6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 52 and 81

[EPA-R05-OAR-2011-0698; FRL-9831-8]

Approval and Promulgation of Air Quality Implementation Plans; Indiana; Redesignation of the Indiana portion of the Louisville Area to Attainment of the 1997 Annual Standard for Fine Particulate Matter

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: On June 16, 2011, the Indiana Department of Environmental Management (IDEM) submitted a request for EPA to approve the redesignation of the Indiana portion of the Louisville (KY-IN) (Madison Township, Jefferson County and Clark and Floyd Counties) nonattainment area to attainment of the 1997 annual standard for fine particulate matter ($PM_{2.5}$). EPA is proposing to determine that the entire Louisville area has attained the 1997 annual $PM_{2.5}$ standard, based on the most recent three years of certified air quality data. EPA is proposing to approve, as revisions to the Indiana state implementation plan (SIP), the state's plan for maintaining the 1997 annual $PM_{2.5}$ National Ambient Air Quality Standard (NAAQS or standard) through 2025 in the area. EPA is proposing to approve the 2008 emissions inventory for the Indiana portion of the Louisville

area as meeting the comprehensive emissions inventory requirement of the Clean Air Act (CAA or Act). Indiana's maintenance plan submission includes motor vehicle emission budgets (MVEBs) for the mobile source contribution of $PM_{2.5}$ and nitrogen oxides (NO_X) in the Louisville area for transportation conformity purposes; EPA is proposing to approve the MVEBs for 2015 and 2025 into the Indiana SIP for transportation conformity purposes. In this proposal, EPA is also proposing to approve a supplement to the emission inventories previously submitted by the state. EPA is proposing that the inventories for ammonia and volatile organic compounds (VOC), in conjunction with the inventories for NO_X, direct $PM_{2.5,}$ and sulfur dioxide (SO_2) that EPA previously proposed to approve, meet the comprehensive emissions inventory requirement of the CAA.

DATES: Comments must be received on or before [INSERT DATE 30 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R05-OAR-2011-0698, by one of the following methods:

1. www.regulations.gov: Follow the on-line instructions for submitting comments.
2. E-mail: blakley.pamela@epa.gov.
3. Fax: (312) 692-2450.

4. Mail: Pamela Blakley, Chief, Control Strategies Section (AR-18J), U.S. Environmental Protection Agency, 77 West Jackson Boulevard, Chicago, Illinois 60604.

5. Hand Delivery: Pamela Blakley, Chief, Control Strategies Section (AR-18J), U.S. Environmental Protection Agency, 77 West Jackson Boulevard, Chicago, Illinois 60604. Such deliveries are only accepted during the Regional Office normal hours of operation, and special arrangements should be made for deliveries of boxed information. The Regional Office official hours of business are Monday through Friday, 8:30 AM to 4:30 PM excluding Federal holidays.

Instructions: Direct your comments to Docket ID No. EPA-R05-OAR-2011-0698. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at www.regulations.gov, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through www.regulations.gov or e-mail. The www.regulations.gov website is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in

the body of your comment. If you send an e-mail comment directly to EPA without going through www.regulations.gov, your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional instructions on submitting comments, go to section I of the SUPPLEMENTARY INFORMATION section of this document.

Docket: All documents in the docket are listed in the www.regulations.gov index. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically in www.regulations.gov or in hard copy at the Environmental Protection Agency, Region 5, Air and Radiation Division, 77 West

Jackson Boulevard, Chicago, Illinois 60604. This facility is open from 8:30 AM to 4:30 PM, Monday through Friday, excluding Federal holidays. We recommend that you telephone Carolyn Persoon, Environmental Engineer, at (312) 353-8290 before visiting the Region 5 office.

FOR FURTHER INFORMATION CONTACT: Carolyn Persoon, Environmental Engineer, Control Strategies Section, Air Programs Branch (AR-18J), Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 353-8290, persoon.carolyn@epa.gov.

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

I. What Should I Consider as I Prepare My Comments for EPA?

When submitting comments, remember to:

1. Identify the rulemaking by docket number and other identifying information (subject heading, Federal Register date and page number).

2. Follow directions - EPA may ask you to respond to specific questions or organize comments by referencing a Code of Federal Regulations (CFR) part or section number.

3. Explain why you agree or disagree; suggest alternatives and substitute language for your requested changes.

4. Describe any assumptions and provide any technical information and/or data that you used.

5. If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.

6. Provide specific examples to illustrate your concerns, and suggest alternatives.

7. Explain your views as clearly as possible, avoiding the use of profanity or personal threats.

8. Make sure to submit your comments by the comment period deadline identified.

II. What Actions is EPA Proposing to Take?

EPA is proposing to take several actions related to redesignation of the Indiana portion of the Louisville area to attainment of the 1997 annual $PM_{2.5}$ NAAQS. In addition to EPA's March 9, 2011, determination that the area attained the 1997 annual NAAQS for $PM_{2.5}$ by the applicable attainment date based on quality-assured, certified 2007-2009 ambient air monitoring data (76 FR 12860), we are proposing to determine that the area continues to attain the NAAQS for $PM_{2.5}$, based monitoring data for 2009-2011 and 2010-2012 shows that the area continues to attain. EPA is proposing to find that Indiana meets the requirements for redesignation of the Louisville area to

attainment of the 1997 $PM_{2.5}$ NAAQS under section 107(d)(3)(E) of the CAA.

Second, EPA is proposing to approve Indiana's annual $PM_{2.5}$ maintenance plan for the Louisville area as a revision to the Indiana SIP, including the MVEBs for $PM_{2.5}$ and NO_X emissions for the mobile source contribution of the Louisville area.

Finally, EPA is proposing to approve 2008 primary $PM_{2.5}$, NO_X, SO_2, VOC, and ammonia emissions inventories as satisfying the requirement in section 172(c)(3) of the CAA for a current, accurate and comprehensive emission inventory. In a supplemental submission to EPA on March 18, 2013, IDEM submitted ammonia and VOC emissions inventories to supplement the emissions inventories that had previously been submitted.

In this proposed redesignation, EPA takes into account two decisions of the D.C. Circuit Court (referred to as "the D.C. Circuit" or "the Court"). In the first of the two court decisions, the D.C. Circuit, on August 21, 2012, issued *EME Homer City Generation, L.P.* v. *EPA,* 696 F.3d 7 (D.C. Cir. 2012, no. 11-1302 and consolidated cases) (referred to as "*EME Homer City*,") which 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 on January 24, 2013. In the second decision, 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 ($PM_{2.5}$)" final rule (73 FR 28321, May 16, 2008). 706 F.3d 428 (D.C. Cir. 2013).

EPA is proposing to approve the request from the state of Indiana to change the designation of Marion Township, Jefferson County and Clark and Floyd Counties (the Indiana portion of the Louisville area) from nonattainment to attainment of the 1997 annual $PM_{2.5}$ NAAQS. This action would not change the legal designation of the Kentucky portion of the area, which would be addressed in a separate rulemaking.

III. What is the Background for These Actions?

Fine particulate pollution can be emitted directly from a source (primary $PM_{2.5}$) 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_2 emissions from power plants and industrial facilities. Nitrates, another common type of secondary particulate, are formed from combustion emissions of

NO_X from power plants, mobile sources and other combustion sources.

The first air quality standards for $PM_{2.5}$ were promulgated on July 18, 1997, at 62 FR 38652. EPA promulgated an annual standard at a level of 15 micrograms per cubic meter ($\mu g/m^3$) of ambient air, based on a three-year average of the annual mean $PM_{2.5}$ concentrations at each monitoring site. In the same rulemaking, EPA promulgated a 24-hour $PM_{2.5}$ standard at 65 $\mu g/m^3$, based on a three-year average of the 98th percentile of 24-hour $PM_{2.5}$ concentrations at each monitoring site.

On January 5, 2005, at 70 FR 944, EPA published air quality area designations for the 1997 annual $PM_{2.5}$ standard based on air quality data for calendar years 2001-2003. In that rulemaking, EPA designated the Louisville area as nonattainment for the 1997 annual $PM_{2.5}$ standard.

On October 17, 2006, at 71 FR 61144, EPA retained the annual $PM_{2.5}$ standard at 15 $\mu g/m^3$ (2006 annual $PM_{2.5}$ standard), but revised the 24-hour standard to 35 $\mu g/m^3$, based again on the three-year average of the annual 98th percentile of the 24-hour $PM_{2.5}$ concentrations. In response to legal challenges of the 2006 annual $PM_{2.5}$ standard, the D.C. Circuit remanded this standard to EPA for further consideration. See *American Farm Bureau Federation and National Pork Producers Council, et al. v.*

EPA, 559 F.3d 512 (D.C. Cir. 2009). On December 14, 2012, EPA finalized a rule revising the $PM_{2.5}$ annual standard to 12 µg/m^3 based on current scientific evidence regarding the protection of public health. Since the Louisville area is designated as nonattainment for the 1997 annual $PM_{2.5}$ standard, today's proposed action addresses redesignation to attainment only for this standard.

