6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 52 and 81

[EPA-R05-OAR-2018-0842; FRL-9991-11-Region 5]

Air Plan Approval; Illinois; Redesignation of the Illinois Portion of the St. Louis Area to Attainment of the 1997 Annual Standard for Fine Particulate Matter

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: On December 6, 2018, the Illinois Environmental Protection Agency (Illinois) submitted a request for the Environmental Protection Agency (EPA) to redesignate the Illinois portion of the St. Louis, MO-IL nonattainment area (hereafter, "St. Louis area") to attainment for the 1997 fine particulate matter ($PM_{2.5}$) annual national ambient air quality standard (NAAQS or standard). The Illinois portion of the St. Louis area includes Madison, Monroe, and St. Clair counties, and Baldwin Township in Randolph County. EPA is taking this action because it has determined that the St. Louis area is attaining the annual 1997 $PM_{2.5}$ standard based on the most recent three years of certified air quality data. EPA is also proposing to approve a revision to the Illinois state implementation plan (SIP) for maintaining the 1997 annual $PM_{2.5}$ NAAQS through 2030.

Illinois' maintenance plan submission includes an updated emission inventory, which includes emission inventories for $PM_{2.5}$, NO_x, volatile organic compounds (VOCs) and ammonia. The maintenance plan submission also includes motor vehicle emission budgets (MVEBs) for the mobile source contribution of $PM_{2.5}$ and nitrogen oxides (NO_X) to the St. Louis $PM_{2.5}$ area for transportation conformity purposes. EPA is proposing to approve and update both the emissions inventory and MVEBs. EPA is proposing to take these actions in accordance with the Clean Air Act (CAA) and EPA's SIP rules regarding the 1997 $PM_{2.5}$ NAAQS.

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

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R05-OAR-2018-0842 at http://www.regulations.gov, or via email to aburano.douglas@epa.gov. For comments submitted at Regulations.gov, follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. For either manner of submission, EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a

written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. EPA will generally not consider comments or comment contents located outside of the primary submission (i.e. on the web, cloud, or other file sharing system). For additional submission methods, please contact the person identified in the "For Further Information Contact" section. For the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit http://www2.epa.gov/dockets/commenting-epa-dockets.

FOR FURTHER INFORMATION CONTACT: Michelle Becker, Life Scientist, Attainment Planning and Maintenance Section, Air Programs Branch (AR-18J), Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 886-3901, Becker.Michelle@epa.gov.

SUPPLEMENTARY INFORMATION: Throughout this document whenever "we," "us," or "our" is used, we mean EPA. This supplementary information section is arranged as follows:

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

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

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

5. Motor Vehicle Emissions Budget (MVEBs) for $PM_{2.5}$ and NO_X, and Safety Margin for the St. Louis Area.

6. Comprehensive Emissions Inventory for the St. Louis Area

V. What are the effects of EPA's actions?

VI. Statutory and Executive Order Reviews.

I. What actions are EPA taking?

EPA is proposing to take several actions related to the redesignation of the St. Louis area to attainment of the 1997 annual $PM_{2.5}$ NAAQS. EPA is proposing to determine that the St. Louis area has attained the 1997 annual $PM_{2.5}$ NAAQS based on quality-assured, certified 2015-2017 air quality data. EPA is proposing to grant the request to redesignate the St. Louis area to attainment of the 1997 annual $PM_{2.5}$ NAAQS.

EPA proposes to find that Illinois' $PM_{2.5}$ maintenance plan meets the requirements of section 175A of the CAA and is proposing to approve Illinois' $PM_{2.5}$ maintenance plan for the 1997 annual $PM_{2.5}$ NAAQS for the St. Louis area as a revision to

the Illinois SIP. The $PM_{2.5}$ maintenance plan provides for the maintenance of the 1997 annual $PM_{2.5}$ NAAQS in the St. Louis area through 2030.

EPA is also proposing to approve Illinois' 2008 and 2030 MVEBs for the St. Louis area.

Finally, EPA is proposing to approve Illinois' 2008 primary $PM_{2.5}$, NO_X, sulfur dioxide (SO_2), VOC, and ammonia (NH_3) emission inventories for the St. Louis area as satisfying the requirement of section 172(c)(3) of the CAA for a current, accurate, and comprehensive emission inventory.

