6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 52 and 81

[EPA-R04-OAR-2018-0510; FRL-9999-43-Region 4]

Air Plan Approval and Designation of Areas; FL; Source-Specific SO₂ Permit Limits & Redesignation of Hillsborough-Polk 2010 1-Hr SO₂ Nonattainment Area to Attainment & Mulberry Unclassifiable Area to Attainment/Unclassifiable

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve state implementation plan (SIP) revisions and two redesignation requests provided by the State of Florida, through the Florida Department of Environmental Protection (FDEP), related to the 2010 1-hour sulfur dioxide (SO₂) national ambient air quality standard (NAAQS or standard). Specifically, EPA is proposing to approve a December 1, 2017, SIP revision (as supplemented through a February 15, 2019 draft SIP revision discussed below) that includes SO₂ multi-unit permit limits and associated compliance and monitoring parameters for Mosaic Fertilizer LLC's New Wales facility (Mosaic New Wales) and Bartow facility (Mosaic Bartow), both located in Polk County, Florida. The December 1, 2017, SIP revision also includes a modeling analysis to demonstrate that the Hillsborough-Polk SO₂ nonattainment area (hereinafter referred to as the "Hillsborough-Polk Area") attains the SO₂ NAAQS with these permit limits. EPA is also proposing to approve, through parallel processing, a draft February 15, 2019, request to redesignate the Hillsborough-Polk Area to attainment for the 1-hour SO₂ NAAQS and associated

SIP revision containing the State's plan for maintaining attainment of the standard in the Area. As mentioned above, a draft February 15, 2019, SIP revision also revises the modeling analysis in the 2017 SIP revision. Additionally, the draft February 15, 2019, SIP revisions contain a base-year emissions inventory for the Area and certify that the Area meets nonattainment new source review (NNSR) requirements. EPA is proposing to approve the draft February 15, 2019, SIP revisions through parallel processing. In addition, EPA is proposing to approve, through parallel processing, a draft February 15, 2019, request to redesignate the Mulberry Unclassifiable Area (hereinafter referred to as the "Mulberry Area") to attainment/unclassifiable for the 2010 1-hour SO₂ 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-R04-OAR-2018-0510 at http://www.regulations.gov. Follow the online instructions for submitting comments.

Once submitted, comments cannot be edited or removed from Regulations.gov. 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, 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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I. What is Parallel Processing?

Parallel processing refers to a process that utilizes concurrent state and Federal proposed rulemaking actions. Generally, the state submits a copy of the proposed regulation or other revisions to EPA before conducting its public hearing and completing its public comment process under state law. EPA reviews this proposed state action and prepares a notice of proposed rulemaking under Federal law. In some cases, EPA's notice of proposed rulemaking is published in the Federal Register during the same time frame that the state is holding its public hearing and conducting its public comment process. The state and EPA then provide for concurrent public comment periods on both the state action and Federal action. If, after completing its public comment process and after EPA's public comment process has run, the state changes its final submittal from the proposed submittal, EPA evaluates those changes and decides whether to publish another notice of proposed rulemaking in light of those changes or to proceed to taking final action on its proposed action and describe the state's changes in its final rulemaking action. Any final rulemaking action by EPA will occur only after the final submittal has been adopted by the state and formally provided to EPA.

In the instant case, however, EPA's and Florida's processes have not been perfectly concurrent. The State submitted its first SIP revision for the Area to EPA in December 2017. Then, on February 15, 2019, Florida submitted proposed SIP revisions related to the 2010 1-hour SO₂ standard for the Hillsborough-Polk Area, including an amendment to the December 2017, SIP revision, along with proposed requests to redesignate the Hillsborough-Polk and Mulberry Areas. These submittals were noticed for public comment by the State on February 15, 2019, and have not yet been submitted in final form. The State's public comment period closed on

March 18, 2019. The State only received comments from EPA which are provided in the docket for this proposed rulemaking. Florida requested that EPA parallel process these proposed submittals while the State waits for the multi-unit permit limits to become state-enforceable on August 31, 2019. The State's intention is to submit its final SIP revisions and redesignation requests in early September 2019. After Florida submits these formal SIP revisions and requests (including responses to EPA's comments), EPA will evaluate the submittals. If the State changes the formal submittals from the proposed submittals, EPA will evaluate those changes for significance. If EPA finds any such changes to be significant, then the Agency intends to determine whether to re-propose the actions based upon the revised submissions or to proceed to take final action on the submittals as changed by the State. Although EPA was unable to have a concurrent public comment process with the State, Florida's request for parallel processing allows EPA to begin to take action on the State's proposed submittals in advance of formal, final submissions.

II. What are the Actions EPA is Proposing to Take?

EPA is proposing to take the following seven separate but related actions: (1) approve and incorporate the SO₂ permit limits and associated compliance and monitoring parameters for Mosaic New Wales and Mosaic Bartow into the SIP; (2) approve the base-year emissions inventory pursuant to Clean Air Act (CAA or Act) section 172(c)(3) for the Hillsborough-Polk Area and incorporate it into the SIP; (3) concur with Florida's certification pursuant to CAA section 172(c)(5) that its existing NNSR requirements apply to the Hillsborough-Polk Area; (4) determine that the air quality modeling submitted by the State demonstrates that the Hillsborough-Polk Area will have attained the 2010 SO₂ NAAQS as a result of compliance with

the multi-unit permit limits at Mosaic New Wales and Mosaic Bartow; (5) approve Florida's plan for maintaining the 2010 1-hour SO₂ NAAQS in the Hillsborough-Polk Area through 2032 and incorporate it into the SIP pursuant to section 175A of the CAA; (6) redesignate the Hillsborough-Polk Area to attainment for the 2010 1-hour SO₂ NAAQS; and (7) redesignate the Mulberry Area to attainment/unclassifiable for the 2010 1-hour SO₂ NAAQS based on air quality modeling. Because attainment of the SO₂ NAAQS is dependent on making the multi-unit permit limits and associated compliance and monitoring parameters for Mosaic New Wales and Mosaic Bartow permanent and enforceable measures, EPA cannot take final action on items 4-7, above, unless it finalizes its proposal to approve and incorporate these limits and parameters into the SIP.¹

The Hillsborough-Polk Area is comprised of the portion of Hillsborough and Polk Counties encompassed by the polygon with the vertices using Universal Transverse Mercator (UTM) coordinates in UTM zone 17 with datum North American Datum 83 (NAD83) as follows: 390,500 E, 3,073,500 N; 390,500 E, 3,083,500 N; 400,500 E, 3,083,500 N; 400,500 E, 3,073,500 N. The Hillsborough-Polk Area contains one major point source for SO₂ emissions – Mosaic New Wales.

The Mulberry Area is that portion of Hillsborough and Polk Counties encompassed by the polygon with the vertices using UTM coordinates in UTM zone 17 with datum NAD83 starting with the Northwest Corner and proceeding to the Northeast as follows: 390,500 E,

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¹ FDEP has committed to submit the redesignation requests and SIP revisions soon after the SO₂ permit limits become state-enforceable on August 31, 2019. As described above, EPA will not take final action on its proposals associated with the February 15, 2019, drafts until after these redesignation requests and SIP revisions are formally submitted to EPA in early September 2019. As a part of the final SIP submittals, Florida will provide emissions data to show compliance with the SO₂ permit limits that are the subject of this proposed rulemaking.

3,083,500 N; 410,700 E, 3,091,600 N; 412,900 E, 3,089,800 N; 412,900 E, 3,084,600 N; 400,500 E, 3,073,50 N; 400,500 E, 3,083,500 N. The Mulberry Area is directly adjacent to the Hillsborough-Polk Area and contains one major point source for SO₂ emissions – Mosaic Bartow. In addition, there are two major SO₂ point sources located within 10 kilometers (km) of the Hillsborough-Polk Area and the Mulberry Area – Mosaic's South Pierce facility and Tampa Electric Company's (TECO's) Polk Power Station.

III. Background

On June 2, 2010, EPA revised the primary SO₂ NAAQS, establishing a new 1-hour SO₂ standard of 75 parts per billion (ppb). *See* 75 FR 35520 (June 22, 2010). Under EPA's regulations at 40 CFR part 50, the 2010 1-hour SO₂ NAAQS is met at a monitoring site when the 3-year average of the annual 99th percentile of daily maximum 1-hour average concentrations is less than or equal to 75 ppb (based on the rounding convention in 40 CFR part 50, appendix T). *See* 40 CFR 50.17. Ambient air quality monitoring data for the 3-year period must meet a data completeness requirement. A year meets data completeness requirements when all four quarters are complete, and a quarter is complete when at least 75 percent of the sampling days for each quarter have complete data. A sampling day has complete data if 75 percent of the hourly concentration values, including state-flagged data affected by exceptional events which have been approved for exclusion by the Administrator, are reported.² The 2010 1-hour SO₂ standard is violated at an ambient air quality monitoring site (or in the case of dispersion modeling, at an ambient air quality receptor location) when the 3-year average of the annual 99th percentile of the

² See 40 CFR part 50, appendix T, section 3(b).

daily maximum 1-hour average concentrations exceeds 75 ppb, as determined in accordance with Appendix T of 40 CFR part 50.

Upon promulgation of a new or revised NAAQS, the CAA requires EPA to designate as nonattainment any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the NAAQS. Effective on April 9, 2018, EPA designated the Hillsborough-Polk Area as nonattainment based on air dispersion modeling and designated the Mulberry Area as unclassifiable for the 2010 1-hour SO₂ NAAQS.³ See 83 FR 1098 (January 9, 2018). Under the CAA, SO₂ nonattainment areas must attain the NAAQS as expeditiously as practicable but not later than five years after the April 9, 2018, effective date of the designation. See CAA section 192(a). Therefore, the Hillsborough-Polk Area's applicable attainment date is no later than April 9, 2023.

EPA's nonattainment designation for the Hillsborough-Polk Area triggered an obligation for Florida to develop a nonattainment area SIP revision addressing certain requirements under CAA title I, part D, subpart 1 (hereinafter "Subpart 1"), and to submit that SIP revision to EPA in accordance with the deadlines in title I, part D, subpart 5 (hereinafter "Subpart 5"). Subpart 1 contains the general requirements for nonattainment areas for criteria pollutants, including requirements to develop a SIP that provides for the implementation of reasonably available control measures (RACM), requires reasonable further progress (RFP), includes base-year and attainment-year emissions inventories, a SIP-approved NNSR permitting program that accounts

³ EPA designated the Mulberry Area as unclassifiable due to the uncertainty regarding possible contribution from Mosaic Bartow to the modeled violations in the Hillsborough-Polk Area. *See* Chapter 9 of the Technical Support Document for the Round 3 Designations for the 2010 1-Hour SO₂ NAAQS located in the docket for the designation at Docket ID No. EPA-HQ-OAR-2017-0003-0635.