On March 9, 2011, EPA issued a final determination that the entire Louisville area attained the 1997 $PM_{2.5}$ standard by the applicable attainment date (76 FR 12860). Indiana's original submittal contained complete, quality-assured and certified air monitoring data for years 2008-2010. Based upon our review of complete, quality-assured and certified ambient air monitoring data from 2009-2011, we are proposing to determine that the area continues to attain the 1997 annual $PM_{2.5}$ NAAQS. Further, recently state certified data for 2012 indicate that the area continues to attain the 1997 annual $PM_{2.5}$ NAAQS.

IV. 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 and 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.

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

EPA is proposing to grant the redesignation of the Indiana portion of the Louisville area to attainment of the 1997 annual $PM_{2.5}$ NAAQS and is proposing to approve Indiana's maintenance plan for the area and other related SIP revisions. The bases for these actions follow.

1. Attainment (Section 107(d)(3)(E)(i))

As noted above, in a rulemaking published on March 9, 2011, EPA determined that the Louisville area attained the 1997 annual $PM_{2.5}$ NAAQS by the applicable attainment date. The basis and effect of this determination were discussed in the proposed (75 FR 55725) and final (76 FR 12860) actions. The determination

was based on certified quality-assured air quality monitoring data for 2007-2009 showing the area had met the standard by the attainment date. In this action, we are proposing to determine that the Louisville area has attained the 1997 annual $PM_{2.5}$ NAAQS based upon the most recent three years of complete, certified and quality-assured data, as required by section 107(d)(3)(E) of the CAA. Under EPA's regulations at 40 CFR 50.7, the annual primary and secondary $PM_{2.5}$ 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 $\mu g/m^3$ at all relevant monitoring sites in the area.

EPA has reviewed the ambient air quality monitoring data in the Louisville area, consistent with the requirements contained at 40 CFR part 50. EPA's review focused on data recorded in the EPA Air Quality System (AQS) database for the Louisville $PM_{2.5}$ nonattainment area from 2009-2011, and 2010-2012. EPA also considered preliminary data for 2012, for which EPA has not yet calculated design values.

The Louisville area has seven monitors that are located in Clark and Floyd counties, Indiana, and Jefferson County, Kentucky. Recently certified state monitored data has been used to calculate design value from 2010-2012 for $PM_{2.5}$ that ranged 11.0–13.2 $\mu g/m^3$ for the 1997 annual standard. The monitors in

the Louisville 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 with at least 75% capture of the scheduled sampling days. Available data are considered to be sufficient for comparison to the NAAQS if three consecutive complete years of data exist.

Table 1. The 1997 Annual $PM_{2.5}$ Design Values for the Louisville Monitor with Complete Data for the 2009-2011 and 2010-2012 Design Values[1] in µg/m^3.

County	Site	Annual Standard Design Value 2009-2011 (µg/m^3)	Annual Standard Design Value 2010-2012 (µg/m^3)
Clark County, IN	180190006	13.5	13.2
Clark County, IN	180190008	11.4	11.0
Floyd County, IN	180431004	12.3	11.8
Jefferson County, KY	211110043	12.6	11.8
Jefferson County, KY	211110044	12.8	12.1
Jefferson County, KY	211110051	12.7	12.3
Jefferson County, KY	211110067	12.1	11.5

EPA's review of monitoring data from the 2009-2011 and 2010-2012 monitoring periods supports EPA's determination that the Louisville area has monitored attainment. EPA proposes to determine that the Louisville area has attained the 1997 annual $PM_{2.5}$ standard.

2. The Area Has Met All Applicable Requirements under Section 110 and Part D and Has a Fully Approved SIP Under Section 110(k) (Sections 107(d)(3)(E)(v) and 107(d)(3)(E)(ii))

1 As defined in 40 CFR part 50, appendix N(1)(c).

We have determined that Indiana's SIP meets all applicable SIP requirements for purposes of redesignation for the Louisville area under section 110 of the CAA for purposes of redesignation in accordance with section 107(d)(3)(E)(v). In addition, with the exception of the emissions inventory under section 172(c)(3), we have previously approved all applicable requirements of the Indiana SIP for purposes of redesignation, in accordance with section 107(d)(3)(E)(ii). As discussed below, in this action EPA is approving Indiana's 2008 emissions inventory as meeting the section 172(c)(3) comprehensive emissions inventory requirement.

In making these determinations, we have ascertained which SIP requirements are applicable to the area for purposes of redesignation, and have determined that they are fully approved under section 110(k) of the CAA.

a. The Louisville Area Has Met All Applicable Requirements for Purposes of Redesignation Under Section 110 and Part D of the CAA

i. 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 and classification 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 to be 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 also 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 and classification are the relevant measures which we may consider in evaluating a redesignation request. This approach is consistent with EPA's existing policy on applicability of conformity and oxygenated fuels requirements for redesignation purposes, as well as with section 184 ozone transport requirements. 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 Indiana's 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 into the Indiana SIP addressing section 110 elements under particulate standards (40 CFR 52.770). On December 7, 2007, September 9, 2008, March 23, 2011, and April 7, 2011, Indiana made submittals addressing "infrastructure SIP" elements required by section 110(a)(2) of the CAA. EPA approved elements of Indiana's submittals on July 13, 2011, at 76 FR 41075. The requirements of section 110(a)(2), however, are statewide requirements that are not linked to the $PM_{2.5}$ nonattainment status of the Louisville area. Therefore, EPA believes that these SIP elements are not applicable requirements for purposes of review of the state's $PM_{2.5}$ redesignation request.

ii. Part D Requirements

EPA has determined that, upon approval of the base year emissions inventories discussed in section IV.C. of this rulemaking, the Indiana SIP will meet the applicable SIP requirements for the Louisville 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.

1. Subpart 1

a) Section 172 Requirements.

For purposes of evaluating this redesignation request, the applicable section 172 SIP requirements for the Louisville 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).

Section 172(c)(1) requires the plans for all nonattainment areas to provide for the implementation of all reasonably available control measures (RACM) as expeditiously as practicable and to provide for attainment of the primary NAAQS. EPA interprets this requirement to impose a duty on all nonattainment areas to consider all available control measures and to adopt and implement such measures that are reasonably available for implementation in each area as components of the area's attainment demonstration. Because the Louisville area has reached attainment, Indiana does not need to address additional measures to provide for attainment, and section 172(c)(1) requirements are no longer considered to be applicable as long as the area continues to attain the standard until redesignation. These requirements were suspended with the

previous action (76 FR 12860) that determined attainment of the standard, as discussed above.

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 redesignation because the Louisville area has monitored attainment of the 1997 annual $PM_{2.5}$ NAAQS. ("General Preamble for the Interpretation of Title I of the CAA Amendments of 1990"; (57 FR 13498, 13564, April 16, 1992)). *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. Indiana submitted a 2008 base year emissions inventory along with the redesignation request. As discussed below in section IV.C., EPA is approving the 2008 inventory as meeting the section 172(c)(3) emissions inventory requirement for the Louisville area.

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 Indiana's current part D (nonattainment) NSR program on October 7, 1994 (59 FR 51108). Nonetheless, since PSD requirements will apply after redesignation, the area need not have a fully-approved part D 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." Indiana has demonstrated that the Louisville 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 Louisville 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 believe the Indiana SIP meets the section 110(a)(2) requirements applicable for purposes of redesignation.

b) 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 Indiana's general and transportation conformity SIPs on January 14, 1998 (63 FR 2146), and August 17, 2010 (75 FR 50730), respectively. Section 176(c) of the CAA was

amended by provisions contained in the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEALU), which was signed into law on August 10, 2005 (Public Law 109-59). In adopting this revision to the CAA, Congress streamlined the requirements for state conformity SIPs. Indiana is in the process of updating its transportation conformity SIP to meet these new requirements.

Indiana has submitted on-road MVEBs for the Louisville area of 580.69 tons per year (tpy) and 324.04 tpy of primary $PM_{2.5}$ and 17,700.95 tpy and 9,311.76 tpy of NO_X for the years 2015 and 2025, respectively. The area must use the MVEBs from the maintenance plan in any conformity determination that is made on or after the effective date of the adequacy finding and maintenance plan approval.