II. What is the background for these actions?

On July 18, 1997, EPA promulgated the first primary annual $PM_{2.5}$ NAAQS to provide increased protection of public health from fine particle pollution (62 FR 38652). In that action, 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. On January 5, 2005, EPA published air quality area designations for the 1997 annual $PM_{2.5}$ standard based on air quality data for calendar years 2001-2003 (70 FR 944). In that rulemaking, EPA designated the St. Louis area, which includes Madison, Monroe, and St. Clair counties, and Baldwin Township in Randolph county in Illinois, as nonattainment for the 1997 annual $PM_{2.5}$ standard.

III. What are the criteria for redesignation to attainment?

The CAA sets forth criteria 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 as 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 subchapter I of the CAA.

IV. What is EPA's analysis of the state's request?

EPA is proposing to redesignate the St. Louis area to attainment of the 1997 annual $PM_{2.5}$ NAAQS and to approve updates to the Illinois maintenance plan including MVEBs and emissions inventory for the area. The rationale for these proposed

actions follows.

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

To redesignate an area from nonattainment to attainment, the CAA requires EPA to determine that the area has attained the applicable NAAQS (CAA section 107(d)(3)(E)(i)). For $PM_{2.5}$, an area is attaining the 1997 annual $PM_{2.5}$ NAAQS if it meets the standard, as determined in accordance with 40 CFR 50.13 and part 50, appendix N, based on three complete, consecutive calendar years of quality-assured air quality monitoring data. To attain the 1997 annual $PM_{2.5}$ NAAQS, the 3-year average of the annual arithmetic mean concentration, as determined in accordance with 40 CFR part 50, appendix N, must be less than or equal to 15.0 $\mu g/m^3$ at all relevant monitoring sites in the subject area over a 3-year period. The relevant data must be collected and quality-assured in accordance with 40 CFR part 58 and recorded in the EPA Air Quality System (AQS) database. The monitors generally should have remained at the same location for the duration of the monitoring period required for demonstrating attainment.

EPA reviewed the certified, quality-assured/quality-controlled $PM_{2.5}$ monitoring data from the St. Louis area for the 1997 annual $PM_{2.5}$ NAAQS from 2015-2017 and determined that the design value for the area is less than the standard of 15.0 $\mu g/m^3$ for that period. The $PM_{2.5}$ design values for monitors with

complete data are summarized in Table 1:

Table 1 - Monitoring Data for the St. Louis area for 2015–2017 1997 annual $PM_{2.5}$ Standard (µg/m^3)

			Year			Average
State	**City/County**	**Site**	**2015**	**2016**	**2017**	**2015-2017**
Illinois	Madison	Alton	9.0	8.8	8.7	8.8
Illinois	Madison	Wood River	9.1	8.7	8.3	8.7
Illinois	Madison	Granite City	10.4	9.1	9.6	9.7
Illinois	Randolph	Houston	7.9	8.0	9.6*	8.5
Illinois	St. Claire	East St. Louis	10.7	10.0	8.8	9.8
Missouri	St. Louis City	Blair Street	10.4	8.5	7.9	8.9
Missouri	St. Louis City	South Broadway	11.1	8.1	7.8	9.0
Missouri	St. Louis City	Forest Park	9.2	8.7	8.3	8.7
Missouri	St. Louis County	Ladue	10.3	8.7	9.4	9.5
Missouri	Jefferson	Arnold West	11.6	8.3	8.2	9.3

* data completeness requirements met by substituting data from a secondary monitor resulting in a valid design value (83 FR 66631)

Pursuant to section 179(c) of the CAA, EPA is proposing to determine that the St. Louis area is attaining the 1997 annual $PM_{2.5}$ NAAQS. This proposed determination is based upon complete, quality-assured, and certified ambient air monitoring data for the 2015–2017 monitoring period that show the area has monitored attainment of 1997 annual $PM_{2.5}$ NAAQS.

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

EPA is proposing to find that Illinois has met all currently applicable SIP requirements for purposes of redesignation for the St. Louis area under section 110 of the

CAA (general SIP requirements), and the planning requirements in part D of subchapter I of the CAA (part D). We are proposing to find that all applicable requirements of the Illinois SIP, for purposes of redesignation, have been implemented, in accordance with section 107(d)(3)(E)(ii) and 107(d)(3)(E)(v) of the CAA. As discussed below, in this section, EPA is proposing to approve Illinois' 2008 emissions inventory as meeting the section 172(C)(3) requirement for a comprehensive emissions inventory.