⁴ No requirements were triggered as a result of the unclassifiable designation for the Mulberry Area.

for growth in the area, enforceable emission limitations and other such control measures, and provides for the implementation of contingency measures. This SIP revision is due within 18 months following the April 9, 2018, effective date of designation (i.e., October 9, 2019). See CAA section 191(a).

IV. What are the Criteria for Redesignation?

The CAA provides the requirements for redesignating a nonattainment area to attainment. Specifically, section 107(d)(3)(E) of the CAA allows for redesignation provided that the following criteria are met: (1) the Administrator determines that the area has attained the applicable NAAQS; (2) the Administrator has fully approved the applicable implementation plan for the area under section 110(k); (3) the Administrator determines that the improvement in air quality is due to permanent and enforceable reductions in emissions resulting from implementation of the applicable SIP and applicable federal air pollutant control regulations, and other permanent and enforceable reductions; (4) the Administrator has fully approved a maintenance plan for the area as meeting the requirements of section 175A; and (5) the state containing such area has met all requirements applicable to the area for purposes of redesignation under section 110 and part D of the CAA.

On April 16, 1992 (57 FR 13498), EPA provided guidance on redesignations in the General Preamble for the Implementation of title I of the CAA Amendments of 1990 and supplemented this guidance on April 28, 1992 (57 FR 18070). EPA has provided further guidance on processing redesignation requests in the following documents:

⁵ If EPA redesignates the Hillsborough-Polk Area to attainment, a nonattainment SIP revision will not be required.

- "Procedures for Processing Requests to Redesignate Areas to Attainment,"
 Memorandum from John Calcagni, Director, Air Quality Management Division,
 September 4, 1992 (hereinafter referred to as the "Calcagni Memorandum");
- "State Implementation Plan (SIP) Actions Submitted in Response to Clean Air
 Act (CAA) Deadlines," Memorandum from John Calcagni, Director, Air Quality
 Management Division, October 28, 1992 (hereinafter referred to as the "1992
 Calcagni Memorandum");
- 3. "Part D New Source Review (Part D NSR) Requirements for Areas Requesting Redesignation to Attainment," Memorandum from Mary D. Nichols, Assistant Administrator for Air and Radiation, October 14, 1994 (hereinafter referred to as the "Nichols Memorandum"); and
- 4. "Guidance for 1-Hour SO₂ Nonattainment Area SIP Submissions," Memorandum from Stephen D. Page, April 23, 2014 (hereinafter referred to as the "SO₂ Nonattainment Area Guidance").

EPA's SO₂ Nonattainment Area Guidance discusses the CAA requirements that air agencies need to address when implementing the 2010 SO₂ NAAQS in areas designated as nonattainment for the standard. The guidance includes recommendations for air agencies to consider as they develop SIPs to satisfy the requirements of sections 110, 172, 175A, 191, and 192 of the CAA to show future attainment and maintenance of the 2010 SO₂ NAAQS. Additionally, the SO₂ Nonattainment Area Guidance provides recommendations for air agencies to consider as they develop redesignation requests and maintenance plans to satisfy the requirements of sections 107(d)(3)(E) and 175A.

V. Why is EPA Proposing These Actions?

EPA has evaluated and is proposing to approve the base-year nonattainment emissions inventory and concurs with FDEP's certification that its existing SIP-approved NNSR permitting program applies to the Hillsborough-Polk Area because they satisfy the requirements of CAA sections 172(c)(3) and 172(c)(5), respectively. As discussed in greater detail in Section VI of this notice, EPA is also proposing to approve and incorporate the SO₂ permit limits and associated compliance and monitoring parameters for Mosaic New Wales and Mosaic Bartow into the SIP. In addition, EPA is proposing to determine that the air quality modeling submitted by the State demonstrates that the Hillsborough-Polk Area will have attained the 2010 SO₂ NAAQS as a result of compliance with the permit limits at Mosaic New Wales and Mosaic Bartow and that the Area will meet the requirements for redesignation as set forth in section 107(d)(3)(E), including the maintenance plan requirements under section 175A of the CAA, provided that the state submits a final SIP consistent with that outlined above, including the permit limits, parameters, and related information, and EPA approves the SIP. Also, as a result of the compliance with the multi-unit permit limits at Mosaic New Wales and Mosaic Bartow, EPA proposes to determine that the Mulberry Area will have attained the 1-hour SO₂ NAAQS and thus will meet the requirements for redesignation from unclassifiable to attainment/unclassifiable.

VI. What is EPA's Analysis of Florida's Source-Specific SO₂ Permit Limits?

Florida's December 1, 2017, source-specific SIP revision includes SO₂ multi-unit permit limits and associated compliance and monitoring provisions from air construction permits for Mosaic New Wales (Permit No. 1050059-106-AC) and Mosaic Bartow (Permit No. 1050046-

050-AC). The SIP revision also includes modeling to demonstrate that the Hillsborough-Polk Area will attain the SO₂ NAAQS as a result of compliance with these multi-unit permit limits. Florida's February 15, 2019, draft SIP submittal contains changes to this modeling and administrative corrections to the aforementioned permits.

Mosaic New Wales and Mosaic Bartow are phosphate fertilizer manufacturing plants that employ a process of reacting phosphate rock with sulfuric acid to produce phosphoric acid, which is then converted into several different fertilizer products and animal feed ingredients. The sulfuric acid needed for the process is produced by sulfuric acid plants (SAPs), which are the largest SO₂ emitting units at these sites. Both facilities are sulfur burning, double conversion, and double absorption plants of Leonard-Monsanto design.⁶ The SAPs burn sulfur with dried atmospheric oxygen to produce SO₂, which is catalytically oxidized to sulfur trioxide (SO₃), which is then absorbed in sulfuric acid.

To reduce SO₂ emissions from the SAPs, Mosaic has replaced the vanadium catalysts with more efficient catalysts to enable Mosaic New Wales and Mosaic Bartow to meet the new SO₂ permit limits. Mosaic Bartow and Mosaic New Wales began installation of the catalyst replacements in 2016 and 2017, respectively, and completed installation in April 2019.⁷ The new catalysts allow for more SO₂ to be captured for process purposes rather than being emitted into the atmosphere.

 $^{^6}$ A double conversion, double absorption plant efficiently converts SO_2 to SO_3 , then SO_3 reacts in a mixture of water and sulfuric acid (H_2SO_4) to produce more H_2SO_4 . In a double absorption system, the conversion efficiency from SO_2 to SO_3 is at least 99.7 percent.

⁷ See the May 23, 2019, email from Mosaic Fertilizer, LLC to EPA Region 4 Air Planning Implementation Branch, Air Regulatory Management Section and Florida Department of Environmental Protection, Division of Air Resource Management located in the docket for this proposed rulemaking. FDEP required Mosaic to install these catalysts through Permit No. 1050059-101-AC (Mosaic New Wales) and No. 1050046-050-AC (Mosaic Bartow).

On October 30, 2017, FDEP issued Permit No. 1050059-106-AC for Mosaic New Wales requiring compliance with a SO₂ multi-unit permit limit of 1,090 pounds per hour (lb/hr) across all five SAPs (Nos. 1 through 5) based on a 24-hour block average and with associated specific compliance and monitoring provisions. On July 3, 2017, FDEP issued Permit No. 1050046-050-AC for Mosaic Bartow requiring compliance with an SO₂ multi-unit permit limits of 1,100 lb/hr across all three SAPs (No. 4, No. 6 and No. 5) based on a 24-hour block average and with associated compliance and monitoring provisions. Mosaic is required to comply with these permit conditions no later than August 31, 2019.⁸ The construction permits impose the new limits for scenarios where any number of units are operating at each respective facility while retaining the current individual unit limits as shown in Tables 1 and 2.

Table 1: Mosaic New Wales SO₂ Source Changes

	SO ₂ Permit Limits (lb/hr)			
	Individual			
Source	(Not changing)	New 5-Unit*		
SAP1	496			
SAP2	496	Combined emissions		
SAP3	496	cannot exceed 1,090		
SAP4	483.3	camot exceed 1,090		
SAP5	483.3			
*SO ₂ permit limit is a 24-hour block average.				

Table 2: Mosaic Bartow SO₂ Source Changes

	SO ₂ Permit Limits (lb/hr)			
Source	Individual (Not changing)	New 3-Unit*		
SAP4	433.3	Combined		
SAP5	433.3	emissions cannot		
SAP6	433.3	exceed 1,100		

⁸ FDEP incorporated these permit limits into Title V Permit No. 1050059-107-AV (Mosaic New Wales) and No. 1050046-053-AV (Mosaic Bartow).

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*SO₂ permit limit is a 24-hour block average.

The potential to emit for SAPs 1-5 at Mosaic New Wales and SAPs 4-6 at Mosaic Bartow was previously 10,750 tons per year (tpy) and 5,694 tpy, respectively. With the new multi-unit permit limits implemented at Mosaic New Wales and Mosaic Bartow, FDEP expects the potential to emit to be 4,774 tpy and 4,818 tpy, respectively. This is approximately a 42-percent drop in total allowable emissions for both facilities, combined. At maximum production, with all SAPs in operation, overall SO₂ emissions are expected to be reduced by approximately 5,930 tpy at Mosaic New Wales and 876 tpy at Mosaic Bartow. FDEP projects that actual SO₂ emissions will decrease by 36 percent from 2016 to 2020.

On January 11, 2019, FDEP issued Administrative Permit Corrections to the air construction permits identified above. These corrections are contained in Permit No. 1050059-114-AC for Mosaic New Wales and Permit No. 1050046-063-AC for Mosaic Bartow and do not modify the multi-unit permit limits or the associated compliance and monitoring provisions. The notices associated with these permits state that the corrections merely remove unnecessary and confusing language from the permit provisions that contain the emissions caps. Florida's February 15, 2019, draft SIP revisions ask EPA to incorporate the corrections from Permit Nos. 1050059-114-AC and 050046-063-AC into the SIP.

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⁹ The Administrative Permit Corrections and associated notices are included in Appendix C and Appendix H of Florida's February 15, 2019 draft SIP revisions contained in the docket for this proposed rulemaking. The corrections remove the phrase "Any requested revisions to this emissions limit requires air dispersion modeling review and written approval from the Department's Meteorology and Air Modeling Section in the Office of Business Planning to confirm SO₂ NAAQS compliance" from the provisions establishing the multi-unit permit limits.

