



6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 52 and 81

[EPA-R05-OAR-2019-0330; FRL-10005-63-Region 5]

**Air Plan Approval; Illinois; Redesignation of the Lemont and
Pekin Sulfur Dioxide Nonattainment Areas**

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: In accordance with the Clean Air Act (CAA), the Environmental Protection Agency (EPA) is proposing to redesignate the Lemont and Pekin sulfur dioxide (SO₂) nonattainment areas from nonattainment to attainment. EPA is also proposing to approve Illinois' maintenance plans for these two areas. Emissions of SO₂ in the areas have been reduced, and the air quality in the two areas is currently better than the SO₂ national ambient air quality standard (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-2019-0330 at <http://www.regulations.gov>, or via email to Blakley.pamela@epa.gov. For comments submitted at [Regulations.gov](http://www.regulations.gov), follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed

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

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

- I. Background and redesignation requirements
- II. Determination of attainment
 - a. Lemont
 - b. Pekin
- III. Approval of Illinois' SIPs
- IV. Permanent and enforceable emission reductions
- V. Maintenance plans
- VI. Requirements for the areas under section 110 and part D
- VII. What action is EPA taking?
- VIII. Statutory and Executive Order reviews.

I. Background and redesignation requirements

In 2010, EPA established a revised primary SO₂ NAAQS of 75 parts per billion (ppb) (75 FR 35520, June 22, 2010). EPA designated the Lemont and Pekin areas as nonattainment for the 2010 SO₂ NAAQS on August 5, 2013 (78 FR 47191) based upon air quality monitoring data for calendar years 2009-2011. The Lemont nonattainment area is comprised of Lemont Township in Cook County and Lockport and DuPage Townships in Will County, Illinois. The Pekin nonattainment area is comprised of Hollis Township in Peoria County and Cincinnati and Pekin Townships in Tazewell County, Illinois.

On March 2, 2016, Illinois submitted nonattainment State Implementation Plans (SIPs) to provide for attainment of the NAAQS in the Lemont and Pekin nonattainment areas by the SO₂

attainment date of October 4, 2018. The plans were developed to meet the additional requirements of sections 172(c) and 191-192 of the CAA. Illinois supplemented the plans on August 8, 2016 and May 4, 2017, and EPA approved them on February 1, 2018 (83 FR 4591). Illinois submitted its request to redesignate the Lemont and Pekin areas on May 24, 2019.

Under CAA section 107(d)(3)(E), there are five criteria which must be met before a nonattainment area may be redesignated to attainment:

1. EPA has determined that the relevant NAAQS has been attained in the area.
2. The applicable implementation plan has been fully approved by EPA under section 110(k) of the CAA.
3. EPA has determined that improvement in air quality is due to permanent and enforceable reductions in emissions resulting from the SIP, applicable Federal regulations, and other permanent and enforceable reductions.
4. EPA has fully approved a maintenance plan, including a contingency plan, for the area under section 175A of the CAA.
5. The State has met all applicable requirements for the area under section 110 and part D of the CAA.

II. Determination of attainment

The first requirement for redesignation is to demonstrate that the NAAQS has been attained in the area. Under EPA

regulations at 40 CFR part 50, the SO₂ NAAQS is met at an ambient air quality monitoring site when the three-year average of the annual 99th percentile daily maximum one-hour average concentration values for the site is less than or equal to 75 ppb, as determined in accordance with appendix T of 40 CFR part 50. As stated in EPA's April 2014 "Guidance for 1-Hour SO₂ Nonattainment Area SIP Submissions" (April 2014 Guidance), there are two components needed to support an attainment determination for SO₂: an initial review of representative air quality monitoring data, then a further analysis, which generally requires air quality modeling, to demonstrate that the entire area is attaining the applicable NAAQS, based on current actual emissions or the fully implemented control strategy. Illinois has addressed both components for each nonattainment area.

a. Lemont

EPA has reviewed the ambient air monitoring data for the Lemont nonattainment area. There is one SO₂ monitoring site in Cook County for the Lemont area (monitor 17-031-1601 in Lemont Township). The data from this monitor have been certified and recorded in EPA's Air Quality System database. Illinois has committed to continue monitoring for SO₂ at this location. EPA's review addresses air quality data collected through 2018, which includes the most recent three years of complete, quality-assured data.