In making these proposed determinations, we have ascertained which SIP requirements are applicable for purposes of redesignation, have concluded that there are SIP measures meeting these requirements, and that they are approved or will be approved by the time of final rulemaking on the State's $PM_{2.5}$ redesignation request.

a. Illinois has met all applicable requirements for purposes of redesignation of the St. Louis Area 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, New Source Review (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 interprets the "applicable" requirements for an area's redesignation to be those requirements linked with that area's nonattainment designation. Therefore, we believe that the section 110 elements described above that are not connected with nonattainment plan submissions and not linked with an area's attainment status, such as the "infrastructure SIP" elements of

section 110(a)(2), are not applicable requirements for purposes of the redesignation. A state remains subject to these requirements after an area is redesignated to attainment, and thus EPA does not interpret such requirements to be relevant applicable requirements to evaluate in a redesignation. For example, the requirement to submit state plans addressing interstate transport obligations under section 110(a)(2)(D)(i)(I) continue to apply to a state regardless of the designation of any particular area in the state, and thus are not applicable requirements to be evaluated in the redesignation context.

EPA has applied this interpretation consistently in many redesignations for decades. *See*, e.g., 81 FR 44210 (July 7, 2016) (final redesignation for the Sullivan county, Tennessee area); 79 FR 43655 (July 28, 2014) (final redesignation for Bellefontaine, Ohio lead nonattainment area); 61 FR 53174-53176 (October 10, 1996) and 62 FR 24826 (May 7, 1997) (proposed and final redesignation for Reading, Pennsylvania ozone nonattainment area); 61 FR 20458 (May 7, 1996) (final redesignation for Cleveland-Akron-Lorain, Ohio ozone nonattainment area); and 60 FR 62748 (December 7, 1995) (final redesignation of Tampa, Florida ozone nonattainment area). *See* also 65 FR 37879, 37890 (June 19, 2000) (discussing this issue

in final redesignation of Cincinnati, Ohio 1-hour ozone nonattainment area); and 66 FR 50399 (October 19, 2001) (final redesignation of Pittsburgh, Pennsylvania 1-hour ozone nonattainment area).

We have reviewed the Illinois SIP and determined that it meets the general SIP requirements under section 110 of the CAA to the extent they are applicable for purposes of redesignation. EPA has previously approved provisions of Illinois' SIP addressing section 110 requirements at 40 CFR 52.720.

ii. Part D Requirements

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

1) Section 172 Requirements.

Section 172(c) sets out general nonattainment plan requirements. A thorough discussion of these requirements can

be found in the General Preamble for Implementation of Title I (57 FR 13498, April 16, 1992) ("General Preamble"). EPA's longstanding interpretation of the nonattainment planning requirements of section 172 is that once an area is attaining the NAAQS, those requirements are not "applicable" for purposes of CAA section 107(d)(3)(E)(ii) and therefore need not be approved into the SIP before EPA can redesignate the area. In the General Preamble, EPA set forth its interpretation of applicable requirements for purposes of evaluating redesignation requests when an area is attaining a standard. *See* 57 FR 13564. EPA noted that the requirements for reasonable further progress (RFP) and other measures designed to provide for an area's attainment do not apply in evaluating redesignation requests because those nonattainment planning requirements "have no meaning" for an area that has already attained the standard. *Id.* This interpretation was also set forth in the Calcagni Memorandum[1].

EPA's long-standing interpretation regarding the applicability of section 172(c)'s attainment planning requirements for an area that is attaining a NAAQS applies in

[1] September 4, 1992 Memorandum from John Calcagni, Director, Air Quality Management Division (EPA), entitled, "Procedures for Processing Requests to Redesignate Areas to Attainment."

this redesignation of the St. Louis area 1997 annual $PM_{2.5}$ nonattainment area as well.