On March 22, 2019, Florida submitted a letter to EPA explaining the administrative corrections and clarifying which permit conditions that it would like EPA to incorporate into the SIP. FDEP is requesting that EPA incorporate the following conditions from Permit Nos. 10500046-106-AC and 1050046-050-AC: (1) Section III, Subsection A, Specific Condition 3 (as corrected by Permit Nos. 1050059-114-AC and Permit No. 1050046-063-AC) – establishing the five-unit permit limit of 1,090 lb/hr for Mosaic New Wales and the three-unit permit limit of 1,100 lb/hr for Mosaic Bartow, each based on 24-hour block average, and applicable during all periods of operation; (2) Section III, Subsection A Specific Condition 4 – requiring the facilities to use certified SO₂ continuous emissions monitoring system (CEMS) data to demonstrate initial compliance with the new SO₂ permit limit; and (3) Section III, Subsection A, Specific Condition 5 – requiring the facilities to keep records of the initial compliance demonstration that include the SO₂ CEMS data and sulfuric acid production rate (in tons per hour) during the demonstration.

The Mosaic New Wales and Mosaic Bartow air construction permits include specific conditions regarding initial compliance with the SO₂ permit limits using CEMS. Florida's SIP-approved regulations for SAPs, at Rule 62-296.402, Florida Administrative Code (F.A.C.), require the owner or operator of a SAP to install and operate CEMS according to appendix B of 40 CFR part 60, and Chapter 62-297, F.A.C., which specifies how stationary sources

¹⁰ See Florida's March 22, 2019, clarification letter contained in the docket for this proposed rulemaking.

¹¹ The permit condition numbers are the same for each permit.

¹² Permit condition Section III, Subsection A, Specific Condition 3 requires compliance with the emissions caps within the same 24-hour block averaging period (6:00 a.m. to 6:00 a.m.) and in scenarios when any combination of any number of the SAPs are not in operation and when any number of the SAPs are in operation. *See* Appendices B, C, G, and H of Florida's February 19, 2019 draft redesignation SIP submission in the docket for this proposed rulemaking.

demonstrate compliance with the applicable permit limits.¹³ These applicable requirements require compliance with the permit limits on an ongoing basis. For each SAP at each source, a CEMS will be used to determine compliance with the 24-hour average permit limit for SO₂. The CEMS shall be calibrated, maintained and operated as specified in 40 CFR 60.84.

The December 1, 2017, SIP revision includes an air dispersion modeling analysis to show attainment of the 2010 SO₂ NAAQS in the Hillsborough-Polk Area. The modeling used 1-hour emission rates calculated from final multi-unit permit limits of 1,090 lb/hr and 1,100 lb/hr for New Wales and Bartow, respectively, using adjustment factors derived following the procedures in EPA's SO₂ Nonattainment Area Guidance. Florida's draft February 15, 2019, SIP revision updated this modeling. FDEP's modeling complied with all applicable EPA rules and guidance, including *Appendix W to 40 CFR Part 51: The Guideline on Air Quality Models* (Appendix W) and the *SO₂ NAAQS Designations Modeling Technical Assistance Document*. For more information on the modeling analysis, see section VII.C of this notice and the Air Modeling Technical Support Document (TSD). For details on how Florida established the 24-hour multi-unit SO₂ permit limits, see the longer term averaging (LTA) TSD. EPA included both TSDs in the docket for this proposing rulemaking.

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¹³ See Florida's March 22, 2019 clarification letter in the docket for this proposal action.

¹⁴ SO₂ National Ambient Air Quality Standards Designations Modeling Technical Assistance Document, Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, available at: https://www.epa.gov/sites/production/files/2016-06/documents/so2modelingtad.pdf
¹⁵ This TSD is entitled "U.S. Environmental Protection Agency Technical Support Document (TSD) for the Air Quality Modeling Analysis Supporting the Proposed Redesignations for the Hillsborough - Polk and Mulberry, Florida Sulfur Dioxide (SO₂) Areas."

¹⁶ This TSD is entitled "U.S. Environmental Protection Agency Technical Support Document (TSD) for the Longer Term Average Sulfur Dioxide (SO₂) Permit Limits for the Mosaic New Wales and Bartow Fertilizer Facilities."

Based on a review of Florida's December 1, 2017, SIP revision, as modified through its February 15, 2019, draft SIP revision, EPA believes that the 24-hour block average SO₂ multiunit permit limits described above provide an appropriate alternative to establishing a 1-hour average permit limit for each unit at Mosaic New Wales and Mosaic Bartow. The State has used a suitable database and has derived adjustment factors that yielded permit limits that have comparable stringency to the 1-hour average limits that would otherwise have been necessary to provide for attainment. While the 24-hour block average allows for occasions in which emissions may be higher than the level that would be allowed with the 1-hour limit, the State's caps compensate by requiring average emissions to be lower than the level that would otherwise have been required by 1-hour average limits. For more information on how Florida established the SO₂ permit limits, please refer to the LTA discussion presented in TSD. For reasons discussed in the LTA TSD and explained in more detail in EPA's SO₂ Nonattainment Area Guidance, EPA believes that appropriately set longer term average limits provide a reasonable basis by which permit limits may provide for attainment. Based on its review of this information as well as the information in the State's 2017 and 2019 SIP revisions, EPA is proposing to find that the 24-hour average limits for Mosaic New Wales and Mosaic Bartow provide for attainment of the SO_2 standard.

VII. What Actions are Being Proposed for the Hillsborough-Polk Area?

Regarding the Hillsborough-Polk Area and in accordance with the CAA, EPA proposes to: (1) approve and incorporate the SO₂ permit limits and associated compliance and monitoring parameters for Mosaic New Wales and Bartow into the SIP; (2) approve the base-year emissions inventory pursuant to Clean Air Act (CAA or Act) section 172(c)(3) for the Hillsborough-Polk

Area and incorporate it into the SIP; (3) concur with Florida's certification pursuant to CAA section 172(c)(5) that its existing NNSR requirements apply to the Hillsborough-Polk Area; (4) determine that the air quality modeling submitted by the State demonstrates that the Hillsborough-Polk Area will have attained the 2010 SO₂ NAAQS as a result of compliance with the multi-unit permit limits at Mosaic New Wales and Bartow; (5) approve Florida's plan for maintaining the 2010 1-hour SO₂ NAAQS in the Hillsborough-Polk Area through 2032 and incorporate it into the SIP pursuant to section 175A of the CAA; and (6) redesignate the Hillsborough-Polk Area to attainment for the 2010 1-hour SO₂ NAAQS. Because attainment of the SO₂ NAAQS is dependent on making the multi-unit permit limits and associated compliance and monitoring parameters for Mosaic New Wales and Bartow permanent and enforceable measures, EPA cannot take final action on items 4-7, above, unless it finalizes its proposal to approve and incorporate these caps and parameters into the SIP.

A. What is EPA's Analysis of Florida's Base-Year Inventory for the Hillsborough-Polk Area?

States are required under section 172(c)(3) of the CAA to develop comprehensive, accurate, and current inventories of actual emissions from all sources of the relevant pollutant or pollutants in the nonattainment area. These inventories provide a detailed accounting of all emissions and emission sources by precursor or pollutant. In addition, these inventories are used in air quality modeling to demonstrate that attainment of the NAAQS is as expeditious as practicable. The SO₂ Nonattainment Area Guidance states that the emissions inventory should be consistent with the Air Emissions Reporting Requirements (AERR) at subpart A to 40 CFR

part 51.¹⁷ The SO₂ Nonattainment Area Guidance notes that the base-year inventory should include all sources of SO₂ in the nonattainment area as well as any sources located outside the nonattainment area which may affect attainment in the area.

Florida elected to use 2017 as the base year. To develop the base-year emission inventory, Florida reviewed and compiled county-level actual SO₂ emissions for all source categories (i.e., point, area, and mobile (nonroad and onroad)) in Hillsborough and Polk Counties and then utilized county and partial county nonattainment area population and land use data to determine estimated SO₂ emission inventories for sources of SO₂ in the Hillsborough-Polk Area. Emissions from Mosaic New Wales, the largest point source of SO₂ in the Area, as well as nearby Mosaic Bartow, a point source located outside of the Area, were included in the inventory.

Pursuant to Florida's SIP-approved regulations at Rule 62-210.370, F.A.C., paragraph (3), FDEP collects annual operating reports (AORs). Florida used these AORs to satisfy the AERR and to develop the base year inventory for actual emissions for point sources. FDEP utilized EPA's 2014 NEI, Version 2 to obtain estimates of the area and nonroad sources. For onroad mobile source emissions, FDEP utilized EPA's Motor Vehicle Emissions Simulator (MOVES2014). A more detailed discussion of the emissions inventory development for the Hillsborough-Polk Area can be found in Florida's February 15, 2019, draft SIP submittal.

Table 3, below, shows the level of emissions in the Hillsborough-Polk Area for the 2017 base year by emissions source category. The point source category includes 2017 emissions

¹⁷ The AERR covers federal reporting requirements for states to submit emissions inventories for criteria pollutants to EPA's Emission Inventory System. EPA uses these submittals, along with other data sources, to build the National Emission Inventory (NEI).

from the Mosaic New Wales and Mosaic Bartow AORs (6,877 tons and 4,001 tons, respectively). Area and nonroad emissions are based on 2014 NEI data for Hillsborough County and Polk County. Florida projected the 2014 emissions for the area and nonroad categories to 2017 based on the increase in the Hillsborough County and Polk County population from 2014 to 2017, and then allocated to the Hillsborough-Polk Area based on the Area's fraction of land area within each county. Florida estimated onroad emissions for the area using MOVES2014a and then allocated them to the Hillsborough-Polk Area based on the Area's fraction of land area within each county.

Table 3. 2017 Base-Year Emissions Inventory for the Hillsborough-Polk Area (tons)

Year	Point	Area	Nonroad	Onroad	Total
2017	10,888	16.42	0.31	1.34	10,906.07

EPA has evaluated Florida's 2017 base-year emissions inventory for the Hillsborough-Polk Area and has made the preliminary determination that this inventory was developed consistent with EPA's guidance. Therefore, pursuant to section 172(c)(3), EPA is proposing to approve Florida's 2017 base-year emissions inventory for the Hillsborough-Polk Area and incorporate it into the SIP.