2. Effect of the January 4, 2013, D.C. Circuit Decision Regarding $PM_{2.5}$ Implementation under Subpart 4

a. Background

As discussed above, 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 ($PM_{2.5}$)" final rule (73 FR 28321, May 16, 2008)

(collectively, "1997 $PM_{2.5}$ Implementation Rule"). 706 F.3d 428 (D.C. Cir. 2013). The Court found that EPA erred in implementing the 1997 $PM_{2.5}$ 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.

b. Proposal on This Issue

As explained below, EPA is proposing to determine that the Court's January 4, 2013, decision does not prevent EPA from redesignating the Louisville area to attainment. Even in light of the Court's decision, redesignation for this area is appropriate under the CAA and EPA's longstanding interpretations of the CAA's provisions regarding redesignation. EPA'slongstanding interpretation that requirements that are imposed, or that become due, after a complete redesignation request is submitted for an area that is attaining the standard, are not applicable for purposes of evaluating a redesignation request. Second, even if EPA applies the subpart 4 requirements to the Louisville redesignation request and disregards the provisions of its 1997 $PM_{2.5}$ implementation rule recently remanded by the Court, the state's request for redesignation of this area still qualifies for approval.

i. Applicable Requirements for Purposes of Evaluating the Redesignation Request

With respect to the 1997 $PM_{2.5}$ implementation rule, the Court's January 4, 2013, ruling rejected EPA's reasons for implementing the $PM_{2.5}$ NAAQS solely in accordance with the provisions of subpart 1, and remanded that matter to EPA, so that it could address implementation of the 1997 $PM_{2.5}$ NAAQS under subpart 4 of part D of the CAA, in addition to subpart 1. For the purposes of evaluating Indiana's redesignation request for the area, to the extent that implementation under subpart 4 would impose additional requirements for areas designated nonattainment, EPA believes that those requirements are not "applicable" for the purposes of CAA section 107(d)(3)(E), and thus EPA is not required to consider subpart 4 requirements with respect to the Louisville redesignation. Under its longstanding interpretation of the CAA, EPA has interpreted section 107(d)(3)(E) to mean, as a threshold matter, that the part D provisions which are "applicable" and which must be approved in order for EPA to redesignate an area include only those which came due prior to a state's submittal of a complete redesignation request. *See* "Procedures for Processing Requests to Redesignate Areas to Attainment," Memorandum from John Calcagni, Director, Air Quality Management Division, September

4, 1992 (Calcagni memorandum). *See also* "State Implementation Plan (SIP) Requirements for Areas Submitting Requests for Redesignation to Attainment of the Ozone and Carbon Monoxide (CO) NAAQS on or after November 15, 1992," Memorandum from Michael Shapiro, Acting Assistant Administrator, Air and Radiation, September 17, 1993 (Shapiro memorandum); Final Redesignation of Detroit-Ann Arbor, (60 FR 12459, 12465-66, March 7, 1995); Final Redesignation of St. Louis, Missouri, (68 FR 25418, 25424-27, May 12, 2003); *Sierra Club v. EPA*, 375 F.3d 537, 541 (7th Cir. 2004) (upholding EPA's redesignation rulemaking applying this interpretation and expressly rejecting Sierra Club's view that the meaning of "applicable" under the statute is "whatever should have been in the plan at the time of attainment rather than whatever actually was in the plan and already implemented or due at the time of attainment").[2] In this case, at the time that Indiana submitted its redesignation request, requirements under subpart 4 were not due,[and indeed, were not yet known to apply.]

EPA's view that, for purposes of evaluating the Louisville redesignation, the subpart 4 requirements were not due at the

[2] Applicable requirements of the CAA that come due subsequent to the area's submittal of a complete redesignation request remain applicable until a redesignation is approved, but are not required as a prerequisite to redesignation. Section 175A(c) of the CAA.

time the state submitted the redesignation request is in keeping with the EPA's interpretation of subpart 2 requirements for subpart 1 ozone areas redesignated subsequent to the D.C. Circuit's decision in *South Coast Air Quality Mgmt. Dist. v. EPA*, 472 F.3d 882 (D.C. Cir. 2006). In *South Coast*, the Court found that EPA was not permitted to implement the 1997 8-hour ozone standard solely under subpart 1, and held that EPA was required under the statute to implement the standard under the ozone-specific requirements of subpart 2 as well. Subsequent to the *South Coast* decision, in evaluating and acting upon redesignation requests for the 1997 8-hour ozone standard that were submitted to EPA for areas under subpart 1, EPA applied its longstanding interpretation of the CAA that "applicable requirements", for purposes of evaluating a redesignation, are those that had been due at the time the redesignation request was submitted. *See, e.g.*, Proposed Redesignation of Manitowoc County and Door County Nonattainment Areas (75 FR 22047, 22050, April 27, 2010). In those actions, EPA therefore did not consider subpart 2 requirements to be "applicable" for the purposes of evaluating whether the area should be redesignated under section 107(d)(3)(E).

EPA's interpretation derives from the provisions of CAA Section 107(d)(3). Section 107(d)(3)(E)(v) states that, for an

area to be redesignated, a state must meet "all requirements 'applicable' to the area under section 110 and part D". Section 107(d)(3)(E)(ii) provides that the EPA must have fully approved the "applicable" SIP for the area seeking redesignation. These two sections read together support EPA's interpretation of "applicable" as only those requirements that came due prior to submission of a complete redesignation request. First, holding states to an ongoing obligation to adopt new CAA requirements that arose after the state submitted its redesignation request, in order to be redesignated, would make it problematic or impossible for EPA to act on redesignation requests in accordance with the 18-month deadline Congress set for EPA action in section 107(d)(3)(D). If "applicable requirements" were interpreted to be a continuing flow of requirements with no reasonable limitation, states, after submitting a redesignation request, would be forced continuously to make additional SIP submissions that in turn would require EPA to undertake further notice-and-comment rulemaking actions to act on those submissions. This would create a regime of unceasing rulemaking that would delay action on the redesignation request beyond the 18-month timeframe provided by the CAA for this purpose.

Second, a fundamental premise for redesignating a nonattainment area to attainment is that the area has attained

the relevant NAAQS due to emission reductions from existing controls. Thus, an area for which a redesignation request has been submitted would have already attained the NAAQS as a result of satisfying statutory requirements that came due prior to the submission of the request. Absent a showing that unadopted and unimplemented requirements are necessary for future maintenance, it is reasonable to view the requirements applicable for purposes of evaluating the redesignation request as including only those SIP requirements that have already come due. These are the requirements that led to attainment of the NAAQS. To require, for redesignation approval, that a state also satisfy additional SIP requirements coming due after the state submits its complete redesignation request, and while EPA is reviewing it, would compel the state to do more than is necessary to attain the NAAQS, without a showing that the additional requirements are necessary for maintenance.

In the context of this redesignation, the timing and nature of the Court's January 4, 2013, decision in *NRDC v. EPA* compound the consequences of imposing requirements that come due after the redesignation request is submitted. The state submitted its redesignation request on June 16, 2011, but the Court did not issue its decision remanding EPA's 1997 $PM_{2.5}$ implementation rule

concerning the applicability of the provisions of subpart 4 until January 2013.

To require the state's fully-completed and pending redesignation request to comply now with requirements of subpart 4 that the Court announced only in January, 2013, would be to give retroactive effect to such requirements when the state had no notice that it was required to meet them. The D.C. Circuit recognized the inequity of this type of retroactive impact in *Sierra Club v. Whitman*, 285 F.3d 63 (D.C. Cir. 2002),[3] where it upheld the District Court's ruling refusing to make retroactive EPA's determination that the St. Louis area did not meet its attainment deadline. In that case, petitioners urged the Court to make EPA's nonattainment determination effective as of the date that the statute required, rather than the later date on which EPA actually made the determination. The Court rejected this view, stating that applying it "would likely impose large costs on states, which would face fines and suits for not implementing air pollution prevention plans . . . even though they were not on notice at the time." *Id.* at 68. Similarly, it would be unreasonable to penalize Indiana by rejecting its

[3]*Sierra Club v. Whitman* was discussed and distinguished in a recent D.C. Circuit decision that addressed retroactivity in a quite different context, where, unlike the situation here, EPA sought to give its regulations retroactive effect. *National Petrochemical and Refiners Ass'n v. EPA*. 630 F.3d 145, 163 (D.C. Cir. 2010), rehearing denied, 643 F.3d 958 (D.C. Cir. 2011), cert denied, 132 S. Ct. 571 (2011).

redesignation request for an area that is already attaining the 1997 $PM_{2.5}$ standard and that met all applicable requirements known to be in effect at the time of the request. For EPA now to reject the redesignation request solely because the state did not expressly address subpart 4 requirements of which it had no notice, would inflict the same unfairness condemned by the Court in *Sierra Club v. Whitman*.

ii. Subpart 4 Requirements and Indiana Redesignation Request

Even if EPA were to take the view that the Court's January 4, 2013, decision requires that, in the context of pending redesignations, subpart 4 requirements were due and in effect at the time the state submitted its redesignation request, EPA proposes to determine that the Louisville area still qualifies for redesignation to attainment. As explained below, EPA believes that the redesignation request for the Louisville area, though not expressed in terms of subpart 4 requirements, substantively meets the requirements of that subpart for purposes of redesignating the area to attainment.