As noted above, the remaining section 172(c) "attainment planning" requirements are not applicable for purposes of evaluating the state's redesignation request. Specifically, these are the reasonably available control measures (RACM) requirement under section 172(c)(1), which requires the plans for all nonattainment areas to provide for the implementation of all RACM as expeditiously as practicable and to provide for attainment of the primary NAAQS; the RFP requirement under section 172(c)(2), which is defined as progress that must be made toward attainment; the requirement to submit section 172(c)(9) contingency measures, which are measures to be taken if the area fails to make reasonable further progress to attainment; and the section 172(c)(6) requirement that the SIP contain control measures necessary to provide for attainment of the standard. These requirements are not applicable in evaluating Illinois' redesignation request because the St. Louis area has monitored attainment of the 1997 annual standard prior to the required attainment date of April 5, 2010, as promulgated in the Clean Data Determination published July 27, 2012 (77 FR 38183).

Section 172(c)(3) requires submission and approval of a

comprehensive, accurate and current inventory of actual emissions. Illinois submitted a 2008 base year emissions inventory as part of their $PM_{2.5}$ attainment demonstration on December 6, 2018 and requested that the 2008 inventories be used as the most accurate and current inventory. As discussed below in section IV.6, EPA is proposing to approve Illinois' 2008 emissions inventory as meeting the section 172(c)(3) emission inventory requirement for the St. Louis 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) and 189(a)(1)(A) requires source permits for the construction and operation of new and modified major stationary sources anywhere in the nonattainment area. EPA approved the current Illinois NSR program for $PM_{2.5}$ on May 13, 2003 (68 FR 25504). In addition, the state's maintenance plan does not rely on nonattainment NSR, therefore having a fully approved NSR program is not an applicable requirement; nonetheless, we have approved the state's program.[2]

Section 172(c)(7) requires the SIP to meet the applicable

[2] 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."

provisions of section 110(a)(2). As noted above, we find that the Illinois SIP meets the section 110(a)(2) applicable requirements for purposes of redesignation.

2) 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 Illinois' transportation conformity SIPs on December 23, 1997 (62 FR 67000). In April 2010, EPA promulgated changes to 40 CFR 51.851, eliminating the requirement for states to maintain a general conformity SIP. EPA confirms that Illinois has met the applicable conformity requirements under section 176.

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

Upon final approval of Illinois' comprehensive 2008 emissions inventories, EPA will have fully approved the Illinois SIP for the St. Louis area under section 110(k) of the CAA for all requirements applicable for purposes of redesignation. EPA may rely on prior SIP approvals in approving a redesignation request (See page 3 of the Calcagni memorandum; *Southwestern Pennsylvania Growth Alliance v. Browner*, 144 F.3d 984, 989-90 (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, Illinois has adopted and submitted, and EPA has fully approved, provisions addressing various required SIP elements under particulate matter standards. In this action, EPA is proposing to approve Illinois' 2008 comprehensive emissions inventories for the St. Louis area as meeting the requirement of section 172(c)(3) of the CAA. No St. Louis area SIP provisions are currently disapproved, conditionally approved, or partially approved. Therefore, EPA has fully approved the applicable requirements for the St. Louis area under section 110(k) in accordance with section 107(d)(3)(E)(ii).

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

EPA finds that Illinois has demonstrated that the observed air quality improvement in the St. Louis area is due to permanent and enforceable reductions from Federal measures. In making this demonstration, Illinois has calculated the change in emissions between 2002, one of the years the St. Louis area was monitoring nonattainment, and 2008, one of the years the St. Louis area monitored attainment. The reduction in emissions and the corresponding improvement in air quality over this period can be attributed to several regulatory control measures that the St. Louis 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 directly emitted fine particles and fine particle precursor emissions have occurred statewide and in upwind areas because 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, including sport utility vehicles. The Federal rules were phased in between 2004 and 2009. 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, reducing both directly emitted sulfates and the precursor SO_2.

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 rule for large nonroad diesel engines, such as those used in construction, agriculture and mining equipment, that was 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 were 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 is expected by 2020. Most of these emission reductions occurred by the 2015-2017 period used to demonstrate attainment, but 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 (including Illinois and Missouri) 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.

Clean Air Interstate Rule (CAIR). On March 10, 2004, EPA promulgated the CAIR. The CAIR required Electric Generating Units (EGUs) in 28 eastern states and the District of Columbia to significantly reduce emissions of NO_x and SO_2. On July 6, 2011, EPA finalized Cross-State Air Pollution Rule (CSAPR) as a replacement for CAIR. CSAPR became effective on January 1, 2015, for SO_2 and annual NO_x, and May 1, 2015, for ozone season NO_x. EPA estimated CSAPR will reduce EGU SO_2 emissions by 73% and NO_x emissions by 54% from 2005 levels in the CSAPR region, which includes Illinois.