B. What is EPA's Analysis of Florida's NNSR SIP for the Hillsborough-Polk Area?

CAA section 172(c)(5) requires source permits for the construction and operation of new and modified major stationary sources anywhere in a nonattainment area. In its February 15, 2019, draft SIP revision, Florida certifies that it has a SIP-approved NNSR permitting program, outlined in Chapters 62-210 and 62-212, F.A.C., to address any new major stationary sources or source modifications in the Hillsborough-Polk Area. The SIP-approved program applies to nonattainment areas for all NAAQS, including the 2010 1-hour SO₂ standard. Florida also states

that it is unaware of and does not anticipate any future development within the Area that would increase SO₂ emissions. EPA has previously approved Florida's SIP-approved NNSR program, including the NNSR regulation at 62-212.500, F.A.C., ¹⁸ and is therefore proposing to concur with Florida's section 172(c)(5) certification that its program requires NNSR in the Hillsborough Polk Area for so long as the Area is designated nonattainment. ¹⁹

C. What is EPA's Analysis of the Redesignation Request and SIP Revision for the Hillsborough-Polk Area?

The five redesignation criteria provided under CAA section 107(d)(3)(E) are discussed in greater detail for the Hillsborough-Polk Area in the following paragraphs.

i. Criterion (1) – The Administrator determines that the area has attained the NAAQS.

For redesignating a nonattainment area to attainment, the CAA requires EPA to determine that the area has attained the applicable NAAQS (CAA section 107(d)(3)(E)(i)). As discussed in section VIII.A of the SO₂ Nonattainment Area Guidance, there are generally two components needed to support an attainment determination for SO₂, which should be considered interdependently. The first component relies on air quality monitoring data. For SO₂, any available monitoring data would need to indicate that all monitors in the affected area are meeting the standard as stated in 40 CFR 50.17 using data analysis procedures specified in 40 CFR part 50, Appendix T. The second component relies on air quality modeling data. If there

¹⁸ EPA last modified the SIP-approved version of this rule on June 27, 2008. See 73 FR 36435.

¹⁹ As discussed in section VII.C.ii.A.2.a, below, EPA has a longstanding interpretation that because NNSR is replaced by Prevention of Significant Deterioration (PSD) permitting upon redesignation, nonattainment areas seeking redesignation to attainment need not have a fully approved part D NNSR program in order to be redesignated. *See* Nichols Memorandum. Nonetheless, EPA is proposing to concur with the State's certification. ²⁰ SO₂ is primarily a localized, source-specific pollutant, and therefore, SO₂ control measures are, by definition, based on what is directly and quantifiably necessary to attain the NAAQS.

are no air quality monitors located in the affected area, or there are air quality monitors located in the area, but analyses show that none of the monitors are located in the area of maximum concentration,²¹ then air quality dispersion modeling will generally be needed to estimate SO₂ concentrations in the area. Such dispersion modeling should be conducted to estimate SO₂ concentrations throughout the nonattainment area using actual emissions and meteorological information for the most recent three calendar years. However, EPA may also make determinations of attainment based on the modeling from the attainment demonstration²² for the applicable SIP for the affected area, eliminating the need for separate actuals-based modeling to support a redesignation request. A demonstration that the control strategy in the SIP has been fully implemented (compliance records demonstrating that the control measures have been implemented as required by the approved SIP) would also be relevant for making the determination, and as noted above, Florida is providing emissions data to demonstrate compliance with the SO₂ permit limits in its final SIP submittal. Areas which were designated nonattainment based on modeling will generally not be redesignated to attainment unless an acceptable modeling analysis indicates attainment. See 1992 Calcagni Memorandum.

As discussed above, Florida's December 1, 2017, SIP revision, as modified through its February 15, 2019, draft SIP revision, contains a modeling analysis to demonstrate that the Area will attain the 2010 1-hour standard as a result of compliance with the comparably stringent 24-hour SO₂ emissions caps at Mosaic New Wales and Mosaic Bartow. When EPA designated the

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²¹ See section VIII.A of the SO₂ Nonattainment Area Guidance.

²² Florida submitted the modeling analysis for the Hillsborough-Polk and Mulberry Areas in support of its redesignation requests and as part of its SIP revision containing permit limits for Mosaic Bartow and Mosaic New Wales. Although this modeling analysis is not considered part of an "attainment demonstration" or "nonattainment SIP" pursuant to section 172 of the CAA, the portion of the SO₂ Nonattainment Area Guidance regarding the use of modeling summarized in this section of the notice is applicable given the similarities between the submitted analysis and a modeling analysis under a section 172 "attainment demonstration."

Hillsborough-Polk Area as a nonattainment area for the 2010 1-hour SO₂ NAAQS, EPA determined that Mosaic New Wales was the primary cause of the 2010 1-hour SO₂ NAAQS violations in the Hillsborough-Polk Area. However, Florida included nearby Mosaic Bartow in its modeling because it determined that emissions from Mosaic Bartow also had the potential to contribute to elevated concentrations within the Hillsborough-Polk Area.

Because there are no air quality monitors located in the Hillsborough-Polk Area, EPA's proposed approval of Florida's draft redesignation and maintenance plan SIP for the Hillsborough-Polk Area is based on this modeled demonstration and related information. Details regarding the modeling analysis are summarized in the following paragraphs. A more detailed discussion of FDEP's modeling, including changes in the February 19, 2019, draft SIP revision, can be found in EPA's Air Modeling TSD.

FDEP's modeling analysis was developed in accordance with EPA's Guideline on Air Quality Models (Modeling Guideline)²³ and the SO₂ Nonattainment Area Guidance, and was prepared using EPA's preferred dispersion modeling system – the American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) – consisting of the AERMOD (version 18081) model and multiple data input preprocessors as described below. FDEP used regulatory default options and the rural land use dispersion option in the AERMOD modeling.

The pre-processors AERMET (version 16216) and AERMINUTE (version 14337) were used to process five years (i.e., 2012-2016) of 1-minute meteorological data from the Winter Haven Municipal Airport National Weather Service (NWS) surface level site, based on FDEP's

²³ See 40 CFR part 51 Appendix W (EPA's Guideline on Air Quality Models) (January 17, 2017) located at https://www3.epa.gov/ttn/scram/appendix_w/2016/AppendixW_2017.pdf.

land use classifications, in combination with twice daily upper-air meteorological information from the Ruskin, FL NWS station. The Winter Haven Municipal Airport is located approximately 38 km northwest from the Hillsborough-Polk Area.

The AERMOD pre-processor AERMAP (version 18081) was used to generate terrain inputs for the receptors, based on a digital elevation mapping database from the National Elevation Dataset developed by the U.S. Geological Survey. FDEP used AERSURFACE to generate direction-specific land-use surface characteristics for the modeling.

The stack heights used in the modeling meet the Good Engineering Practice stack height criteria, and the Building Profile Input Program for Plume Rise Model Enhancements preprocessor was used to generate direction-specific building downwash parameters. FDEP developed two overlapping Cartesian receptor grids to fully encompass the entire nonattainment area and the unclassifiable area, with 100-meter (m) spacing out to 2.5 km from Mosaic New Wales and Mosaic Bartow, 200 m spacing from 2.5 km to 5 km, and 500 m spacing from 5 km to 7.5 km from the facilities, to ensure maximum concentrations were captured in the analysis.

FDEP selected a background SO₂ concentration based on monitoring data from the Sydney monitor (AQS ID: 12-057-3002), for the period January 2014 to December 2016. The monitor is approximately 23 km from Mosaic New Wales and 31 km from Mosaic Bartow. The background concentration from this ambient air monitor is used to account for SO₂ impacts from all sources that are not specifically included in the AERMOD modeling analysis. The ambient monitoring data was obtained from the Florida Air Monitoring and Assessment System. Due to its close proximity to the modeled facilities, monitored concentrations at this station are strongly influenced by their emissions. As a result, and as allowed by EPA's Modeling Guideline, the

data were filtered to remove measurements where the wind direction could transport pollutants from these facilities to the monitor. More specifically, the data were filtered to remove measurements where hourly wind directions were between 85° to 175° . FDEP elected to use a temporally varying approach, based on the 99th percentile monitored concentrations by hour of day and season or month. The resulting temporally varying background concentration ranged from 0.67 - 7.33 ppb.

The State used the emissions caps for each of the SO₂ emissions units at Mosaic New Wales and Mosaic Bartow in the modeling demonstration. As discussed in Section VI, FDEP's construction permits require Mosaic New Wales to comply with a 1,090 lb/hr SO₂ permit limit for its five SAPs and Mosaic Bartow to comply with a 1,100 lb/hr for its three SAPs, each on a 24-hour block average, no later than August 31, 2019. To determine the level of these permit limits, the State initially performed exploratory modeling, consisting of over 300 AERMOD modeling runs, to determine the CEVs for Mosaic New Wales and Mosaic Bartow on an hourly basis. This modeling was performed to determine the highest aggregate hourly emission rate that, regardless of its distribution among any combination of SAPs at the facilities, would result in modeled concentrations at or below the level of the 1-hour NAAOS (i.e., the CEV). The analysis resulted in CEVs of 1,118 lb/hr and 1,163 lb/hr for Mosaic New Wales and Mosaic Bartow, respectively. Following the procedures in EPA's SO₂ Nonattainment Area Guidance, Florida calculated comparably stringent 24-hour emissions caps using adjustment factors calculated by the ratio of each source's historic 99th percentile one-hour average emissions rate to its 99th percentile longer-term average emissions rate, which resulted in 24-hour adjusted emission caps of 1,100 lb/hr for New Wales and 1,138 lb/hr for Bartow. The details of the

adjustment factor calculation are provided in the LTA TSD for this action. To provide for a margin of safety in the final modeling demonstration, Florida slightly lowered the 24-hour adjusted emission caps to establish final multi-unit permit limits of 1,090 lb/hr and 1,100 lb/hr for New Wales and Bartow, respectively. For the final modeling run to show compliance with the NAAQS, Florida applied the adjustment factors to back-calculate 1-hour emission rates (1,108 lb/hr for New Wales and 1,124 lb/hr for Bartow) from the final 24-hour multi-unit permit limits of 1,090 lb/hr and 1,100 lb/hr for New Wales and Bartow, respectively.

Table 4 shows that the maximum modeled 99th percentile daily maximum 1-hour SO₂ concentration averaged across all five years of meteorological data (2012-2016) is less than or equal to the 2010 1-hour SO₂ NAAQS of 75 ppb using the in 1-hour equivalent emission rates.