Table 1 shows the 99th percentile results and three-year average design values for the Lemont nonattainment area monitors for 2012-2018. Lemont has been in attainment of the 2010 SO₂ NAAQS of 75 ppb since the 2012-2014 three-year design value period, when the design value was 66 ppb. Currently, the design value at the Lemont monitor has dropped to 8 ppb (2016-2018). Therefore, Illinois has demonstrated that the Lemont area's SO₂ monitor shows attainment of the 2010 SO₂ NAAQS. Preliminary monitoring data for 2019 indicate that the area is continuing to attain the 2010 SO₂ NAAQS.

Table 1. Lemont Monitoring data, 2012-2018.

Location/Site ID	Year and 99 th percentile value (ppb)						
	2012	2013	2014	2015	2016	2017	2018
Lemont 17-031-1601	108	73	16	20	12	5	6
	Three-year design value (ppb)						
			2012- 2014	2013- 2015	2014- 2016	2015- 2017	2016- 2018
		66	36	16	13	8	

Illinois also prepared a dispersion modeling analysis demonstrating that the Lemont area will attain the SO₂ NAAQS under the area's control strategy. Illinois provided this analysis in its March 2, 2016 nonattainment SIP submittal. Illinois' analysis showed that revised SO₂ emission limits at five SO₂ sources in the Lemont nonattainment area, in addition to statewide requirements for lower sulfur fuel oil, will provide for attainment. Illinois has confirmed that the modeled facilities are currently in full compliance with their emission

limits. Current actual emissions at these facilities are therefore at or below the levels Illinois used in its modeling analysis. The modeling analysis was discussed in detail in the October 5, 2017 (82 FR 46434) notice of proposed rulemaking for the Lemont and Pekin SO₂ nonattainment SIPs. The modeling shows that compliance with the emission limits in Illinois' plan, even at maximum allowable emissions, yields attainment in the entire Lemont area. Further, since the sources in the Lemont area are complying with these limits, this modeling supports EPA's proposed conclusion that the Lemont area is attaining the SO₂ NAAQS.

b. Pekin

EPA has reviewed the ambient air monitoring data for the Pekin nonattainment area. There is one SO₂ monitoring site in Tazewell County for the Pekin area (17-179-0004, in Pekin Township). The initial SO₂ data gathered between August 31, 2016 and August 16, 2018 was invalidated after the monitor failed an audit in late 2018. Illinois addressed EPA's concerns with the monitor by replacing faulty equipment at the site on August 16, 2018. EPA is satisfied that Illinois is meeting the requirements of 40 CFR part 58, appendix A for this monitor, and that the SO₂ data gathered at this monitor after August 16, 2018 has been valid.

Because portions of the data from 2016 to 2018 were

invalidated, there is no valid three-year design value for SO₂ at Pekin from the 2014-2016 time period to the present. The last valid three-year design value which was calculated using data gathered before the audit and data invalidation for Pekin was 167 ppb (2013-2015), which does not meet the 2010 SO₂ NAAQS. The 2013-2015 design value does not provide useful information on the current state of SO₂ air quality in Pekin, because it represents the local air quality before Illinois' revised SO₂ nonattainment SIP limits for Pekin came into effect. SO₂ emissions in the area decreased after 2015 due to the revised SIP emission limits at three facilities: the Midwest Generation Powerton Station, the Illinois Power Holdings E.D. Edwards Power Plant, and Aventine Renewable Energy Resources, now Pacific Ethanol Pekin, Inc. Since January 1, 2017, the Pekin facilities have been in full compliance with their new emission limits. Air quality monitoring data measured from late 2018 to the present, confirmed to be valid, now indicates that emissions have sharply declined since 2015 and remain well below the 2010 SO₂ NAAQS for 2019. The 99th percentile one-hour maximum value for the valid portion of 2018 is 12 ppb. The preliminary data for 2019 indicates a 99th percentile one-hour maximum value of 17 ppb. The average of preliminary valid data for 2018-2019 is 15 ppb. While the available valid data from August 2018 to the present is not enough to calculate a valid three-year design

value to confirm that the NAAQS are met, the available valid data indicates that ambient air concentrations of SO₂ at Pekin have substantially decreased to a level below the 2010 SO₂ NAAQS. This supports EPA's proposed conclusion that the Pekin area is attaining the standard and is eligible for redesignation.