On September 7, 2016, EPA promulgated an update to CSAPR that will bring even greater reductions in NO_x emissions. EPA estimated that the CSAPR update and other changes already underway in the power sector will cut ozone season NO_x emissions from power plants in the eastern United States by 20%, resulting in a reduction of 80,000 tons in 2017 compared to 2015 levels.

iii. Consent Decrees

Air quality in the Illinois portion of the nonattainment area has benefited from implementation of state point source NOx controls and other emission controls targeting $PM_{2.5}$ precursors. Federally-initiated litigation resulting in emission-reducing consent decrees with local industry include the ConocoPhillips Global Refinery Settlement (filed January 27, 2005, U.S.

District Court for the Southern District in Texas), which provided for installation (no later than December 31, 2009) of low-NOx burners and ultra-low NO_x burners on combustion units at its "Distilling West" operations (Roxana, IL, refinery), as well as reductions of SO_2, particulate matter, and NO_x from process operations. A settlement reached with Dynegy Midwest Generation (USA v. IL Power Co., et.al. 3:99-cv-833 Consent Decree, March 2005, U.S. District Court for the Southern District of Illinois) included the requirements to "commence operation of the SCRs [selective catalytic reduction systems] installed at Baldwin Unit 1, Unit 2… so as to achieve and maintain a 30-day rolling average emission rate from each such unit of not greater than 0.100 lb/mmBtu NO_x" and "maintain a 30-day rolling average emission rate of not greater than 0.120 lb/mmBtu NO_x at Baldwin Unit 3." Within this same timeframe, the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Integrated Iron and Steel Manufacturing Facilities was amended on July 13, 2006, affecting emission limits from the blast furnaces and Basic Oxygen Furnace shop at the U.S. Steel facility in Granite City, Illinois. The control measures and emission reductions resulting from this federal rulemaking and consent agreements continue to be permanent and enforceable.

The emissions reductions resulting from these control

measures are in Table 2.

Table 2. 2002 and 2008 Emissions Totals for the St. Louis 1997 annual $PM_{2.5}$ NAAQS (tons/year)

Pollutant	2002	2008	Difference
$PM_{2.5}$	10,950.60	8,136.98	-2,813.62
NO_x	61,860.58	44,722.08	-17,138.50
SO_2	55,940.09	50,557.33	-5,382.76
VOC	40,697.69	21,753.04	-18,944.65
NH_3	4,418.65	3,873.19	-545.46

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

In conjunction with the request to redesignate the St. Louis nonattainment area to attainment status, Illinois has submitted a SIP revision to provide for maintenance of the 1997 annual $PM_{2.5}$ NAAQS in the area through 2030.

a. What Is Required in a Maintenance Plan?

Section 175A of the CAA sets forth the required elements of a maintenance plan for areas seeking redesignation from nonattainment to attainment. Under section 175A, the plan must demonstrate continued attainment of the applicable NAAQS for at least ten years after EPA approves a redesignation to attainment. Eight years after redesignation, the state must submit a revised maintenance plan which demonstrates that attainment will continue to be maintained for ten years following the initial ten year maintenance period. To address the possibility of future NAAQS violations, the maintenance plan

must contain contingency measures with a schedule for implementation as EPA deems necessary to assure prompt correction of any future $PM_{2.5}$ NAAQS violations.

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

As discussed in detail in the section below, the state's maintenance plan submission expressly documents that the area's emissions inventory and modeling show that the area will remain below the attainment year inventories through 2030, more than ten years after redesignation.

b. Attainment Inventory

Illinois developed an emissions inventory for annual $PM_{2.5}$ emissions for 2008, one of the years in the period during which the St. Louis area monitored attainment of the 1997 annual $PM_{2.5}$ NAAQS. The attainment levels of emissions are summarized in Tables 3 through 7, along with future maintenance projections.

c. Demonstration of Maintenance

As discussed above, EPA has determined that the St. Louis area attained the 1997 annual $PM_{2.5}$ NAAQS based on monitoring data for the 3-year period from 2007-2009 and based on 2015-2017 monitoring data continues to attain the standard. In its maintenance plan, Illinois selected 2008 as the attainment emission inventory year. The attainment inventory identifies the level of emissions in the St. Louis area that is sufficient to attain the 1997 annual $PM_{2.5}$ NAAQS. Illinois began development of the attainment inventory by first generating a baseline emissions inventory for the St. Louis area. The year 2008 was chosen as the base year for developing a comprehensive emissions inventory for direct $PM_{2.5}$, NO_x, SO_2, VOC, and NH_3. The projected inventory included with the maintenance plan estimates emissions forward to 2025 and 2030, which satisfies the ten year interval required in section 175A of the CAA.