Table 4. Maximum Modeled 99th Percentile Daily Maximum 1-Hour SO₂ Impacts in the Hillsborough-Polk Area, Micrograms per Cubic Meter

Averaging time	Maximum predicted impact	Background	Total	SO ₂ NAAQS
1-hour	186.94 (71.4 ppb)	7.84 (3 ppb)	194.74 (74.4 ppb)	196.4 (75 ppb)

The final modeling resulted in a highest predicted 99th percentile daily maximum 1-hour concentration of 74.4 ppb with no modeled violations of the 1-hour SO₂ NAAQS in ambient air locations in the Hillsborough-Polk Area or in the Mulberry Area. The details of the modeling are provided EPA's Air Modeling TSD for this action. EPA believes that the modeled demonstration described above is consistent with CAA requirements, EPA's Modeling Guideline, and the SO₂ Nonattainment Area Guidance. Therefore, EPA proposes to determine that the air quality modeling and related information that will be submitted by the State in its final submission (consistent with the current proposed SIP) demonstrates that the Hillsborough-

Polk Area will have attained the 2010 1-hour SO₂ NAAQS as a result of compliance with the permit limits at Mosaic New Wales and Mosaic Bartow. EPA cannot take final action to determine that the Area has attained the NAAQS unless it receives the final SIP submittal containing that information and finalizes its proposal to approve and incorporate these permit limits, associated compliance and monitoring parameters, and other related information into the SIP.

ii. Criterion (2) – The Administrator fully approves the applicable implementation plan for the area under section 110(k); and Criterion (5) – Florida has met all applicable requirements under section 110 and part D of title I of the CAA.

For redesignating a nonattainment area to attainment, the CAA requires EPA to determine that the state has met all applicable requirements under section 110 and part D of title I of the CAA (CAA section 107(d)(3)(E)(v)) and that the state has a fully approved SIP under section 110(k) for the area (CAA section 107(d)(3)(E)(ii)). EPA proposes to find that Florida has met all applicable SIP requirements for the Hillsborough-Polk Area under section 110 of the CAA (general SIP requirements) for purposes of redesignation. Additionally, EPA proposes to find that the Florida SIP satisfies the criterion that it meets applicable SIP requirements for purposes of redesignation under part D of title I of the CAA in accordance with section 107(d)(3)(E)(v). Further, EPA proposes to determine that the SIP is fully approved with respect to all requirements applicable for purposes of redesignation in accordance with section 107(d)(3)(E)(ii). In making these proposed determinations, EPA ascertained which requirements are applicable to the Area and, if applicable, that they are fully approved under section 110(k).

SIPs must be fully approved only with respect to requirements that were applicable prior to submittal of the complete redesignation request.

- A. The Hillsborough-Polk Area has met all applicable requirements under section 110 and part D of the CAA.
- 1. General SIP requirements.

General SIP elements and requirements are delineated in section 110(a)(2) of title I, part A of the CAA. These requirements include, but are not limited to, the following: submittal of a SIP that has been adopted by the state after reasonable public notice and hearing; provisions for establishment and operation of appropriate procedures needed to monitor ambient air quality; implementation of a source permit program; provisions for the implementation of part C requirements (Prevention of Significant Deterioration (PSD)) and provisions for the implementation of part D requirements (NNSR permit programs); provisions for air pollution modeling; and provisions for public and local agency participation in planning and emission control rule development.

Section 110(a)(2)(D) requires that SIPs contain certain measures to prevent sources in a state from significantly contributing to air quality problems in another state. To implement this provision, EPA has required certain states to establish programs to address the interstate transport of air pollutants. The section 110(a)(2)(D) requirements for a state are not linked with a particular nonattainment area's designation and classification in that state. EPA believes that the requirements linked with a particular nonattainment area's designation and classifications 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, EPA does not believe that the CAA's interstate transport requirements should be construed to be applicable requirements for purposes of redesignation.

In addition, EPA believes that other section 110(a)(2) elements that are neither connected with nonattainment plan submissions nor linked with an area's attainment status are not applicable requirements for purposes of redesignation. The area will still be subject to these requirements after the area is redesignated. The section 110(a)(2) and part D requirements which are linked with a particular area's designation and classification are the relevant measures to evaluate in reviewing a redesignation request. This approach is consistent with EPA's existing policy on applicability (i.e., for redesignations) of conformity and oxygenated fuels requirements, as well as with section 184 ozone transport requirements. See Reading, Pennsylvania, proposed and final rulemakings (61 FR 53174-53176, October 10, 1996), (62 FR 24826, May 7, 2008); Cleveland-Akron-Loraine, Ohio, final rulemaking (61 FR 20458, May 7, 1996); and Tampa, Florida, final rulemaking at (60 FR 62748, December 7, 1995). See also the discussion on this issue in the Cincinnati, Ohio, redesignation (65 FR 37890, June 19, 2000), and in the Pittsburgh, Pennsylvania, redesignation (66 FR 50399, October 19, 2001). Nonetheless, EPA has approved Florida's SIP revisions related to the section 110 requirements for the 2010 SO_2 NAAQS, with the exception of the interstate transport elements at section 110(a)(2)(D)(i)(I). See 81 FR 67179 (September 30, 2016).

2. Title I, Part D, applicable SIP requirements.

Subpart 1 of part D, comprised of CAA sections 171-179B, sets forth the basic nonattainment requirements applicable to all nonattainment areas. All areas that were designated nonattainment for the SO₂ NAAQS were designated under Subpart 1 of the CAA in accordance with the deadlines in Subpart 5. For purposes of evaluating this redesignation request, the applicable Subpart 1 SIP requirements are contained in section 172(c)(1)-(9), section 176, and sections 191 and 192. A thorough discussion of the requirements contained in sections 172(c) can be found in the General Preamble for Implementation of Title I. *See* 57 FR 13498 (April 16, 1992).

a. Subpart 1 Section 172 Requirements.

Section 172 requires states with nonattainment areas to submit plans providing for timely attainment and meeting a variety of other requirements. EPA's longstanding interpretation of the attainment-related 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 1992 General Preamble for Implementation of Title I, EPA set forth its interpretation of applicable requirements for purposes of evaluating redesignation requests when an area is attaining a standard. *See* 57 FR 13498, 13564 (April 16, 1992). EPA noted that the requirements for RFP and other measures designed to provide for attainment do not apply in evaluating redesignation requests because those nonattainment planning requirements "have no meaning" for an area that is attaining the standard. *Id.* This interpretation was also set forth in the Calcagni Memo. EPA's understanding of section 172 also forms the basis of its Clean Data Policy, articulated with regard to the 2010 1-hour SO₂ NAAQS in the SO₂ Nonattainment Area

Guidance, which suspends a state's obligation to submit most of the attainment planning requirements that would otherwise apply. Therefore, these section 172(c) nonattainment planning requirements are not applicable for purposes of evaluating Florida's redesignation request if EPA finalizes its proposal to incorporate the permit limits and associated compliance and monitoring parameters into the SIP once they become enforceable at the state level on August 31, 2019. Specifically, the RACT/RACM requirement under 172(c)(1); the RFP requirement under section 172(c)(2), which is defined as progress that must be made toward attainment; the requirement under section 172(c)(6) that the SIP contain control measures necessary to provide for attainment of the standard; and 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, would not be applicable.

Section 172(c)(3) requires submission for approval of a comprehensive, accurate, and current inventory of actual emissions. As discussed in Section VII.A, EPA is proposing to approve Florida's base-year emissions inventory for the Hillsborough-Polk Area.

Section 172(c)(4) requires the identification and quantification of allowable emissions for major new and modified stationary sources to be allowed 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 has a longstanding interpretation that because NNSR is replaced by PSD upon redesignation, nonattainment areas seeking redesignation to attainment need not have a fully approved part D NNSR program in order to be redesignated.

See Nichols Memorandum. Florida currently has a fully-approved PSD and part D NNSR program in place in Chapters 62-204, 62-210, and 62-212 of the Florida Administrative Code.

Florida's PSD program will become effective in the Area upon redesignation to attainment. Nonetheless, as discussed above, Florida has certified that its SIP-approved NNSR program meets the requirements of section 172(c)(5) for the Hillsborough-Polk Area and EPA is proposing to concur with that certification.

Section 172(c)(7) requires the SIP to meet the applicable provisions of section 110(a)(2). As noted above, EPA believes that Florida's SIP meets the requirements of section 110(a)(2) applicable for purposes of redesignation.

Finally, section 172(c)(8) allows a state to use equivalent modeling, emission inventory, and planning procedures if such use is requested by the state and approved by EPA. Florida has not requested the use of equivalent techniques under section 172(c)(8).

b. Subpart 1 Section 176 - Conformity Requirements.

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 (U.S.C.) 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, and enforceability that EPA promulgated pursuant to its authority under the CAA.

EPA believes that it is reasonable to interpret the conformity SIP requirements²⁴ as not applying for purposes of evaluating the redesignation request under section 107(d) because state conformity rules are still required after redesignation and federal conformity rules apply where state rules have not been approved. See Wall v. EPA, 265 F.3d 426 (upholding this interpretation) (6th Cir. 2001); See 60 FR 62748 (December 7, 1995). Furthermore, due to the relatively small, and decreasing, amounts of sulfur in gasoline and on-road diesel fuel, EPA's transportation conformity rules provide that they do not apply to SO₂ unless either the EPA Regional Administrator or the director of the state air agency has found that transportationrelated emissions of SO₂ as a precursor are a significant contributor to a SO₂ or fine particulate matter (PM_{2.5}) nonattainment problem, or if the SIP has established an approved or adequate budget for such emissions as part of the RFP, attainment, or maintenance strategy. See 40 CFR 93.102(b)(1), (2)(v); SO₂ Nonattainment Area Guidance. Neither of these conditions have been met; therefore, EPA's transportation conformity rules do not apply to SO₂ for the Area. For these reasons, EPA proposes to find that Florida has satisfied all applicable requirements for purposes of redesignation of the Hillsborough-Polk Area under section 110 and part D of title I of the CAA.

B. The Hillsborough-Polk Area has a fully approved applicable SIP under section 110(k) of the CAA.

EPA has fully approved the applicable Florida SIP for the Hillsborough-Polk Area under section 110(k) of the CAA for purposes of redesignation. EPA may rely on prior SIP approvals

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²⁴ CAA section 176(c)(4)(E) requires states to submit revisions to their SIPs to reflect certain federal criteria and procedures for determining transportation conformity. Transportation conformity SIPs are different from the motor vehicle emission budgets that are established in control strategy SIPs and maintenance plans.

in approving a redesignation request (*see* 1992 Calcagni Memorandum at p. 3, *Southwestern Pennsylvania Growth Alliance v. Browner*, 144 F.3D 984, 989-90 (6th Cir. 1998); *Wall*, 265 F.3d 426) plus any additional measures it may approve in conjunction with a redesignation action. *See* 68 FR 25426 (May 12, 2003) and citations therein.