Because the Pekin monitor cannot be used to fully demonstrate attainment of the 2010 SO₂ NAAQS until three years of valid data have been gathered, Illinois' redesignation request for the Pekin nonattainment area relied upon the demonstration of attainment based on air dispersion modeling which Illinois submitted to EPA as part of its March 2016 nonattainment SIP submittal. As noted in EPA's April 2014 Guidance, for a short-term (*i.e.*, 1-hour) standard, the EPA believes that dispersion modeling, using allowable emissions and addressing stationary sources in the affected area (and in some cases, those sources located outside the nonattainment area which may affect attainment in the area) is technically appropriate, efficient and effective in demonstrating attainment in nonattainment areas, because it takes into consideration combinations of meteorological and emission source operating conditions that can contribute to peak ground-level concentrations of SO₂.

Illinois' modeled demonstration of attainment for the Pekin area was discussed in detail in EPA's proposed approval of the Pekin SO₂ nonattainment plan. See 82 FR 46438, October 5, 2017.

Illinois' analysis showed that revised SO₂ emission limits at three facilities in the Pekin nonattainment area, in addition to statewide requirements for lower sulfur fuel oil, will provide for attainment. The modeled demonstration included the three Pekin sources at their revised SO₂ emission limits and emissions from all other major SO₂ sources within 50 kilometers of the Pekin nonattainment area, modeled at their maximum allowable SO₂ emission rates. Illinois' analysis demonstrated that the Pekin area will attain and maintain the 2010 SO₂ NAAQS at the maximum allowable emission level. The Pekin sources were required to comply with their revised SIP emission limits by January 1, 2017. Illinois has confirmed that they are in full compliance with their emission limits. Current actual emissions at these facilities are therefore at or below the emission rates which Illinois used in its modeling analysis. Since the Pekin modeled attainment demonstration shows that compliance with the emission limits in Illinois' plan even at maximum allowable emissions yields attainment in the entire Pekin nonattainment area, and since the sources are complying with these limits, Illinois' modeled attainment demonstration supports EPA's proposed conclusion that the Pekin area is currently attaining and will continue to attain the SO₂ NAAQS.

EPA proposes to conclude that, considered together, the modeling and monitoring data currently available for the Pekin

area are adequate to address the redesignation requirement to demonstrate attainment of the 2010 SO₂ NAAQS, and that both the results of the modeled attainment demonstration, based on current enforceable emission limits, and the currently available valid monitoring data for Pekin indicate that the Pekin area is attaining the 2010 SO₂ NAAQS.

III. Approval of Illinois' SIPs

On February 1, 2018 (83 FR 4591), EPA approved Illinois' nonattainment SIPs for the Lemont and Pekin nonattainment areas, including emission limits which were demonstrated to provide for attainment in both areas. In that action, EPA found that Illinois had satisfied the requirements for providing for attainment of the SO₂ NAAQS in the Lemont and Pekin nonattainment area. Illinois has adopted SO₂ SIP regulations requiring emission reductions for sources in the Lemont and Pekin nonattainment areas. Illinois maintains an active enforcement program to ensure ongoing compliance in both areas. Illinois' new source review/prevention of significant deterioration program will address emissions from new sources in both areas. Therefore, EPA proposes to conclude that this redesignation criterion has been met by Illinois for both areas.