With respect to evaluating the relevant substantive requirements of subpart 4 for purposes of redesignating the Louisville area, EPA notes that subpart 4 incorporates components of subpart 1 of part D, which contains general air

quality planning requirements for areas designated as nonattainment. *See* Section 172(c). Subpart 4 itself contains specific planning and scheduling requirements for PM_{10}[4] nonattainment areas, and under the Court's January 4, 2013, decision in *NRDC v. EPA*, these same statutory requirements also apply for $PM_{2.5}$ nonattainment areas. 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 Louisville area to be a

[4] PM_{10} refers to particulates nominally 10 micrometers in diameter or smaller.

"moderate" $PM_{2.5}$ 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. Sections 189(a) and (c) of subpart 4 apply to moderate nonattainment areas and include 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_{10}, 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.[5] 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 (61 FR 31834-31837, June 21, 1996).

With respect to the specific attainment planning requirements under subpart 4,[6] when EPA evaluates a redesignation request under either subpart 1 and/or 4, any area that is attaining the $PM_{2.5}$ standard is viewed as having satisfied the attainment planning requirements for these subparts. For redesignations, EPA has for many years interpreted attainment-

[5] The potential effect of section 189(e) on section 189(a)(1)(A) for purposes of evaluating this redesignation is discussed below.
[6]These are attainment demonstration, RFP, RACM, milestone requirements, contingency measures.

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. 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 1992 Calcagni memorandum that, "The 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."

It is evident that even if we were to consider the Court's January 4, 2013, decision in *NRDC v. EPA* to mean that attainment-related requirements specific to subpart 4 should be imposed retroactively[7] and thus are now past due, those requirements do not apply to an area that is attaining the 1997 $PM_{2.5}$ standard, for the purpose of evaluating a pending request to redesignate the area to attainment. EPA has consistently enunciated this interpretation of applicable requirements under section 107(d)(3)(E) since the General Preamble was published more than twenty years ago. Courts have recognized the scope of EPA's authority to interpret "applicable requirements" in the redesignation context. *See Sierra Club* v. *EPA,* 375 F.3d 537 (7th Cir. 2004).

Moreover, even outside the context of redesignations, EPA has viewed the obligations to submit attainment-related SIP planning requirements of subpart 4 as inapplicable for areas that EPA determines are attaining the standard. EPA's prior "Clean Data Policy" rulemakings for the PM_{10} NAAQS, also governed

[7] As EPA has explained above, we do not believe that the Court's January 4, 2013, decision should be interpreted so as to impose these requirements on the states retroactively. *Sierra Club v. Whitman*, *supra.*

by the requirements of subpart 4, explain EPA's reasoning. They describe the effects of a determination of attainment on the attainment-related SIP planning requirements of subpart 4. *See* "Determination of Attainment for Coso Junction Nonattainment Area," (75 FR 27944, May 19, 2010). *See also* Coso Junction proposed PM_{10} redesignation, (75 FR 36023, 36027, June 24, 2010); Proposed and Final Determinations of Attainment for San Joaquin Nonattainment Area (71 FR 40952, 40954–55, July 19, 2006; and 71 FR 63641, 63643–47 October 30, 2006). In short, EPA in this context has also long concluded that to require states to meet superfluous SIP planning requirements is not necessary and not required by the CAA, so long as those areas continue to attain the relevant NAAQS.

Elsewhere in this notice, EPA proposes to determine that the area has attained the 1997 $PM_{2.5}$ 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 section 172(c)d section 189(a)(1)(c), a RFP demonstration under 189(c)(1), and contingency measure

requirements under section 172(c)(9) are satisfied for purposes of evaluating the redesignation request.

iii. Subpart 4 and Control of $PM_{2.5}$ Precursors

The D.C. Circuit in *NRDC v. EPA* remanded to EPA the two rules at issue in the case with instructions to EPA to re-promulgate them consistent with the requirements of subpart 4. EPA in this section addresses the Court's opinion with respect to $PM_{2.5}$ precursors. While past implementation of subpart 4 for PM_{10} has allowed for control of PM_{10} precursors such as NO_X from major stationary, mobile, and area sources in order to attain the standard as expeditiously as practicable, CAA section 189(e) specifically provides that control requirements for major stationary sources of direct PM_{10} shall also apply to PM_{10} precursors from those sources, except where EPA determines that major stationary sources of such precursors "do not contribute significantly to PM_{10} levels which exceed the standard in the area."

EPA's 1997 $PM_{2.5}$ implementation rule, remanded by the D.C. Circuit, contained rebuttable presumptions concerning certain $PM_{2.5}$ precursors applicable to attainment plans and control measures related to those plans. Specifically, in 40 CFR 51.1002, EPA provided, among other things, that a state was "not required to address VOC [and ammonia] as . . . $PM_{2.5}$ attainment

plan precursor[s] and to evaluate sources of VOC [and ammonia] emissions in the State for control measures." EPA intended these to be rebuttable presumptions. EPA established these presumptions at the time because of uncertainties regarding the emission inventories for these pollutants and the effectiveness of specific control measures in various regions of the country in reducing $PM_{2.5}$ concentrations. EPA also left open the possibility for such regulation of VOC and ammonia in specific areas where that was necessary.

The Court in its January 4, 2013, decision made reference to both section 189(e) and 40 CFR 51. 1002, and stated that, "In light of our disposition, we need not address the petitioners' challenge to the presumptions in [40 CFR 51.1002] that volatile organic compounds and ammonia are not $PM_{2.5}$ precursors, as subpart 4 expressly governs precursor presumptions." *NRDC v. EPA*, at 27, n.10.

Elsewhere in the Court's opinion, however, the Court observed:

> Ammonia is a precursor to fine particulate matter, making it a precursor to both $PM_{2.5}$ and PM_{10}. For a PM_{10} nonattainment area governed by subpart 4, a precursor is presumptively regulated. See 42 U.S.C. § 7513a(e) [section 189(e)].

Id. at 21, n.7.

For a number of reasons, EPA believes that its proposed redesignation of [the 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_{10} area governed by subpart 4, a precursor is 'presumptively regulated,'" the Court expressly declined to decide the specific challenge to EPA's 1997 $PM_{2.5}$ implementation rule provisions regarding ammonia and VOC as precursors. The Court had no occasion to reach whether and how it was substantively necessary to regulate any specific precursor in a particular $PM_{2.5}$ nonattainment area, and did not address what might be necessary for purposes of acting upon a redesignation request.

However, even if EPA takes the view that the requirements of subpart 4 were deemed applicable at the time the state submitted the redesignation request, and disregards the implementation rule's rebuttable presumptions regarding ammonia and VOC as $PM_{2.5}$ precursors, the regulatory consequence would be to consider the need for regulation of all precursors from any sources in the area to demonstrate attainment and to apply the section 189(e) provisions to major stationary sources of precursors. In the case of Louisville, EPA believes that doing

so is consistent with proposing redesignation of the area for the 1997 $PM_{2.5}$ standard. The Louisville area has attained the standard without any specific additional controls of VOC 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 $PM_{2.5}$ precursors.[8] Under subpart 1 and EPA's prior implementation rule, all major stationary sources of $PM_{2.5}$ precursors were subject to regulation, with the exception of ammonia and VOC. Thus we must address here whether additional controls of ammonia and VOC from major stationary sources are required under section 189(e) of subpart 4 in order to redesignate the area for the 1997 $PM_{2.5}$ standard. As explained below, we do not believe that any additional controls of ammonia and VOC 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 Act

[8] 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.

requirements may suffice to relieve a state from the need to adopt precursor controls under section 189(e). 57 FR 13542. EPA in this proposal proposes to determine that the SIP 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 Louisville area contains no major stationary sources of ammonia, and (2) existing major stationary sources of VOC are adequately controlled under other provisions of the CAA regulating the ozone NAAQS.[9] 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 $PM_{2.5}$ standard, at present ammonia and VOC precursors from major stationary sources do not contribute significantly to levels exceeding the 1997 $PM_{2.5}$ standard in the Louisville area. *See* 57 FR 13539-42.