Criterion (3) – The air quality improvement in the Hillsborough-Polk Area 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.

For redesignating a nonattainment area to attainment, the CAA requires EPA to determine that the air quality improvement in the area is due to permanent and enforceable reductions in emissions resulting from implementation of the SIP, applicable Federal air pollution control regulations, and other permanent and enforceable reductions (CAA section 107(d)(3)(E)(iii)). As discussed above, EPA proposes to determine that the modeled attainment in the Hillsborough-Polk Area will be due to emission reductions resulting from compliance with the SO₂ permit limits at Mosaic New Wales and Mosaic Bartow. These limits will become permanent and enforceable measures if EPA finalizes its proposal to approve and incorporate them into the SIP. See section VI, above, for more discussion on these permit limits, the permit conditions proposed for approval and incorporation into the SIP, and the emissions reductions resulting from the limits.

Criterion (4) – The Hillsborough-Polk Area has a fully approved maintenance plan pursuant to section 175A of the CAA.

For redesignating a nonattainment area to attainment, the CAA requires EPA to determine that the area has a fully approved maintenance plan pursuant to section 175A of the CAA. *See* CAA section 107(d)(3)(E)(iv). In conjunction with its request to redesignate the Hillsborough-Polk Area to attainment for the 2010 1-hour SO₂ NAAQS, Florida submitted a draft SIP revision to provide for the maintenance of the 2010 1-hour SO₂ NAAQS for at least 10 years after the effective date of redesignation to attainment. EPA is proposing to determine that this maintenance plan meets the requirements for approval under section 175A of the CAA; however, EPA cannot take final action to approve the maintenance plan unless it finalizes its proposal to approve and incorporate the SO₂ permit limits into the SIP.

a. What is required in a maintenance plan?

Section 175A of the CAA 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 10 years after the Administrator approves a redesignation 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 10 years following the initial 10-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 2010 1-hour SO₂ violations. The 1992 Calcagni Memorandum provides further guidance on the content of a maintenance plan, explaining that a maintenance plan should address five requirements: the attainment emissions inventory; maintenance demonstration; monitoring; verification of continued attainment; and a contingency plan. As is discussed more fully below, EPA is proposing to determine that Florida's

maintenance plan includes all the necessary components and is thus proposing to approve it as a revision to the Florida SIP.

b. Attainment Emissions Inventory

An attainment inventory identifies a level of emissions in the area that is sufficient to attain the NAAQS. As discussed above, modeled attainment of the SO₂ NAAQS in the Hillsborough-Polk Area will be due to emissions reductions resulting from compliance with the SO₂ permit limits at Mosaic New Wales and Mosaic Bartow. Because the permit limits are not state-enforceable until August 31, 2019, Florida based its attainment emissions inventory on projected emissions from the year after the permit limits become state-enforceable (i.e., 2020) rather than on actual emission levels that reflect complete implementation of the emission reduction measures.²⁵

The largest point sources of SO₂ in or near the Hillsborough-Polk Area are Mosaic New Wales and Mosaic Bartow, which combined, account for over 99 percent of the SO₂ emissions in or near the Area. Florida projected emissions from both sources to 2020 by first analyzing the average utilization factors (i.e., the ratios of historical actual to allowable emissions rates) for the SAPs from 2012-2016. Over this time period, both sources emitted between approximately 60 percent and 75 percent of each facility's total allowable emissions rate. FDEP selected the high end of this range (75 percent) as the utilization factor and then applied it to the 2020 allowable emissions rate of 4,774 tpy and 4,818 tpy for Mosaic New Wales and Mosaic Bartow, respectively, to project 2020 actual emissions for both Mosaic sources. Tables 5 and 6 below provide for the historic emissions data (i.e., actuals, allowables, and the average percentage of

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²⁵ See Tables 5 and 6 for Mosaic New Wales and Mosaic Bartow, respectively, and Appendix L in Florida's draft redesignation request and maintenance plan submittal.

allowables) for both facilities as well as 2020 allowables and 2020 projected actuals. The projected 2020 actual emissions for Mosaic New Wales and Mosaic Bartow are 3,581 tpy and 3,614 tpy, respectively, resulting in total point source projected actual emissions of 7,195 tons.

Table 5 - Mosaic New Wales Historic Emissions and 2020 Projected Actuals Emissions Inventory

2012-2016 Historic Emissions				2020 Emissions	
Unit	Average Annual Actual SO ₂ Emissions	Annual Allowable SO ₂ Emissions (tons)	Average Percentage of Allowables Emitted	Allowables	Projected Actuals (75 Percent of 2020 Allowables)
SAP 1	1,292	2,172	59.45%	4,774	3,581
SAP 2	1,517	2,172	69.81%		
SAP 3	1,397	2,172	64.32%		
SAP 4	1,532	2,117	72.36%		
SAP 5	1,394	2,117	65.86%		

Table 6 - Mosaic Bartow Historic Emissions and 2020 Projected Actuals Emissions Inventory

2012-2016 Historic Emissions				2020 Emissions	
Unit	Average	Annual	Average	Allowables	Projected
	Annual	Allowable	Percentage		Actuals (75
	Actual SO ₂	SO_2	of		Percent of
	Emissions	Emissions	Allowables		2020
		(tons)	Emitted		Allowables)
SAP 1	1,315	1,897	69.33%	4,818	3,614
SAP 2	1,308	1,897	68.94%		
SAP 3	1,336	1,897	70.43%		

Table 7 includes the complete inventory of all source categories for the 2020 attainment year. A discussion of the development of the 2020-2032 projections is found in the next section.

Table 7 – 2020 Projected Emissions Inventory by Source Category

Source Type	Projected 2020 SO₂ Emissions		
	(tons)		
Point	7,195		
Area	16.97		
Non-Road	0.32		
On-Road	1.30		
Total	7,213.59		

Maintenance Demonstration c.

Maintenance of the 2010 1-hour SO₂ standard is demonstrated either by showing that future emissions will not exceed the level of the attainment emissions inventory year or by modeling to show that the future mix of sources and emission rates will not cause a violation of the NAAQS. As discussed in the SO₂ Nonattainment Area Guidance, an EPA-approved demonstration of attainment that relies on air quality dispersion modeling using maximum allowable emissions, such as Florida's modeling, can generally be expected to demonstrate that the standard will be maintained for the requisite 10 years and beyond without regard to any changes in operation rate of the pertinent sources that do not involve increases in maximum allowable emissions.²⁶ EPA believes that the Hillsborough-Polk Area will continue to maintain the 2010 1-hour SO₂ standard through year 2032 because the relevant sources are required to comply with the permit limits that air quality modeling shows will maintain the standard.

To evaluate maintenance through 2032 and satisfy the 10-year interval required in CAA section 175A, Florida elected to prepare projected emissions inventories for 2020-2032. The emissions inventories are composed of the following general source categories: point, area, non-

²⁶ See SO₂ Nonattainment Area Guidance at p.67.

road mobile, and on-road mobile. The emissions inventories were developed consistent with EPA guidance and are summarized in Table 8.

Florida estimated 2020 point source emissions as discussed above and held those emissions steady through 2032 because it is not aware of and does not anticipate any future development within the Hillsborough-Polk Area that would increase SO₂ emissions. Furthermore, following achievement of the emission levels that Florida demonstrated yield attainment, actual emissions from Mosaic New Wales and Mosaic Bartow must remain at or below these levels.

Florida estimated on-road mobile emissions utilizing the most recent version of EPA's Motor Vehicle Emission Simulator (MOVES2014a). The State developed MOVES inputs for the 2017 base year using county-level traffic modeling from the Florida Department of Transportation and vehicle population information from the Florida Department of Highway Safety and Motor Vehicles (FLDHSMV). Where county-level data was not available, FDEP used MOVES default data. To develop MOVES inputs for future years, FDEP calculated the linear trend of vehicle population growth using FLDHSMV data from 2008 to 2018 and projected it to future years. FDEP apportioned the Hillsborough County and Polk County results of the MOVES2014a model runs for each year to the Hillsborough-Polk Area by using the fraction of the county land area contained within the boundaries of the Hillsborough-Polk Area.²⁷

Estimates for the projected future emissions inventories for area and non-road categories were calculated by multiplying the area and non-road 2014 NEI data²⁸ by the projected increase in population in Hillsborough and Polk Counties in 2020 and each interim year. The population

²⁷ See Table 3 in Appendix L for summarize land area and MOVES2014a data.
 ²⁸ See Table 5 in Appendix L for summarize 2014 NEI emissions data for area and non-road source categories.

data for 2014 and 2017 were obtained from the US Census Bureau. Population projections for 2020 through 2032 were developed by the Florida Bureau of Economic and Business Research. For years where projections were not available, the projections were interpolated.²⁹ County level emissions were apportioned to the Hillsborough-Polk Area using the fraction of the county land area within the Hillsborough-Polk Area boundary.

Florida compared projected emissions for the final year of the maintenance plan (2032) to the 2020 projected actuals emissions inventory and compared interim years to the 2020 projected actuals inventory to demonstrate continued maintenance of the 2010 1-hour SO₂ standard. For additional information regarding the development of the projected inventories, see Florida's February 15, 2019, draft SIP submittal.