The emissions inventories address four major types of sources: point, area, onroad mobile, and nonroad mobile. The future year emissions inventories have been estimated using projected rates of growth in population, traffic, economic activity, expected control programs, and other parameters. Nonroad mobile emissions estimates were based on EPA's nonroad mobile model, with the exception of the railroad locomotives,

commercial marine, and aircraft. Onroad mobile source emissions were calculated using EPA's MOVES2014a onroad mobile emission model. The 2008 $PM_{2.5}$, NO_x, SO_2, VOC, and NH_3 emissions for St. Louis area, as well as the emissions for other years, were developed consistent with EPA guidance.

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, the purpose is to show that emissions during the maintenance period will not increase over the attainment year inventory. *Id.* at pp. 9–10.

As discussed in detail below, Illinois' maintenance plan submission expressly documents that the St. Louis area's overall emissions inventories will remain well below the attainment year inventories through 2030. In addition, for the reasons set forth below, EPA believes that the St. Louis area will continue to maintain the 1997 annual $PM_{2.5}$ NAAQS through 2030. Thus, if EPA finalizes its proposed approval of the redesignation request and maintenance plan, the approval will be based upon this showing, in accordance with section 175A, and EPA's analysis

described herein, that the Illinois maintenance plan provides for maintenance for at least 10 years after redesignation.

The maintenance plan for the St. Louis 1997 annual $PM_{2.5}$ area includes a maintenance demonstration that:

(i) Shows compliance with and maintenance of the annual $PM_{2.5}$ standard by providing information to support the demonstration that current and future emissions of $PM_{2.5}$ and NO_x, as well as other precursors, remain at or below 2008 emissions levels.

(ii) Uses 2008 as the attainment year and includes future emission inventory projections for 2025 and 2030.

(iii) Identifies an "out year" at least ten years after EPA review and potential approval of the maintenance plan. Per 40 CFR part 93, $PM_{2.5}$, and NO_x MVEBs were established for the last year (2030) of the maintenance plan.

(iv) Provides, as shown in Tables 3 through 7 below, the estimated and projected emissions inventories, in tons per year, covering only the Illinois portion of the St. Louis, MO-IL area, for $PM_{2.5}$, NO_x, SO_2, VOC, and NH_3.

Table 3. St. Louis area $PM_{2.5}$ Emission Inventories (tons/year)

Sector	2008 Attainment	2030 Maintenance	Difference
Point	2,438.05	2,350.90	-87.15
Area	4,749.40	4,656.69	-92.71
Onroad	524.49	104.24	-420.25
Offroad	425.04	304.41	-120.63

Total	8,136.98	7,416.24	-720.74

Table 4. 2002 and 2008 Emissions Totals for the St. Louis 1997 annual $PM_{2.5}$ NAAQS (tons/year)

Sector	2008 Attainment	2030 Maintenance	Difference
Point	16,608.41	14,519.27	-2,089.14
Area	1,638.36	1,766.40	128.04
Onroad	17,965.82	2,984.38	-14,981.44
Offroad	8,509.49	9,222.09	712.60
Total	44,722.08	28,492.14	-16,229.94

Table 5. St. Louis area SO_2 Emission Inventories (tons/year)

Sector	2008 Attainment	2030 Maintenance	Difference
Point	49,895.15	47,652.59	-2,242.56
Area	246.64	275.09	28.45
Onroad	60.26	51.76	-8.50
Offroad	355.25	432.68	77.43
Total	50,577.33	48,412.12	-2,165.21

Table 6. St. Louis area VOC Emission Inventories(tons/year)

Sector	2008 Attainment	2030 Maintenance	Difference
Point	4,270.41	6,071.31	1,800.90
Area	7,796.35	9,676.73	1,880.38
Onroad	6,741.77	1,402.96	-5,338.81
Offroad	2,994.51	1,605.73	-1,388.78
Total	21,753.04	18,756.74	-2,996.30