EPA notes that its 1997 $PM_{2.5}$ implementation rule provisions in 40 CFR 51.1002 were not directed at evaluation of $PM_{2.5}$ precursors in the context of redesignation, but at SIP plans and control measures required to bring a nonattainment area into attainment of the 1997 $PM_{2.5}$ NAAQS. By contrast, redesignation to

[9]The Louisville 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.

attainment primarily requires the area to have already attained due to permanent and enforceable emission 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 VOC for $PM_{2.5}$ under the attainment planning provisions of subpart 4, those provisions in and of themselves do not require additional controls of these precursors for an area that already qualifies for redesignation. Nor does EPA believe that requiring Indiana to address precursors differently than they have already would result in a substantively different 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_{10} 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.[10] Courts have upheld this

[10] *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_X emissions and did not impose controls on SO_2, VOC, or ammonia

approach to the requirements of subpart 4 for PM_{10}.[11] EPA believes that application of this approach to $PM_{2.5}$ precursors under subpart 4 is reasonable. Because the Louisville area has already attained the 1997 $PM_{2.5}$ NAAQS with its current approach to regulation of $PM_{2.5}$ precursors, EPA believes that it is reasonable to conclude in the context of this redesignation that 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 in evaluating this redesignation request to consider additional precursors under subpart 4, it would not affect EPA's approval here of Indiana's request for redesignation of the Louisville area. In the context of a redesignation, the area has shown that it has attained the standard. Moreover, the state has shown and EPA has proposed 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 logically that no further control of additional precursors is necessary. Accordingly, EPA does not view the January 4, 2013, decision of the Court as precluding redesignation of the

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emissions).

[11] *See, e.g., Assoc. of Irritated Residents v. EPA et al.*, 423 F.3d 989 (9th Cir. 2005).

Louisville area to attainment for the 1997 $PM_{2.5}$ NAAQS at this time.

In sum, even if Indiana were required to address precursors for the Louisville area under subpart 4 rather than under subpart 1, as interpreted in EPA's remanded $PM_{2.5}$ implementation rule, EPA would still conclude that the area had met all applicable requirements for purposes of redesignation in accordance with section 107(d)(3)(E)(ii) and (v).

b. The Louisville Area Has a Fully Approved Applicable SIP under Section 110(k) of the CAA

Upon final approval of Indiana's comprehensive 2008 emissions inventory, EPA will have fully approved the Indiana SIP for the Louisville 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 September 4, 1992, John 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, Indiana 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 Indiana's 2008 emissions inventory for the Louisville area as meeting the requirement of section 172(c)(3) of the CAA. No Louisville area SIP provisions are currently disapproved, conditionally approved, or partially approved.

3. The Improvement in Air Quality Is Due to Permanent and Enforceable Reductions in Emissions Resulting from Implementation of the SIP and Applicable Federal Air Pollution Control Regulations and Other Permanent and Enforceable Reductions (Section 107(d)(3)(E)(iii))

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

In making this demonstration, Indiana has calculated the change in emissions between 2005, one of the years the Louisville area was monitoring nonattainment, and 2008, one of the years the Louisville 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 Louisville area and contributing areas have implemented in recent years.

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 fine particle precursor emissions 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. These emission control requirements result in lower NO_X and SO_2 emissions from new cars and light duty trucks. The Federal rules were phased in between 2004 and 2009. The EPA has estimated that, by the end of the phase-in period, new vehicles will emit less NO_x with the following percentage decreases: passenger cars (light duty vehicles) - 77%; light duty trucks, minivans and sports utility vehicles - 86%; and, larger sports utility vehicles, vans and heavier trucks - 69% to 95%. 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 to 30 parts per million (ppm) beginning in January 2006. Most gasoline sold in Indiana prior to January 2006 had a sulfur

content of about 500 ppm.

Heavy-Duty Diesel Engine Rule. EPA issued this rule in July 2000. This rule includes standards limiting the sulfur content of diesel fuel, which went into effect in 2004. A second phase took effect in 2007 which reduced fine particle emissions from heavy-duty highway engines and further reduced the highway diesel fuel sulfur content to 15 ppm. The total program is estimated to achieve a 90% reduction in direct $PM_{2.5}$ emissions and a 95% reduction in NO_X emissions for these new engines using low sulfur diesel, compared to existing engines using higher sulfur content diesel. The reduction in fuel sulfur content also yielded an immediate reduction in sulfate particle emissions from all diesel vehicles.

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. The rule also reduces the sulfur content in nonroad diesel fuel by over 99%. Prior to 2006, nonroad diesel fuel averaged approximately 3,400 ppm sulfur. This rule limited nonroad diesel sulfur content to 500 ppm by 2006, with a further reduction to 15 ppm by 2010. The combined engine and fuel rules will reduce NO_X and $PM_{2.5}$ emissions from large nonroad diesel engines by over 90%, compared to current nonroad engines

using higher sulfur content diesel. It is estimated that compliance with this rule will cut NO_X emissions from nonroad diesel engines by up to 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.

Nonroad Large Spark-Ignition Engine and Recreational Engine Standards. In November 2002, EPA promulgated emission standards for groups of previously unregulated nonroad engines. These engines include large spark-ignition engines such as those used in forklifts and airport ground-service equipment; recreational vehicles using spark-ignition engines such as off-highway motorcycles, all-terrain vehicles and snowmobiles; and recreational marine diesel engines. Emission standards from large spark-ignition engines were implemented in two tiers, with Tier 1 starting in 2004 and Tier 2 in 2007. Recreational vehicle emission standards are being phased in from 2006 through 2012. Marine diesel engine standards were phased in from 2006 through 2009. With full implementation of the entire nonroad spark-ignition engine and recreational engine standards, an 80% reduction in NO_X expected by 2020. Some of these emission reductions occurred by the 2008-2010 period used to demonstrate

attainment, and additional emission reductions will occur during the maintenance period.

ii. Control Measures in Contributing Areas

NO_X SIP Call. On October 27, 1998 (63 FR 57356), EPA issued a NO_X SIP Call requiring the District of Columbia and 22 states to reduce emissions of NO_X. 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_X SIP Call are permanent and enforceable.

CAIR. On May 12, 2005, EPA published CAIR, which requires significant reductions in emissions of SO_2 and NO_x from electric generating units to limit the interstate transport of these pollutants and the ozone and fine particulate matter they form in the atmosphere. *See* 76 FR 70093. The D.C. Circuit initially vacated CAIR, *North Carolina v. EPA*, 531 F.3d 896 (D.C. Cir. 2008), but ultimately remanded the rule to EPA without vacatur to preserve the environmental benefits provided by CAIR, *North Carolina v. EPA*, 550 F.3d 1176, 1178 (D.C. Cir. 2008). In response to the Court's decision, EPA issued the Transport Rule, also known as CSAPR), to address interstate transport of NO_x and SO_2 in the eastern United States. *See* 76 FR 48208 (August 8, 2011).

On December 30, 2011, the D.C. Circuit issued an order addressing the status of CSAPR and CAIR in response to motions filed by numerous parties seeking a stay of CSAPR pending judicial review. In that order, the Court stayed CSAPR pending resolution of the petitions for review of that rule in *EME Homer City Generation*. The Court also indicated that EPA was expected to continue to administer CAIR in the interim until judicial review of CSAPR was completed.

On August 21, 2012, the D.C. Circuit issued a decision to vacate CSAPR. In that decision, it also ordered EPA to continue administering CAIR "pending the promulgation of a valid replacement." *EME Homer City*, 696 F.3d at 38. The D.C. Circuit denied all petitions for rehearing on January 24, 2013. EPA and other parties have filed petitions for certiorari to the U.S. Supreme Court, but those petitions have not been acted on to date. Nonetheless, EPA intends to continue to act in accordance with the *EME Homer City* opinion.

In light of these unique circumstances and for the reasons explained below, to the extent that attainment is due to emission reductions associated with CAIR, EPA is here proposing to determine that those reductions are sufficiently permanent and enforceable for purposes of CAA sections 107(d)(3)(E)(iii) and 175A. EPA therefore proposes to approve the redesignation

request and the related SIP revision for Indiana portion of the Louisville area, including Indiana's plan for maintaining attainment of the $PM_{2.5}$ standard.

As directed by the D.C. Circuit, CAIR remains in place and enforceable until substituted by a valid replacement rule. Indiana's SIP revision lists CAIR as a control measure that became state-effective October 22, 2007 and was fully approved by EPA on November 29, 2010 (75 FR 72956), for the purpose of reducing SO_2 and NO_X emissions. CAIR was thus in place and getting emission reductions when the Louisville area began monitoring attainment of the 1997 annual $PM_{2.5}$ NAAQS. The quality-assured, certified monitoring data used to demonstrate the area's attainment of the 1997 annual $PM_{2.5}$ NAAQS by the April 2010 attainment deadline was also impacted by CAIR.