IV. Permanent and enforceable emission reductions

For an area to be redesignated, the state must be able to reasonably attribute the improvement in air quality to emission

reductions which are permanent and enforceable. In the Lemont nonattainment area, Illinois applied revised emission limits to Owens Corning Roofing & Asphalt in Summit, Ingredion Bedford Park in Bedford Park, Oxbow Midwest Calcining in Lemont, the Midwest Generation Joliet Generating Station in Joliet, and the Midwest Generation Will County Generating Station in Romeoville. Total facility SO₂ emissions in the Lemont nonattainment area have decreased by over 5,000 tons per year (tpy). In the Pekin nonattainment area, Illinois applied revised emission limits to the Midwest Generation Powerton Station in Pekin, the Illinois Power Holdings E.D. Edwards Power Plant in Bartonville, and the Aventine Renewable Energy Resources ethanol facility, now Pacific Ethanol Pekin, Inc., located in Pekin. Total facility SO₂ emissions in the Pekin nonattainment area were reduced by over 21,000 tpy. These emission reductions have been made permanent and enforceable by the limits that Illinois adopted into Title 35, part 214 of the Illinois Administrative Code, which EPA approved into the SIP. See 83 FR 4591, February 1, 2018. EPA has approved Illinois' SO₂ SIP rules, which makes them federally enforceable.

Recent monitoring data indicate that ambient SO₂ levels have improved significantly in the Lemont and Pekin nonattainment areas. At the time that the areas were designated nonattainment, the 2009-2011 monitored design value in the

Lemont area was 98 ppb, and the 2009-2011 monitored design value at the Pekin monitor was 211 ppb. After the new SIP emission limits came into effect in 2017, the monitored SO₂ design value for Lemont dropped to 8 ppb (2016-2018), which is well below the SO₂ NAAQS of 75 ppb. The monitored SO₂ values at the Pekin monitor also dropped after the new SIP emission limits came into effect, to less than 20 ppb in 2018 and 2019 (based on estimated 99th percentile annual maximum 1-hour values from valid data; see discussion in III.b. above). EPA proposes to find that the improvement in air quality in the Lemont and Pekin nonattainment areas can be attributed to the permanent and enforceable emission reductions in Illinois' approved nonattainment SIPs.

V. Maintenance plans

CAA section 175A sets forth the 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 the nonattainment area is redesignated to attainment. Eight years after the redesignation, the state must submit a revised maintenance plan demonstrating that attainment will continue to be maintained for the ten years following the initial ten-year period. To address the possibility of future NAAQS violations, the maintenance plan must contain contingency measures as EPA deems necessary to assure prompt correction of

any future one-hour violations. Specifically, the maintenance plan should address five requirements: the attainment emissions inventory, maintenance demonstration, monitoring, verification of continued attainment, and a contingency plan.

Illinois' May 24, 2019 redesignation request contains its maintenance plans for Lemont and Pekin, which Illinois has committed to review and update eight years after redesignation.

Illinois projected SO₂ emissions for an interim future year, 2023, and for the maintenance year, 2030, for both areas. Illinois projected that total SO₂ emissions in the Lemont nonattainment area in the maintenance year would drop from 10,975 tpy in 2014 to 824 tpy in 2030, considering both the SIP reductions and projected future growth. Illinois projected that total SO₂ emissions in the Pekin nonattainment area in the maintenance year would drop from 32,331 tpy in 2014 to 10,588 tpy in 2030, considering both the SIP reductions and projected future growth.

Illinois' maintenance demonstration consists of the nonattainment SIP air quality analyses which demonstrated that the emission reductions in effect in the Lemont and Pekin nonattainment areas will provide for attainment of the SO₂ NAAQS. The permanent and enforceable SO₂ emission limits in Illinois' SO₂ SIP ensure that the SO₂ emissions in the Lemont and Pekin areas will be equal to or less than the emission levels which

were evaluated in the air quality analyses, and Illinois' enforcement program will ensure that the Lemont and Pekin SO₂ emission limits are met continuously.

For continued verification, Illinois has committed to track the SO₂ emissions and compliance status of the facilities in the Lemont and Pekin areas. The state commits to update its emissions inventories as required by EPA. Illinois has also committed to continue ambient SO₂ monitoring at Lemont and Pekin to verify attainment of the SO₂ NAAQS.