Table 7. St. Louis area NH_3 Emission Inventories (tons/year)

Sector	2008 Attainment	2030 Maintenance	Difference 2008-2030
Point	208.31	270.38	62.07
Area	3,354.13	3,381.35	27.22
Onroad	304.71	187.59	-117.12
Offroad	6.04	8.94	2.9
Total	3,873.19	3,848.27	-24.92

As discussed in the section below, the state's maintenance plan submission expressly documents that the area's emission

levels will remain below the attainment year emission levels through 2030.

d. Monitoring Network

Illinois and Missouri each currently operate five monitors for purposes of determining attainment with the annual $PM_{2.5}$ standard for the St. Louis area. EPA has determined that the monitors maintained by both Illinois and Missouri constitute an adequate monitoring network.

e. Verification of Continued Attainment

Illinois remains obligated to continue to quality-assure monitoring data and enter all data into the AQS in accordance with Federal guidelines in accordance with 40 CFR part 58. Illinois will use these data, supplemented with additional information as necessary, to assure that the area continues to attain the standard. Illinois 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. These actions will help to verify continued attainment in accordance with 40 CFR part 58.

f. Contingency Plan

The contingency plan provisions are designed to promptly correct or prevent a violation of the NAAQS that might occur

after redesignation of an area to attainment. Section 175A of the CAA requires that a maintenance plan include such contingency measures as EPA deems necessary to assure that the state will promptly correct a violation of the NAAQS that occurs after redesignation. The maintenance plan should identify the contingency measures to be adopted, a schedule and procedure for adoption and implementation of the contingency measures, and a time limit for action by the state. The state should also identify specific indicators to be used to determine when the contingency measures need to be adopted and implemented. The maintenance plan must include a requirement that the state will implement all pollution control measures that were contained in the SIP before redesignation of the area to attainment. *See* section 175A(d) of the CAA.

The Illinois contingency plan defines Level I and Level II contingency measure triggers. The Level I triggers are activated when the $PM_{2.5}$ average of the weighted annual mean of 15.0 $\mu g/m^3$ or greater occurs in a single calendar year within the maintenance area or the total maintenance area emissions increase 5% or more above the 2008 inventory. A Level I trigger response will consist of a study, to be completed within nine months, to determine whether the $PM_{2.5}$ value indicates a trend toward higher $PM_{2.5}$ values or whether emissions appear to be

increasing. The Level II trigger will be prompted whenever a violation of the standard (three-year average of the weighted annual means of greater than 15.0 µg/m^3). If the Level II trigger occurs, Illinois will conduct an analysis to determine control measures to address the violation within six months. Level II trigger measures that can be implemented in a short time will be selected to be in place within 18 months from the close of the calendar year that prompted the action level. Illinois will also consider the timing of an action level trigger and determine if additional, significant new regulations not currently included as part of the maintenance provisions will be implemented in a timely manner and will constitute our response.

Because it is not possible to determine what control measures will be appropriate at an unspecified time in the future, Illinois provides that additional facility-specific controls requiring reductions in NO_x, $PM_{2.5}$, SO_2 and/or VOC emissions and broader geographic applicability of existing measures are options for implementation.

As required by section 175A(b) of the CAA, Illinois commits to submit to EPA an updated $PM_{2.5}$ maintenance plan eight years after redesignation of the St. Louis area to cover an additional ten year period beyond the initial ten year maintenance period.

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

Illinois further commits to conduct ongoing review of its data, and if monitored concentrations or emissions are trending upward, Illinois commits to take appropriate steps to avoid a violation if possible. Illinois commits to continue implementing SIP requirements upon and after redesignation.

EPA finds that Illinois' contingency measures, as well as the commitment to continue implementing any SIP requirements, satisfy the pertinent requirements of section 175A.

5. Motor Vehicle Emissions Budget (MVEBs) for $PM_{2.5}$ and NO_X, and Safety Margin for the St. Louis Area

The maintenance plan submitted by Illinois for the St. Louis area contains new primary $PM_{2.5}$, NO_X, and VOC MVEBs for the area for the years 2008 and 2030. MVEBs are the projected levels of controlled emissions from the transportation sector (mobile sources) that are estimated in the SIP to provide for maintenance of the ozone standard. The MVEBs were calculated using MOVES2014a. Table 8 details Illinois' 2008 and 2030 MVEBs for the St. Louis area.