To the extent that Indiana is relying on CAIR in its maintenance plan, the recent directive from the D.C. Circuit in *EME Homer City* ensures that the reductions associated with CAIR will be permanent and enforceable for the necessary time period. EPA has been ordered by the Court to develop a new rule to address interstate transport to replace CSAPR and the opinion makes clear that after promulgating that new rule EPA must provide states an opportunity to draft and submit SIPs to implement that rule. Thus, CAIR will remain in place until EPA

has promulgated a final rule through a notice-and-comment rulemaking process, States have had an opportunity to draft and submit SIPs, EPA has reviewed the SIPs to determine if they can be approved, and EPA has taken action on the SIPs, including promulgating a FIP if appropriate. The Court's clear instruction to EPA that it must continue to administer CAIR until a valid replacement exists provides an additional backstop: by definition, any rule that replaces CAIR and meets the Court's direction would require upwind states to have SIPs that eliminate significant contributions to downwind nonattainment and prevent interference with maintenance in downwind areas.

Further, in vacating CSAPR and requiring EPA to continue administering CAIR, the D.C. Circuit emphasized that the consequences of vacating CAIR "might be more severe now in light of the reliance interests accumulated over the intervening four years." *EME Homer City*, 696 F.3d at 38. The accumulated reliance interests include the interests of states who reasonably assumed they could rely on reductions associated with CAIR which brought certain nonattainment areas into attainment with the NAAQS. If EPA were prevented from relying on reductions associated with CAIR in redesignation actions, states would be forced to impose additional, redundant reductions on

top of those achieved by CAIR. EPA believes this is precisely the type of irrational result the Court sought to avoid by ordering EPA to continue administering CAIR. For these reasons also, EPA believes it is appropriate to allow states to rely on CAIR, and the existing emissions reductions achieved by CAIR, as sufficiently permanent and enforceable for purposes such as redesignation. Following promulgation of the replacement rule, EPA will review SIPs as appropriate to identify whether there are any issues that need to be addressed.

iii. Consent Decrees

Along with Federal and state rules controlling direct PM and precursors, there have been a number of permanent and enforceable consent decrees that have reduced emissions and will continue to reduce emissions into the future. The EPA and Duke Energy consent decree created caps on both NO_x and SO_2 similar allocations provided for the Gallagher Generating Station in Floyd County. Duke Energy Indiana permanently shut-down two of its four coal-fired Electric Generating Units (EGUs) (Units 1 and 3) on February 1, 2012. The Tennessee Valley Authority has also recently entered into a consent decree with EPA that establishes system-wide annual tonnage limits for NO_x and SO_2 for its eleven coal-fired power plants located in Alabama, Kentucky, and Tennessee. NO_x will be limited to 100,600 tpy beginning in

2011 and capped at 52,000 tpy in 2018 and each year thereafter. SO_2 will be limited to 285,000 tpy beginning in 2011 and capped at 110,000 tpy in 2019 and each year thereafter.

This will result in significant regional NO_x and SO_2 reductions, further ensuring that the area will continue to maintain the NAAQS in the future.

b. Emission Reductions

Indiana developed emissions inventories for NO_X, direct $PM_{2.5}$ and SO_2 for 2005, one of the years the area monitored nonattainment, and 2008, one of the years the Louisville area monitored attainment of the standard.

EGU SO_2 and NO_X emissions were derived from EPA's Clean Air Market's acid rain database. These emissions reflect Indiana and Kentucky's NO_X emission budgets resulting from EPA's NO_X SIP call. The 2008 emissions from EGUs reflect Indiana's emission caps under CAIR. All other point source emissions were obtained from Indiana's source facility emissions reporting.

Area source emissions in the Louisville area for 2005 were taken from periodic emissions inventories.[12] These 2005 area source emission estimates were extrapolated to 2008. Source

12 Periodic emission inventories are derived by states every three years and reported to the 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.

growth factors were supplied by the Lake Michigan Air Directors Consortium (LADCO).

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, MOVES2010a, in conjunction with transportation model results developed by the local metropolitan planning organization, Kentuckiana Regional Planning and Development Agency (KIPDA), along with the Louisville Metro Air Pollution Control District and IDEM.

All emissions estimates discussed below were documented in the submittal and appendices of Indiana's redesignation request submittal from June 16, 2011. 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-2011-0698, which includes digital copies of Indiana's submittal.

Emissions data in tpy for the entire Louisville area are shown in Tables 2 and 3, below.

Table 2. Summary of 2005 emissions for the entire

Louisville area by source type (tpy)

	SO_2	NO_X	$PM_{2.5}$
Point (EGU)	174,178.36	48,103.47	3,443.00
Non-EGU	5,441.05	3,922.83	1,291.31
On-road	144.23	32,744.55	1,055.61
Nonroad	1,050.81	14,370.95	780.54
Area	418.98	2,123.83	810.13
Total Louisville	181,233.43	101,265.63	7,380.59

Table 3. Comparison of 2005 emissions from the nonattainment year and 2008 emissions for an attainment year for the entire Louisville area (tpy)

	2005	2008	Net Change (2005-2008)
$PM_{2.5}$	7,380.59	6,724.02	-656.57
NO_X	101,265.63	97,533.93	-3,731.70
SO_2	181,233.43	151,503.01	-29,730.42

Table 3 shows that in the entire Louisville area reduced direct $PM_{2.5}$ emissions by 656.57 tons, NO_X emissions by 3,731.70 tons and SO_2 emissions by 29,730.42 tons between 2005, a nonattainment year, and 2008, an attainment year.

Emissions data in tpy the Indiana portion of the Louisville area are shown in Tables 4, 5, and 6, below.

Table 4. Summary of 2008 base year emissions inventory for the Indiana portion of the Louisville area by source type (tpy)

	SO_2	NO_X	$PM_{2.5}$
Point	108,861.34	27,916.08	847.78
On-road	38.89	6,245.60	210.91
Nonroad	141.97	2,553.23	131.41
Area	330.32	811.15	12.37
Total	109,372.52	37,526.06	1,202.47

Table 5. Summary of 2007/2008 base year emissions of VOCs

and Ammonia for the entire Louisville area by source type (tpy)

	Ammonia	VOC
Point	6.304	916.25
Area	1,193.20	5,618.26
Nonroad	2.13	1,246.43
On-road	113.13	2,886.02
Total	1,314.76	10,666.95

Table 6. Comparison of 2005 emissions from the nonattainment year and 2008 emissions for an attainment year for the Indiana portion of the Louisville area (tpy)

	2005	2008	Net Change (2005-2008)
$PM_{2.5}$	1,376.37	1,202.47	-173.90
NO_X	41,750.37	37,526.06	-4,224.31
SO_2	135,182.59	109,372.52	-25,810.07

Table 6 shows that in the Indiana portion of the Louisville area reduced direct $PM_{2.5}$ emissions by 173.90 tons, NO_X emissions by 4,224.31 tons and SO_2 emissions by 25,810.07 tons between 2005, a nonattainment year, and 2008, an attainment year.

Based on the information summarized above, Indiana has adequately demonstrated that the improvement in air quality is due to permanent and enforceable emissions reductions.

4. Indiana Has a Fully Approved Maintenance Plan Pursuant to Section 175A of the CAA (Section 107(d)(3)(E)(iv))

In conjunction with Indiana's request to redesignate the Indiana portion of the Louisville nonattainment area to attainment status, Indiana has submitted a SIP revision to provide for maintenance of the 1997 annual $PM_{2.5}$ NAAQS in the

area through 2025.

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 annual $PM_{2.5}$ violations.

The September 4, 1992, 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 inventories, 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.

b. Attainment Inventory

Indiana developed emissions inventories for NO_X, direct $PM_{2.5}$ and SO_2 for 2008, one of the years in the period during which the Louisville area monitored attainment of the 1997 annual $PM_{2.5}$ standard, as described previously. The attainment levels of emissions for the entire area, as well as the attainment levels of emissions for the Indiana portion of the area were summarized in Tables 3 and 5, above.

c. Demonstration of Maintenance

Along with the redesignation request, Indiana submitted a revision to its $PM_{2.5}$ SIP to include a maintenance plan for the Louisville area, as required by section 175A of the CAA. 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. A maintenance demonstration may be based on such an emissions inventory approach. *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).

Indiana's plan demonstrates maintenance of the 1997 annual $PM_{2.5}$ standard through 2025 by showing that current and future emissions of NO_X, directly emitted $PM_{2.5}$ and SO_2 for the area remain at or below attainment year emission levels.

Indiana's submission uses emissions inventory projections for the years 2015 and 2025 to demonstrate maintenance for the Indiana portion of the Louisville area. The projected emissions were estimated by Indiana, with assistance from LADCO and KIPDA using the MOVES2010a model. Projection of inventory emissions was done for the 2015 interim year emissions using estimates based on the 2009 and 2018 LADCO modeling inventory, using LADCO's growth factors, for all sectors. The 2025 maintenance year emissions are based on emissions estimates from the 2018 LADCO modeling. Table 7 shows the 2008 attainment base year emission estimates and the 2015 and 2025 emission projections for the entire tri-state Louisville area that Indiana provided in its June 16, 2011, submission.