The requirement to submit contingency measures in accordance with CAA section 172(c)(9) can be adequately addressed for SO₂ by the operation of a comprehensive enforcement program which can quickly identify and address sources that might be causing exceedances of the NAAQS level. Illinois' enforcement program is active and capable of prompt action to remedy compliance issues or NAAQS exceedances. Illinois' redesignation request discusses the state's plan to respond to increased SO₂ emissions or ambient monitored concentrations or new exceedances of the SO₂ NAAQS in the maintenance areas. Illinois commits to evaluate air quality and emission trends, identify areas of concern, and take action as needed, particularly if a violation is recorded, or an annual average 99th percentile maximum daily one-hour SO₂ concentration of 75 ppb or greater occurs, or if total SO₂ emissions increase more

than five percent above the attainment year inventory. Illinois has the authority to expeditiously adopt, implement and enforce any subsequent emissions control measures deemed necessary to correct any future SO₂ violations. Illinois commits to adopt and implement such corrective actions as necessary. The public will have the opportunity to participate in the contingency measure implementation process.

Based on the above, EPA proposes to find that Illinois has addressed the contingency measure requirement for both areas. Further, EPA proposes to find that Illinois' maintenance plans adequately address the five basic components necessary to maintain the SO₂ NAAQS in the Lemont and Pekin nonattainment areas.

VI. Requirements for the areas under section 110 and part D

Illinois has submitted information demonstrating that it meets all requirements of the CAA applicable to the Lemont and Pekin nonattainment areas. EPA approved Illinois' infrastructure SIP for SO₂ on October 16, 2014 (79 FR 62042). This infrastructure SIP approval confirms that Illinois's SIP meets the requirements of CAA section 110(a)(1) and 110(a)(2) to contain the basic program elements, such as an active enforcement program and permitting program. The program elements addressed in the infrastructure SIP will be implemented and enforced in the Lemont and Pekin areas.

Section 191 of the CAA requires Illinois to submit part D SIPs for the Lemont and Pekin nonattainment areas by April 4, 2015. As discussed earlier, Illinois submitted its part D SIPs for the two areas on March 2, 2016 and supplemented them on August 8, 2016 and May 4, 2017. The SIPs each included a demonstration of attainment and revised SO₂ emission limits. EPA approved the Lemont and Pekin SIPs on February 1, 2018 (83 FR 4591). In its rulemaking, EPA determined that Illinois had satisfied the various requirements under CAA section 110 and part D for the Lemont and Pekin nonattainment areas, such as the requirements for an attainment inventory of the SO₂ emissions from sources in each nonattainment area (required under CAA section 173(c)(3)), reasonably available control measures (required under CAA section 173(c)(1)), and reasonable further progress (required under CAA section 173(c)(2)).

Section 176(c) of the CAA requires states to establish criteria and procedures to ensure that federally supported or funded projects conform to the air quality planning goals in the applicable SIP. The requirement to determine conformity applies to transportation plans, programs, and projects that are developed, funded, or approved under title 23 of the United States Code and the Federal Transit Act (transportation conformity) as well as to all other federally supported or funded projects (general conformity). State transportation

conformity SIP revisions must be consistent with Federal conformity regulations relating to consultation, enforcement, and enforceability that EPA promulgated pursuant to its authority under the CAA. 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. Illinois has met the applicable conformity requirements under CAA section 176.

Based on the above, EPA is proposing to find that Illinois has satisfied all requirements applicable to the Lemont and Pekin areas under section 110 and part D of title I of the CAA.

VII. What action is EPA taking?

In accordance with Illinois' May 24, 2019 request, EPA is proposing to redesignate the Lemont and Pekin SO₂ areas from nonattainment to attainment of the SO₂ NAAQS. Illinois has demonstrated, among other things, that these areas are attaining the SO₂ NAAQS, and that the improvement in air quality is due to permanent and enforceable SO₂ emission reductions in the nonattainment area. EPA is also proposing to approve Illinois' maintenance plans, which are designed to ensure that the Lemont and Pekin nonattainment areas will continue to maintain the SO₂ NAAQS.

VIII. 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, this action:

- 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), because redesignation is an action that affects the status of a geographical area and does not impose any new regulatory requirements on tribes, impact any existing sources of air pollution on tribal lands, nor impair the maintenance of ozone national ambient air quality standards in tribal lands.

List of Subjects

40 CFR Part 52

Environmental protection, Air pollution control,
Incorporation by reference, Intergovernmental relations,
Reporting and recordkeeping requirements, Sulfur oxides.

40 CFR Part 81

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

Dated: February 10, 2020.

Kurt A. Thiede,
Regional Administrator.

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