Table 8 – Projected Future Emissions Inventories for the Hillsborough-Polk Area

Source Type	Projected 2020 SO ₂ Emissions (tons)	Projected 2023 SO ₂ Emissions (tons)	Projected 2026 SO ₂ Emissions (tons)	Projected 2029 SO ₂ Emissions (tons)	Projected 2032 SO ₂ Emissions (tons)
Point	7,195	7,195	7,195	7,195	7,195
Area	16.97	17.83	18.66	19.44	20.16
Non-road	0.32	0.33	0.35	0.37	0.38
On-road	1.30	1.27	1.22	1.22	1.22
Total	7,213.59	7,214.43	7,215.23	7,216.03	7,216.76

In situations where local emissions are the primary contributor to nonattainment, such as the Hillsborough-Polk Area, if the future projected emissions in the nonattainment area remain at or below the baseline emissions in the nonattainment area, then the related ambient air quality standards should not be violated in the future. Florida has projected emissions as described

²⁹ Population data and projections are summarized in Table 4 in Appendix L.

previously, and these projections indicate that emissions in the Hillsborough-Polk Area will remain at nearly the same levels as those in the attainment year inventory for the duration of the maintenance plan. While these projections include a very small increase in area and nonroad emissions from 2020 to 2032 (3.25 tons), the increase is negligible when compared to the total emissions inventory, and EPA does not believe that this projected increase should cause a violation of the 2010 1-hour SO₂ NAAQS through 2032. This belief is supported by the fact that Florida does not anticipate any future development within the Hillsborough-Polk Area that could potentially increase SO₂ emissions and the fact that any increases in actual emissions from Mosaic New Wales or Mosaic Bartow must remain below their permitted levels. Furthermore, any potential future SO₂ emissions sources that may locate in or near the Area would be required to comply with the FDEP's approved NSR permitting programs to ensure that the Area will continue to meet the NAAQS.

d. Monitoring Network

As noted above, the Hillsborough-Polk Area was designated nonattainment based on air dispersion modeling; there is no ambient air monitor in the Area. Therefore, the maintenance plan does not contain provisions for continued operation of air quality monitors to verify attainment status. As discussed in the following section, Florida will verify continued attainment using emissions data from Mosaic New Wales and Mosaic Bartow and an evaluation of air dispersion modeling inputs.

e. Verification of Continued Attainment

The State of Florida, through FDEP, has the legal authority to enforce and implement all measures necessary to attain and maintain the NAAQS. Section 403.061(35), Florida Statutes,

authorizes the Department to "exercise the duties, powers, and responsibilities required of the state under the federal Clean Air Act." This includes implementing and enforcing all measures necessary to attain and maintain the NAAQS.

Because there is no ambient air SO₂ monitor in the Hillsborough-Polk Area, Florida will verify continued attainment of the 2010 1-hour SO₂ standard through an annual review of emissions data and air dispersion modeling inputs and assumptions for Mosaic New Wales and Mosaic Bartow. Florida will use emissions data from the required AOR submittals from both facilities to verify continued compliance with the permitted limits used to model attainment of the NAAQS in the Area. Actual emissions must remain below permitted levels, which will be made permanent and federally-enforceable if EPA finalizes its proposal to approve and incorporate the permit limits into the SIP.

Florida will evaluate the inputs and assumptions used to model attainment by assessing emissions data and basic air dispersion inputs for the Area on an annual basis. Prior to each annual review, FDEP will contact EPA to discuss the emissions data and air dispersion modeling inputs and assumptions necessary for evaluation. FDEP will verify attainment using the emissions data and air dispersion modeling inputs and assumptions identified by EPA as a result of coordination with FDEP. FDEP anticipates that the inputs and assumptions may include stack parameters for all modeled sources; significant changes to land use in the area; a limited review of meteorology; changes in operation that lead to a temporal or spatial distribution of emissions; onsite construction that change building configuration/dimensions or add new buildings; changes in fuel that would alter emissions; and changes in ambient background concentrations used in the cumulative modeling analysis.

Based on its review of source emissions data and air dispersion modeling inputs and assumptions, FDEP will provide an annual report to EPA on or before July 1st that certifies whether the Hillsborough-Polk Area is continuing to attain the 2010 1-hour SO₂ NAAQS. This annual report will provide: 1) the status of ongoing compliance with the SO₂ permit limits for Mosaic New Wales and Mosaic Bartow; 2) a review of annual emissions data for these facilities; 3) a review of the air dispersion modeling inputs and assumptions identified by EPA as a result of coordination with FDEP; 4) a certification that there are no changes in the air dispersion modeling inputs and assumptions that could result in a modeled violation; and 5) all supporting documentation and data evaluated by FDEP to prepare its annual report.

If FDEP certifies that there are no changes in the modeling inputs and assumptions that could result in modeled violations, and EPA concurs, no additional action or information is necessary to verify continued attainment. If FDEP or EPA identifies a change in the modeling inputs and assumptions that could cause a modeled violation, FDEP, in coordination with EPA, will further evaluate the modeling inputs and assumptions and complete this evaluation no later than 30 days after identifying the changes. If this evaluation continues to indicate that a modeled violation could occur, FDEP will conduct air dispersion modeling no later than 30 days after completing the evaluation. If the revised model does not produce a modeled violation, then no additional action or information is necessary to verify continued attainment. If the revised model produces a modeled violation of the 2010 1-hour SO₂ standard within the nonattainment area, the State will implement the relevant contingency measures as discussed below.

f. Contingency Measures in the Maintenance Plan

Section 175A of the CAA requires that a maintenance plan include 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, and a time limit for action by the state. In cases where attainment revolves around compliance of a single source or a small set of sources with emissions limits shown to provide for attainment, EPA interprets "contingency measures" to mean that the state agency has a comprehensive program to identify sources of violations of the SO₂ NAAQS and to undertake aggressive follow-up for compliance and enforcement, including expedited procedures for establishing enforceable consent agreement pending the adoption of revised SIPs.³⁰ A state should also identify specific indicators to be used to determine when the contingency measures need to be implemented. The maintenance plan must include a requirement that a state will implement all measures with respect to control of the pollutant that were contained in the SIP before redesignation of the area to attainment in accordance with section 175A(d).

The contingency plan included in the maintenance plan contains triggers to determine when contingency measures are needed and what kind of measures should be used. The Title V operating permits for Mosaic New Wales and Mosaic Bartow require the facilities to report any non-compliance with permit conditions or limitations.³¹ Upon receipt of such a report from

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³⁰ See SO₂ Nonattainment Area Guidance at p.69. FDEP has an active compliance and enforcement program to address violations. FDEP will continue to operate this program to identify sources of violations of the SO₂ NAAQS and to undertake an aggressive follow-up for compliance and enforcement, including expedited procedures for establishing enforceable consent agreements pending the adoption of revised SIPs. FDEP commits to adopt and expeditiously implement necessary corrective actions in the event of a violation.

³¹ This reporting requirement is detailed in Appendix RR2(b) and (c) in the Title V permits as follows: "b. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information: (1)

Mosaic New Wales and/or Mosaic Bartow that identifies noncompliance with the SO₂ permit limits, FDEP will immediately begin a 30-day evaluation period to diagnose the cause of noncompliance. This will be followed by a 30-day consultation period with Mosaic New Wales and/or Mosaic Bartow to develop and implement operational changes identified during the consultation period to prevent any future noncompliance with the SO₂ permit limits. These changes could include, but would not be limited to, physical or operational reduction of production capacity, as appropriate. Any necessary changes would be implemented as soon as practicable, with at least one measured implemented during the full system audit implemented within 18-24 months of the noncompliance with the SO₂ permit limits, in order to bring the Area into attainment as expeditiously as possible.

FDEP would rely on its authority outlined in Rule 62-4.080, F.A.C., which expressly authorizes FDEP to require the permittee to conform to new or additional conditions if there is a showing of any change in the environment or surrounding conditions that requires a modification to conform to applicable air quality standards. Depending on the present circumstances, FDEP would exercise this authority to work expeditiously with Mosaic New Wales and Mosaic Bartow to make necessary permit modifications. If a permit modification is deemed necessary, FDEP would issue a final permit within the statutory timeframes in Sections 120 and 403, Florida

description of and cause of noncompliance; and (2) The period of noncompliance, i

A description of and cause of noncompliance; and (2) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damaged which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit. c. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly." "Immediately" is defined in Appendix RR(d) as "the same day, if during a workday (i.e., 8:00 a.m. -5:00 p.m.), or the first business day after the incident, excluding weekends and holidays."

Statutes, and any new permit limits required by such a permit would be submitted to EPA as a SIP revision.

If revised air dispersion modeling performed during the verification of continued attainment process produces a violation of the 2010 1-hour SO₂ standard due to changes in modeling inputs and assumptions, FDEP will immediately begin a 30-day evaluation period to diagnose the cause of the modeled violation, including consultation with any emission source(s) that FDEP believes may be a cause of the modeled violation. At the completion of this evaluation period, FDEP will begin to take necessary measures to remedy the modeled violation of the 2010 1-hour SO₂ standard, which may include mandating physical or operational changes at emission sources. Any necessary changes would be implemented as soon as practicable, with at least one measure implemented within 18-24 months of the modeled violation, in order to bring the area into modeled attainment as expeditiously as possible.

EPA has preliminarily concluded that the maintenance plan adequately addresses the five basic components of a maintenance plan: the attainment emissions inventory; maintenance demonstration; monitoring; verification of continued attainment; and a contingency plan.

Therefore, EPA proposes to determine that the maintenance plan for the Area meets the requirements of section 175A of the CAA and proposes to incorporate the maintenance plan into the Florida SIP. EPA cannot take final action to approve the maintenance plan unless it finalizes its proposal to approve and incorporate the SO₂ permit limits into the SIP.

VIII. What is EPA's Analysis of the Redesignation Request for the Mulberry Area?

A. Background

On January 9, 2018 (effective April 9, 2018), EPA designated the Mulberry Area as unclassifiable for the 2010 1-hour SO₂ NAAQS. *See* 83 FR 1098. EPA designated the Area as unclassifiable based on uncertainty regarding the potential for SO₂ emissions from Mosaic Bartow to contribute to the Hillsborough-Polk Area. EPA's rationale for this designation is outlined in the TSD associated with EPA's designation for the Mulberry Area.³²

B. Criteria for Redesignating an Area from Unclassifiable to Attainment/Unclassifiable

Section 107(d)(3) of the CAA provides the framework for changing the area designations for any NAAQS pollutants. Section 107(d)(3)(A) provides that the Administrator may notify the Governor of any state that the designation of an area should be revised "on the basis of air quality data, planning and control considerations, or any other air quality-related considerations the Administrator deems appropriate." The Act further provides in section 107(d)(3)(D) that even if the Administrator has not notified a state Governor that a designation should be revised, the Governor of any state may, on the Governor's own motion, submit a request to revise the designation of any area, and the Administrator must approve or deny the request.

When approving or denying a request to redesignate an area, EPA bases its decision on the air quality data for the area as well as the considerations provided under section 107(d)(3)(A). For the 1-hour SO₂ NAAQS, EPA may also base its decision on relevant modeling analyses as discussed in section VII.C, above. In keeping with section 107(d)(1)(A), areas that are redesignated to attainment/unclassifiable must meet the requirements for

³² See Chapter 9 of the Technical Support Document for the Round 3 Designations for the 2010 1-Hour SO₂ NAAQS located in the docket for the designation at Docket ID No. EPA-HQ-OAR-2017-0003-0635.