Table 8. MVEBs for the St. Louis 1997 annual $PM_{2.5}$ Maintenance Plan (tons/year)

Pollutant	2008 MVEB	2030 MVEB

$PM_{2.5}$	524.49	208.29
NO_x	17,965.82	5,980.67
VOC	6,741.77	2,470.72

Illinois included "safety margins" as provided for in 40 CFR 93.124(a). A "safety margin", as defined in the transportation conformity rule (40 CFR part 93, subpart A), is the amount by which the total projected emissions from all sources of a given pollutant are less than the total emissions that would satisfy the applicable requirement for reasonable further progress, attainment, or maintenance. The attainment level of $PM_{2.5}$, NO_X, and VOC emissions for the St. Louis area is shown in tables 3, 4, and 6. Table 9 shows the remaining safety margin for the St. Louis area following the allocation to the $PM_{2.5}$, NO_X, and VOC MVEBs.

Table 9. 2030 Safety Margin for St. Louis 2012 annual $PM_{2.5}$ Maintenance Plan (tons/year)

Pollutant	**2030 Safety margin**	**Safety margin Allocated to 2030 MVEB**	**Safety Margin Remaining**
$PM_{2.5}$	720.74	104.05	616.69
NO_x	16,299.94	2,996.29	13,233.65
VOC	2,996.3	1,067.76	1,928.54

The 2008 actual and 2030 projected emissions, even with this allocation, will be below the 2008 attainment year emissions for $PM_{2.5}$, NO_X, and VOC. For this reason, EPA finds that the allocation of the safety margin to the MVEBs for the

St. Louis area meet the requirements of the transportation conformity regulations at 40 CFR part 93,and are approvable. Once allocated to mobile sources, these portions of the safety margins will not be available for use by other sources.

6. Comprehensive Emissions Inventory for the St. Louis Area

As discussed above, section 172(c)(3) of the CAA requires areas to submit a comprehensive emissions inventory including direct PM and all four precursors (SO_2, NO_X, VOCs, and ammonia). Actual emissions contained in the submittal cover the general source categories of point sources, area sources, onroad mobile sources, and nonroad mobile sources for the base attainment year of 2008.

For this reason, EPA proposes to approve the emissions inventory as complete and accurate, and meets the requirement of CAA section 172(c)(3).

V. What are the effects of EPA's actions?

EPA is proposing to change the official designation of the St. Louis area for the 1997 annual $PM_{2.5}$ NAAQS, found at 40 CFR part 81, from nonattainment to attainment. EPA is proposing to determine that the St. Louis area has attained the 1997 annual $PM_{2.5}$ standard, based on the most recent three years of certified air quality data. This action also proposes to approve the maintenance plan for the 1997 annual $PM_{2.5}$ NAAQS as revisions to

the Illinois SIP for the St. Louis area. Also, the EPA proposes to approve the 2008 emissions inventory for the St. Louis area as well as the 2008 and 2030 MVEBs for the St. Louis area. These MVEBs will be used in future transportation conformity analyses for the area.

In addition, if finalized, according to the Fine Particulate Matter National Ambient Air Quality Standards: State Implementation Plan Requirements (81 FR 58009, August 24, 2016), "for an area that is redesignated to attainment after the effective date of this final rule, the 1997 primary annual $PM_{2.5}$ NAAQS will be revoked in such an area on the effective date of its redesignation to attainment for that NAAQS. After revocation of the 1997 primary annual $PM_{2.5}$ NAAQS in a given area, the designation for that standard is no longer in effect."

VI. Statutory and Executive Order Reviews.

Under the CAA, redesignation of an area to attainment and the accompanying approval of the maintenance plan under CAA 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 required by state law. A redesignation to attainment does not in and of itself impose any new requirements, but rather results in the application 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 Act 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 these reasons, these actions:

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Is not an Executive Order 13771 (82 FR 9339, February 2, 2017) regulatory action because SIP approvals are exempted under Executive Order 12866;
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);

- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those

areas of Indian country, the rule does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

List of Subjects

40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Particulate matter, Sulfur oxides.

40 CFR Part 81

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

Dated: March 11, 2019.

Cheryl L. Newton,
Acting Regional Administrator, Region 5.

[FR Doc. 2019-05285 Filed: 3/20/2019 8:45 am; Publication Date: 3/21/2019]