to submit a comprehensive emissions inventory including direct PM and all four precursors (SO<sub>2</sub>, NO<sub>x</sub>, VOCs, and ammonia). EPA approved the Ohio 2005 base year emissions inventory on December 23, 2011 (76 FR 80253). This previously approved base year emissions inventory detailed emissions of PM<sub>2.5</sub>, SO<sub>2</sub>, and NO<sub>x</sub> for 2005. Emissions inventories for VOCs and ammonia from 2007, taken from the RIA for the 2012 PM<sub>2.5</sub> NAAQS, have been added as part of this submittal in accordance with the provisions of subpart 4 (Title I, Part D) of the CAA. Emissions contained in the submittal cover the general source categories of point sources, area sources, on-road mobile sources, and nonroad mobile sources.

Based upon EPA's previous action and 2007 emissions inventory for VOCs and ammonia, the emissions inventory was complete and accurate, and met the requirement of CAA section 172(c)(3).

## **IV. EPA's Proposed Actions**

EPA is proposing to take several actions related to redesignation of the Cincinnati-Hamilton area to attainment for

the 1997 annual PM<sub>2.5</sub> NAAQS.

EPA has previously approved Ohio's PM<sub>2.5</sub> maintenance plan and MVEBs for the Cincinnati-Hamilton area. EPA is proposing to determine that this plan and budgets are still applicable.

EPA has previously approved the 2005 primary PM<sub>2.5</sub>, NO<sub>x</sub>, and SO<sub>2</sub> base year emissions inventory. EPA is proposing to approve Ohio's updated emissions inventory which includes emissions inventories for VOCs and ammonia from 2007. EPA is proposing that Ohio meets the emissions inventory requirement under section 107(d)(3)(E)(iii).

EPA is proposing to approve the RACM/RACT portion of Ohio's prior Cincinnati-Hamilton area attainment plan SIP revision as providing adequate RACM/RACT consistent with the provisions of 40 CFR 51.1010(b), because Ohio has demonstrated with a RACM/RACT analysis that no further control measures would advance the attainment date in the area.

EPA is proposing that Ohio meets the requirements for redesignation of the Cincinnati-Hamilton area to attainment of the 1997 annual PM<sub>2.5</sub> NAAQS under section 107(d)(3)(E) of the CAA. EPA is thus proposing to grant Ohio's request to change the designation of its portion of the Cincinnati-Hamilton area from nonattainment to attainment for the 1997 annual PM<sub>2.5</sub> NAAQS.

If finalized, approval of the redesignation request would change the official designation of the Ohio portion of the Cincinnati-Hamilton area for the 1997 annual PM<sub>2.5</sub> NAAQS, found at 40 CFR part 81, from nonattainment to attainment. If finalized, EPA would determine that the previously approved maintenance plan is still applicable to the Cincinnati-Hamilton area for the 1997 annual PM<sub>2.5</sub> NAAQS.

#### **V. Statutory and Executive Order Reviews**

Under the CAA, redesignation of an area to attainment and the accompanying approval of a maintenance plan under section 107(d)(3)(E) are actions that affect the status of a geographical area and do not impose any additional regulatory requirements on sources beyond those imposed by state law. A redesignation to attainment does not in and of itself create any new requirements, but rather results in the applicability of requirements contained in the CAA for areas that have been redesignated to attainment. Moreover, the Administrator is required to approve a SIP submission that complies with the provisions of the CAA and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this

action merely proposes to approve state law as meeting Federal requirements and, if finalized, will not impose additional requirements beyond those imposed by state law. For that reason, this actions:

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);

- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the Clean Air Act; and
- Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, this rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because redesignation is an action that affects the status of a geographical area and does not impose any new regulatory requirements on tribes, impact any existing sources of air pollution on tribal lands, nor impair the maintenance of ozone national ambient air quality standards in

tribal lands.

**List of Subjects**

*40 CFR Part 52*

Environmental protection, Air pollution control,  
Incorporation by reference, Intergovernmental relations,  
Particulate matter.

*40 CFR Part 81*

Environmental protection, Air pollution control, National parks,  
Wilderness areas.

Dated: December 13, 2016.

Robert Kaplan,  
Acting Regional Administrator, Region 5.

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