Table 7. Comparison of 2008, 2015 and 2025 NO_X, direct $PM_{2.5}$ and SO_2 emission totals (tpy) for the Louisville area

	SO_2	NO_X	$PM_{2.5}$
2008(baseline)	151,503.01	97,533.93	6,724.02
2015	76,958.54	69,936.67	5,540.29
2025	76,082.07	59,455.17	5,055.61
Change 2008-2025	-75,420.94 50% decrease	-38,078.76 39% decrease	-1,668.41 25% decrease

Table 7 shows that the Louisville area will reduce NO_X emissions by 38,078.76 tpy between 2008 and the maintenance projection to 2025, direct $PM_{2.5}$ emissions by 1,668.41 tpy, and reduced SO_2 emissions by 75,420.94 tpy between 2008 and 2025.

An air quality modeling analysis conducted by IDEM demonstrates that the Louisville area would be able to attain the $PM_{2.5}$ standard even in the absence of either CAIR or CSAPR. *See* appendices H and I. This modeling is available in the docket for this proposed redesignation action.

Based on the information summarized above, Indiana has adequately demonstrated maintenance of the $PM_{2.5}$ standard in this area for a period extending in excess of ten years from expected final action on Indiana's redesignation request.

i. Maintenance Plan and Evaluation of VOCs and Ammonia

With regard to the redesignation of Louisville, in evaluating the effect of the Court's remand of EPA's implementation rule, which included presumptions against consideration of VOC and ammonia as $PM_{2.5}$ 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 $PM_{2.5}$ standard and that the state has shown that attainment of that standard is due to permanent and enforceable emission reductions.

EPA proposes to determine 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 $PM_{2.5}$ standard in the Louisville 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 VOC 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 Louisville area need not include any additional emission reductions of VOC or ammonia in order to provide for continued maintenance of the standard.

First, as noted above in EPA's discussion of section 189(e), VOC 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 Louisville area are very low, estimated to be less than 1,500 tpy. *See* Table 8 below. This amount of ammonia emissions appears especially small in comparison to the total amounts of SO_2, NO_X, and even direct $PM_{2.5}$ emissions from sources in the area, see Table 7. Third, as described below, available information shows that no precursor, except ammonia, is expected to increase over the maintenance period so as to interfere with or undermine the State's maintenance demonstration.

Indiana's maintenance plan shows that emissions of direct $PM_{2.5}$, SO_2, and NO_X are projected to decrease by 1,668 tpy, 75,420 tpy, and 38,078 tpy, respectively, over the maintenance period. *See* Table 7 above. In addition, emissions inventories used in the regulatory impact analysis (RIA), found in the docket, for the 2012 $PM_{2.5}$ NAAQS, shows that VOC emissions are projected to decrease by 14,551 tpy between 2007 and 2020. Although ammonia emissions are predicted to increase slightly between 2007 and 2020, the large decrease of emissions in other precursors in comparison will keep the area well below the standard. *See* Table 8 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 2025. Given that the Louisville area is already attaining the 1997 $PM_{2.5}$ 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 $PM_{2.5}$ 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 VOC and ammonia emissions were to increase unexpectedly between 2020 and 2025, the overall emissions reductions projected in direct $PM_{2.5}$, SO_2, and NO_X would be sufficient to offset any increases. For these reasons, EPA believes that local emissions of all of the potential $PM_{2.5}$ precursors will not increase to the extent that they will cause monitored $PM_{2.5}$ levels to violate the 1997 $PM_{2.5}$ standard during the maintenance period.

Table 8. Comparison of 2007 and 2020 VOC and Ammonia Emission Totals by Source Sector (tpy) for the Louisville Area[13]

	VOC			Ammonia		
Sector	**2007**	**2020**	**Net Change 2007-2020**	**2007**	**2020**	**Net Change 2007-2020**
Point	1,084	1,099	15	6	97	91
Area	5,504	5,460	-44	1,115	1,191	76
Nonroad	1,273	6,39	-634	2	250	248
On-road	2,087	9,35	-1,152	97	68	-29
Fires	73	73	0	5	5	0
Total	10,497	8,819	-1,678	1,270	1,407	137

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

[13] These emissions estimates were taken from the emissions inventories developed for the RIA for the 2012 $PM_{2.5}$ NAAQS

the maintenance period. The current air quality design value for the area is 13.5 µg/m^3 (based on 2009-2011 air quality data), which is well below the 1997 annual $PM_{2.5}$ NAAQS of 15 µg/m^3. Moreover, the modeling analysis conducted for the RIA for the 2012 $PM_{2.5}$ NAAQS indicates that the design value for this area is expected to continue to decline through 2020. In the RIA analysis, the highest 2020 modeled design value for the Louisville area is 9.8 µg/m^3. Given that precursor emissions are projected to decrease through 2025, it is reasonable to conclude that monitored $PM_{2.5}$ levels in this area will also continue to decrease through 2025.

Thus, EPA believes that there is ample justification to conclude that the Louisville area should be redesignated, even taking into consideration the emissions of other precursors potentially relevant to $PM_{2.5}$. 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 maintenance plan and its request to redesignate the Louisville area to attainment for the 1997 $PM_{2.5}$ annual standard.

Based on the information summarized above, Indiana has adequately demonstrated maintenance of the $PM_{2.5}$ standard in this area for a period extending in excess of ten years from expected final action on Indiana's redesignation request.

d. Monitoring Network

Indiana's plan includes a commitment to continue working with Kentucky to operate its EPA-approved monitoring network, as necessary to demonstrate ongoing compliance with the NAAQS. Indiana currently operates three $PM_{2.5}$ monitors in Clark and Floyd counties in order to monitor the Indiana portion of the Louisville area. Kentucky currently operates four monitors in Jefferson County for the Louisville area.

e. Verification of Continued Attainment

Indiana remains obligated to continue to quality-assure monitoring data and enter all data into AQS in accordance with Federal guidelines. Indiana will use these data, supplemented with additional information as necessary, to assure that the area continues to attain the standard. Indiana 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 measures with respect to control of the pollutant(s) that were contained in the SIP before redesignation of the area to attainment. *See* section 175A(d) of the CAA.

As required by section 175A of the CAA, Indiana has adopted a contingency plan for the Louisville area to address possible future annual $PM_{2.5}$ air quality problems. Under Indiana's plan, if a violation of the 1997 annual $PM_{2.5}$ standard occurs, Indiana will implement an "Action Level Response" to evaluate what measures are warranted to address the violation, committing to implement one or more measures from a list of candidate measures given in the plan. Indiana's candidate contingency measures include the following:

i. Vehicle inspection and maintenance program;

ii. Alternative fuel and diesel retrofit programs for fleet vehicle operations;

iii. Requiring NO_x or SO_2 emissions offsets for new and modified major and minor sources;

iv. Increasing the ratio of emissions offsets required for new sources;

v. NO_X or SO_2 controls on new minor sources;

vi. Wood stove change-out program;

vii. Emission reduction measures for unpaved roads and parking lots;

viii. Idle restrictions;

ix. Broader geographic applicability of existing measures; and

x. One or more transportation control measures sufficient to achieve at least a 0.5% reduction in actual area wide precursor emissions.

Under Indiana's plan, control measures are to be adopted and implemented within 18 months from the end of the year in which air quality triggering the Action Level Response occurs. Indiana further commits to conduct ongoing review of its data, and if monitored concentrations or emissions are trending upward, Indiana commits to take appropriate steps to avoid a violation if possible. EPA believes that Indiana's contingency

plan satisfies the pertinent requirements of section 175A(d).

EPA believes that Indiana's 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, Indiana commits to submit to the EPA an updated $PM_{2.5}$ maintenance plan eight years after redesignation of the Louisville area to cover an additional ten year period beyond the initial ten year maintenance period. As required by section 175A of the CAA, Indiana has also committed to retain the $PM_{2.5}$ control measures contained in the SIP prior to redesignation.

For all of the reasons set forth above, EPA is proposing to approve Indiana's 1997 annual $PM_{2.5}$ maintenance plan for the Louisville area as meeting the requirements of CAA section 175A.

5. Adequacy of Indiana's MVEB

1. How Are MVEBs Developed and What Are the MVEBs for the Louisville Area?

Under the CAA, states are required to submit, at various times, control strategy SIP revisions and maintenance plans for $PM_{2.5}$ nonattainment areas and for areas seeking redesignation to attainment of the $PM_{2.5}$ 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, in this case the $PM_{2.5}$ maintenance plans, and conclude that the SIP will achieve its overall purpose, in this case providing for maintenance of the 1997 annual $PM_{2.5}$ standard in the Indiana portions of the Louisville area.