³³ While CAA section 107(d)(3)(E) also lists specific requirements for redesignations, those requirements only apply to redesignations of nonattainment areas to attainment and, therefore, are not applicable in the context of a redesignation of an area from unclassifiable to attainment/unclassifiable.

attainment areas and thus must meet the relevant NAAQS.³⁴ In addition, the area must not contribute to ambient air quality in a nearby area that does not meet the NAAQS.

C. EPA's Rationale for Proposing to Redesignate the Mulberry Area

As noted above, EPA designated the Mulberry Area as unclassifiable due to uncertainty regarding the potential contribution of emissions from Mosaic Bartow to the Hillsborough-Polk Area. After EPA finalized the designation, FDEP established permits requiring catalyst installation and compliance with the SO₂ permit limits for Mosaic New Wales and Mosaic Bartow. As discussed above, EPA has reviewed the modeling based on CEVs which, when adjusted, provide for the 24-hour adjusted emission caps of 1,100 lb/hr and 1,138 lb/hr for New Wales and Bartow, respectively. To provide for an additional margin of safety in its air dispersion modeling, Florida slightly lowered the maximum 24-hour emission caps to establish final multi-unit permit limits of 1,090 lb/hr and 1,100 lb/hr for New Wales and Bartow, respectively. EPA believes that the modeling results relying on the slightly lowered permit limits appropriately characterize the air quality in the Mulberry Area and that this modeling demonstrates that the Mulberry Area will have attained the 1-hour SO₂ standard as a result of compliance with these limits at Mosaic New Wales and Mosaic Bartow. Therefore, EPA proposes to redesignate the Mulberry Area to attainment/unclassifiable for the SO₂ NAAQS. EPA cannot redesignate the Mulberry Area to attainment/unclassifiable unless it finalizes its

³⁴ Historically, EPA has designated most areas that do not meet the definition of nonattainment as "unclassifiable/attainment." EPA has reversed the order of the label to be "attainment/unclassifiable" to better convey the definition of the designation category and so that the category is more easily distinguished from the separate unclassifiable category. *See*, *e.g.*, 83 FR 1098, 1099 (January 9, 2018) and 83 FR 25776, 25778 (June 4, 2018). EPA reserves the "attainment" category for when EPA redesignates a nonattainment area to attainment.

proposal to approve and incorporate the permit limits and associated compliance and monitoring parameters into the SIP.

IX. What is the Effect of EPA's Proposed Actions?

Approval and incorporation of the Mosaic New Wales and Mosaic Bartow permit conditions described in Section VI, above, into the SIP would make them permanent and federally enforceable.

Approval of the base-year emissions inventory would satisfy the requirements of CAA section 173(c)(3) for the Hillsborough-Polk Area and incorporate that inventory into the SIP. Concurrence with Florida's certification that prior EPA rulemaking has approved NNSR rules that require NNSR for the Hillsborough-Polk Area for so long as the Area is designated nonattainment would satisfy CAA section 173(c)(5).

Approval of Florida's redesignation request for the Hillsborough-Polk Area would change the legal designation of the portions of Hillsborough and Polk Counties that are within the Hillsborough-Polk Area, as found at 40 CFR part 81, from nonattainment to attainment for the 2010 1-hour SO₂ NAAQS. Approval of Florida's associated maintenance plan SIP revision would incorporate a plan for maintaining the 2010 1-hour SO₂ NAAQS in the Hillsborough-Polk Area through 2032 into the SIP.

Lastly, approval of Florida's redesignation request for the Mulberry Area would change the legal designation of the portion of Polk County that is within the Mulberry Area, as found at 40 CFR part 81, from unclassifiable to attainment/unclassifiable for the 2010 1-hour SO₂ NAAQS.

X. Incorporation by Reference

EPA is proposing to include in a final EPA rule regulatory text that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, EPA is proposing to incorporate by reference into Florida's SIP the following conditions from Permit No. 1050046-050-AC issued by FDEP to Mosaic Bartow with an effective date of July 3, 2017: (1) Section III, Subsection A, Specific Condition 3 (as administratively corrected by Permit No. 1050046-063-AC with an effective date of January 11, 2019);³⁵ (2) Section III, Subsection A, Specific Condition 4;³⁶ and (3) Section III, Subsection A, Specific Condition 5.³⁷ In accordance with requirements of 1 CFR 51.5, EPA is also proposing to incorporate by reference into Florida's SIP the following conditions from Permit No. 1050059-106-AC issued by FDEP to Mosaic New Wales with an effective date of October 30, 2017: (1) Section III, Subsection A, Specific Condition 3;³⁸ (2) Section III, Subsection A, Specific Condition 4 (as administratively corrected

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³⁵ This provision states: "SO₂ Emissions Limit: The following emission limit applies to the Sulfuric Acid Plant (SAP) Nos. 1, 2, 3, 4 & 5: a. When all five SAPs are in operation within the same 24-hour block averaging period, a cap of 1,090 lb SO₂/hour, 24-hour block average (6:00 a.m. to 6:00 a.m.) is applicable; and, b. The cap of 1,090 lb SO₂/hour, 24-hour block average (6:00 a.m. to 6:00 a.m.) applies in scenarios when any combination of any number of the SAPs are not in operation and when any number of the SAPs are in operation. [Rules 62-4.030, General *Prohibition*, F.A.C. & Rule 62-4.210, *Construction Permits*, F.A.C.; Application No. 1050059-106-AC; and, Administrative Permit Correction Application No. 1050059-114-AC.]"

³⁶ This provision states: "<u>Initial Compliance</u>: These emission units shall use certified SO₂ CEMS data to demonstrate initial compliance with the new SO₂ emission limit. [Rules 62-4.070(1)&(3), *Reasonable Assurance*, F.A.C.; and, Application Nos. 1050059-103-AC & 1050059-106-AC.]"

³⁷ This provision states: "<u>Recordkeeping</u>: The permittee shall keep records of the initial compliance demonstration. The records shall include the SO₂ CEMS data along with the sulfuric acid production rate (TPH, tons per hour) during the demonstration. Any reports shall be prepared in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310(10), F.A.C.; and, Application Nos. 1050059-103-AC & 1050059-106-AC.]"

³⁸ This provision states: "<u>SO₂ Emissions Limit</u>: The following emission limit applies to the Sulfuric Acid Plant (SAP) Nos. 4, 5 & 6: a. When all five SAPs are in operation within the same 24-hour block averaging period, a cap of 1,100 lb SO₂/hour, 24-hour block average (6:00 a.m. to 6:00 a.m.) is applicable; and, b. The cap of 1,100 lb SO₂/hour, 24-hour block average (6:00 a.m. to 6:00 a.m.) applies in scenarios when any combination of any number of the SAPs are not in operation and when any number of the SAPs are in operation. [Rules 62-4.030, General *Prohibition*, F.A.C. & Rule 62-4.210, *Construction Permits*, F.A.C.; Application No. 1050046-050-AC; and, Administrative Permit Correction Application No. 1050046-063-AC.]"

by Permit No. 1050059-114-AC with an effective date of January 11, 2019);³⁹ and (3) Section III, Subsection A, Specific Condition 5.⁴⁰ EPA has made, and will continue to make, these materials generally available through www.regulations.gov and at EPA Region 4 office (please contact the person identified in the "For Further Information Contact" section of this preamble for more information).

XI. Proposed Actions.

EPA is proposing to approve SIP revisions provided by Florida related to the 2010 1-hour SO₂ NAAQS. Specifically, EPA is proposing to approve Florida's December 1, 2017, SIP revision (as supplemented through the February 15, 2019, draft SIP revision) which includes SO₂ permit limits and associated compliance and monitoring provisions for Mosaic New Wales and Mosaic Bartow. The December 1, 2017, SIP revision also includes a modeling analysis to demonstrate that the Hillsborough-Polk Area will attain the SO₂ NAAQS as a result of compliance with these permit limits.

EPA is also proposing to approve, through parallel processing, a draft February 15, 2019 request to redesignate the Hillsborough-Polk Area to attainment for the SO₂ NAAQS and associated SIP revision containing the State's plan for maintaining attainment of the 2010 1-hour SO₂ standard in that Area. Florida also submitted draft SIP revisions on February 15, 2019, to

³⁹ This provision states: "<u>Initial Compliance</u>: These emission units shall use certified SO₂ CEMS data to demonstrate initial compliance with the new SO₂ emission limit. [Rules 62-4.070(1)&(3), *Reasonable Assurance*, F.A.C.; and, Application No. 1050046-050-AC.]"

⁴⁰This provision states: "<u>Recordkeeping</u>: The permittee shall keep records of the initial compliance demonstration. The records shall include the SO₂ CEMS data along with the sulfuric acid production rate (TPH, tons per hour) during the demonstration. Any reports shall be prepared in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310(10), F.A.C.; and, Application No. 1050046-050-AC.]"

revise the modeling analysis in the 2017 SIP revision, provide a base-year emissions inventory for the Area, and certify that the Area meets NNSR requirements. In addition, EPA is proposing to approve, through parallel processing, Florida's draft February 15, 2019 request to redesignate the Mulberry Area to attainment/unclassifiable for the 2010 SO₂ NAAQS.

EPA is proposing to approve these requests and SIP revisions because the Agency has made the preliminary determination that they meet the requirements of the CAA.

XII. 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) as well as the redesignation of an area to attainment/unclassifiable 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 or to attainment/unclassifiable 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 or attainment/unclassifiable, respectively. Moreover, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. *See* 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, these proposed actions merely propose to approve state law as meeting Federal requirements and do not impose additional requirements beyond those imposed by state law. For this reason, these proposed actions:

- Are not significant regulatory actions 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);
- Are not Executive Order 13771 (82 FR 9339, February 2, 2017) regulatory actions because redesignations and SIP approvals are exempted under Executive Order 12866;
- Do not impose information collection burdens 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 mandates 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

• Will not have disproportionate human health or environmental effects under Executive Order 12898 (59 FR 7629, February 16, 1994).

These proposed actions do not 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, these proposed actions do not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), nor will they impose substantial direct costs on tribal governments or preempt tribal law.

List of Subjects in 40 CFR Part 52

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

List of Subjects in 40 CFR Part 81

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

Authority: 42 U.S.C. 7401 et seq.

Dated: August 27, 2019 Mary S. Walker,

Regional Administrator,

Region 4.

[FR Doc. 2019-19413 Filed: 9/6/2019 8:45 am; Publication Date: 9/9/2019]