EPA's process for determining adequacy of a MVEB consists of three basic steps: (1) providing public notification of a SIP submission; (2) providing the public the opportunity to comment on the MVEB during a public comment period; and, (3) EPA taking

action on the MVEB. The process for determining the adequacy of submitted SIP MVEBs is codified at 40 CFR 93.118.

The maintenance plan submitted by Indiana for the Louisville area contains new primary $PM_{2.5}$ and NO_X MVEBs for the area for the years 2015 and 2025. The motor vehicle emissions budgets were calculated using MOVES2010(a). After the adequacy finding and approval of the budgets become effective, the budgets will have to be used in future conformity determinations and regional emissions analyses prepared by the KIPDA, will have to be based on the use of MOVES2010a or the most recent version of MOVES required to be used in transportation conformity determinations.[14] The states have determined the 2015 MVEBs for the combined Indiana and Kentucky portions of the Louisville area to be 580.69 tpy for primary $PM_{2.5}$ and 17,700.95 tpy for NO_X. Indiana has determined the 2025 MVEBs for the entire Louisville area to be 324.04 tpy for primary $PM_{2.5}$ and 9,311.76 tpy for NO_X. These MVEBs exceed the on-road mobile source primary $PM_{2.5}$ and NO_X emissions projected by the states for 2015 and 2021. Indiana has decided to include "safety margins" as provided for in 40 CFR 93.124(a) (described below) of 75.74 tpy and 42.27 tpy for primary $PM_{2.5}$ and 2,308.82 tpy and 1,214.58 tpy for NO_X in the

14 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)

2015 and 2025 MVEBs, respectively, to provide for on-road mobile source growth. Indiana did not provide emission budgets for SO_2, VOCs, and ammonia because it concluded that emissions of these precursors from on-road motor vehicles are not significant contributors to the area's $PM_{2.5}$ air quality problem.

In the Indiana portion of the Louisville area, the motor vehicle budgets including the safety margins and motor vehicle emission projections for both NO_X and $PM_{2.5}$ are lower than the levels in the attainment year.

EPA has reviewed the submitted budgets for 2015 and 2025 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 also completed a thorough review of the maintenance plan for the Indiana portion of the Louisville area. Based on the results of this review of the budgets and the maintenance plans EPA is approving the 2015 and 2025 direct $PM_{2.5}$ and NO_x budgets including the requested safety margins for the Indiana portion of the Louisville area. Additionally, EPA, through this rulemaking, has found the submitted budgets to be adequate for use to determine transportation conformity in the Indiana portion of the area, because EPA has determined that the area can maintain the 1997 annual $PM_{2.5}$ NAAQS for the relevant

maintenance period with on-road mobile source emissions at the levels of the MVEBs including the requested safety margins. These budgets must be used in conformity determinations made on or after the effective date of this direct final rulemaking (40 CFR 93.118(f)(iii)). Additionally, transportation conformity determinations made after the effective date of this notice must be based on regional emissions analyses using MOVES2010a or a more recent version of MOVES that has been approved for use in conformity determinations.[15]

2. What Is a Safety Margin?

A "safety margin" is the difference between the attainment level of emissions (from all sources) and the projected level of emissions (from all sources) in the maintenance plan. As shown in Table 8, the entire Louisville area is projected to have safety margins for NO_X and direct $PM_{2.5}$ of 38,078.76 tpy and 1,668.41 tpy in 2025 (the difference between the attainment year, 2008, emissions and the projected year of 2025 emissions for all sources in the Louisville area). The transportation conformity rule allows areas to allocate all or a portion of a "safety margin" to the area's motor vehicle emissions budgets (40 CFR 92.124(a)). The MVEBs requested by Indiana contain NO_X

15 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)

safety margins for mobile sources in 2015 and 2025 and $PM_{2.5}$ safety margins for mobile sources in 2015 and 2025 are much smaller than the allowable safety margins reflected in the total emissions for the Louisville area. The state is not requesting allocation to the MVEBs of the entire available safety margins reflected in the demonstration of maintenance. Therefore, even though the state is requesting MVEBs that exceed the projected on-road mobile source emissions for 2015 and 2025 contained in the demonstration of maintenance, the increase in on-road mobile source emissions that can be considered for transportation conformity purposes is well within the safety margins of the overall $PM_{2.5}$ maintenance demonstration.

Therefore, EPA believes that the requested budgets, including the requested portion of the safety margins, provide for a quantity of mobile source emissions that would be expected to maintain the $PM_{2.5}$ standard. Once allocated to mobile sources, these portions of the safety margins will not be available for use by other sources.

3. What action is EPA taking on the submitted motor vehicle emissions budgets?

EPA, through this rulemaking, has found adequate and is approving the MVEBs for use to determine transportation conformity in the Indiana portion of the Louisville area,

because EPA has determined that the area can maintain attainment of the 1997 annual $PM_{2.5}$ NAAQS for the relevant maintenance period with mobile source emissions at the levels of the MVEBs including the requested safety margins. These budgets must be used in conformity determinations if this rulemaking goes final. (40 CFR 93.118(f)(iii)) Additionally, the determinations must be based on regional emissions analyses using MOVES2010b or a more recent version of MOVES that has been approved for use in conformity determinations.[16]

6. 2008 Comprehensive Emissions Inventory

As discussed above, section 172(c)(3) of the CAA requires areas to submit a comprehensive emissions inventory. Indiana submitted a 2008 base year emissions inventory that meets this requirement. Emissions contained in the submittals cover the general source categories of point sources, area sources, on-road mobile sources, and nonroad mobile sources. Discussion of how these emissions were compiled is found in section V(3)(b) above, as well as in the docket.

The emissions for the 2008 base year emission inventory and supplemental precursor emissions inventory are found in Tables 4 and 5, and documented in Indiana's redesignation request

16 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)

submittal and supplemental submittal. EPA has reviewed Indiana's documentation of the emissions inventory techniques and data sources used for the derivation of the 2008 emissions estimates, and has found that Indiana has thoroughly documented the derivation of these emissions inventories. The submittal from the state shows that the 2008 emissions inventory is currently the most complete emissions inventories for $PM_{2.5}$ and $PM_{2.5}$ precursors in the Louisville area. Based upon EPA's review, we propose to find that the base year emissions inventory are as complete and accurate as possible given the input data available to Indiana, and we are proposing to approve them under CAA section 172(c)(3).

7. Summary of Proposed Actions.

EPA has previously determined that the Louisville area has attained the 1997 annual $PM_{2.5}$ NAAQS. EPA is proposing to determine that the entire Louisville area continues to attain the 1997 annual $PM_{2.5}$ standard using the latest three years of certified, quality-assured data, and that the Indiana portion of the area has met the requirements for redesignation under section 107(d)(3)(E) of the CAA. EPA is proposing to grant the request from Indiana to change the legal designation of the Indiana portion of the Louisville area from nonattainment to attainment for the 1997 annual $PM_{2.5}$ NAAQS. EPA is proposing to

approve Indiana's $PM_{2.5}$ maintenance plan for the Louisville area as a revision to the Indiana SIP because the plan meets the requirements of section 175A of the CAA. EPA is proposing to approve the 2008 emissions inventory for primary $PM_{2.5}$, NO_X, SO_2, VOC and ammonia documented in Indiana's June 16, 2011, submittal and supplement on March 18, 2013, as satisfying the requirement in section 172(c)(3) of the CAA for a comprehensive, current emission inventory. Finally, EPA finds adequate and is approving 2015 and 2025 primary $PM_{2.5}$ and NO_X MVEBs for the Louisville area. These MVEBs will be used in future transportation conformity analyses for the area.

VI. What are the Effects of EPA's Proposed Actions?

If finalized, approval of the redesignation request would change the official designation of the Indiana portion of the Louisville area for the 1997 annual $PM_{2.5}$ NAAQS, found at 40 CFR part 81, from nonattainment to attainment. A final approval would also be a revision to the Indiana SIP for the Louisville area, the maintenance plan for the 1997 annual $PM_{2.5}$ standard, MVEBs, as well as the 2008 emissions inventory included with the redesignation request.

VII. 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 approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, these actions:

- are not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- do not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);

- are 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*.);
- do 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);
- do not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- are not economically significant regulatory actions based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- are not significant regulatory actions subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- are 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 CAA; and
- do 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, this rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the SIP is not approved to apply in Indian country located in the state, and EPA notes that it will not impose substantial direct costs on tribal governments or preempt tribal law.

List of Subjects

40 CFR part 52

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

40 CFR part 81

Air pollution control, Environmental protection, National Parks, Wilderness

Dated: June 25, 2013.

Susan Hedman,

Regional Administrator, Region 5.

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