



**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Parts 52 and 81**

**[EPA-R07-OAR-2025-0818; FRL-12901-01-R7]**

**Air Plan Approval; IA, Muscatine; 2010 1-Hour SO<sub>2</sub> Maintenance  
Plan and Redesignation**

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

**ACTION:** Proposed rule.

**SUMMARY:** The Environmental Protection Agency (EPA) is proposing to redesignate the nonattainment area in Muscatine County, Iowa to attainment for the 2010 1-hour sulfur dioxide (SO<sub>2</sub>) National Ambient Air Quality Standard (NAAQS). The EPA is also proposing to approve Iowa's maintenance plan for the 2010 1-hour SO<sub>2</sub> NAAQS for the Muscatine nonattainment area and approve modifications to source-specific permits in the Iowa State Implementation Plan (SIP). The EPA's proposed approval of this rule revision is being done in accordance with the requirements of the Clean Air Act (CAA).

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

**ADDRESSES:** You may send comments, identified by Docket ID No. EPA-R07-OAR-2025-0818 to <https://www.regulations.gov>. Follow the online instructions for submitting comments.

*Instructions:* All submissions received must include the Docket ID No. for this rulemaking. Comments received will be posted without change to <https://www.regulations.gov>, including any personal information provided. For detailed instructions on

sending comments and additional information on the rulemaking process, see the "Written Comments" heading of the **SUPPLEMENTARY INFORMATION** section of this document.

**FOR FURTHER INFORMATION CONTACT:** Bethany Olson, Environmental Protection Agency, Region 7 Office, Air Quality Planning Branch, 11201 Renner Boulevard, Lenexa, Kansas 66219; telephone number: (913) 551-7905; email address: olson.bethany@epa.gov.

**SUPPLEMENTARY INFORMATION:** Throughout this document "we," "us," and "our" refer to the EPA.

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## **I. Written Comments**

Submit your comments, identified by Docket ID No. EPA-R07-OAR-2025-0818, at <https://www.regulations.gov>. Once submitted, comments cannot be edited or removed from Regulations.gov. The 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. The 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 <https://www.epa.gov/dockets/commenting-epa-dockets>.

## **II. What is Being Addressed in this Document?**

The EPA is proposing to approve a SIP revision and redesignation request submitted on November 17, 2021, by the Iowa Department of Natural Resources (IDNR). The EPA is proposing to take the following three separate but related actions: (1) to add new or revised permits for Muscatine area sources into the Iowa SIP and remove certain air construction permits from the SIP; (2) to approve Iowa's maintenance plan for the 2010 1-hour SO<sub>2</sub> NAAQS in the Muscatine area and incorporate it into the SIP; and (3) to redesignate the Muscatine area to attainment for the 2010 1-hour SO<sub>2</sub> NAAQS.

The EPA proposes to find that the State's submittal meets the requirements for redesignation under the CAA and the revisions do not interfere with any applicable requirement concerning attainment and reasonable further progress. The full State submission is included in the docket for this action.

## **III. Have the Requirements for Approval of a SIP Revision Been**

## **Met?**

The State submission has met the public notice requirements for SIP submissions in accordance with 40 CFR 51.102. The submission also satisfied the completeness criteria of 40 CFR part 51, appendix V. The State provided public notice on this SIP submission from August 20, 2021, to September 20, 2021, and held a public hearing on September 20, 2021. IDNR received and responded to written comments from two sources, and included the comments and responses in its submission. In addition, as explained above and in more detail in the technical support document (TSD) which is part of this document, the revision meets the substantive SIP requirements of the CAA, including section 110 and implementing regulations.

## **IV. What is the Background for the EPA's Proposed Actions?**

### *A. Nonattainment Designation*

On June 2, 2010 (75 FR 35520), the EPA signed the revised the primary SO<sub>2</sub> NAAQS, establishing a new 1-hour standard of 75 parts per billion (ppb). Under the EPA's regulations at 40 CFR part 50, the 2010 1-hour SO<sub>2</sub> NAAQS is met at a monitoring site when the 3-year average of the annual 99<sup>th</sup> 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).<sup>1</sup> 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

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<sup>1</sup> See 40 CFR 50.17.

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.<sup>2</sup>

Following promulgation of a new or revised NAAQS, the EPA is required by CAA section 107(d) to designate areas throughout the nation as attaining or not attaining the NAAQS, or as unclassifiable. On August 5, 2013, the EPA designated a portion of Muscatine County, Iowa, as nonattainment for the 2010 primary 1-hour SO<sub>2</sub> NAAQS (78 FR 47191), effective October 4, 2013. The designation was based on air quality monitoring data from 2009-2011 showing violations of the NAAQS. Pursuant to CAA sections 172(a)(2) and 192(a), this action established an attainment date five years after the effective date of the final action designating the area as nonattainment for the 2010 SO<sub>2</sub> NAAQS (*i.e.*, by October 4, 2018).

#### *B. Relevant Historical SIP Actions*

The EPA's 2013 SO<sub>2</sub> nonattainment designation triggered an obligation for Iowa to submit a SIP for the Muscatine SO<sub>2</sub> nonattainment area (NAA) addressing the requirements of CAA sections 110, 172(c) and 191-192 within 18 months following the October 4, 2013, effective date of designation (*i.e.*, by April 4, 2015). The EPA did not receive an attainment SIP revision for

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<sup>2</sup> 40 CFR part 50, appendix T, section 3(b).

the Muscatine NAA by the April 6, 2015 deadline and subsequently on March 18, 2016, the EPA published a finding of failure to submit indicating that Iowa did not submit the required SO<sub>2</sub> attainment plan (81 FR 14736).

Iowa submitted the required attainment plan submittal on May 26, 2016. The EPA proposed approval of Iowa's attainment plan on August 24, 2017 (82 FR 40086). The EPA published a supplemental notice of proposed rulemaking (SNPRM) on January 9, 2018, and included additional information in the docket in response to public comments suggesting that insufficient information was provided in the docket to allow the reviewer to fully evaluate the attainment plan and the EPA's proposed approval (83 FR 997). The EPA published a second SNPRM on June 22, 2020, to provide additional detail regarding the technical support and policy rationale for approving the attainment demonstration and control strategy, as well as the underlying state permits as the enforceable mechanism of the control strategy (85 FR 37405). The EPA issued a final approval of Iowa's attainment plan on November 17, 2020 (85 FR 73218).

Iowa's approved 2016 attainment plan provided a modeled attainment demonstration and satisfied the required nonattainment planning requirements mentioned above for the Muscatine NAA. In accordance with CAA title I, part D, subpart 1, the revision included a 2011 base-year and projection-year emissions inventories, a control strategy and air quality modeling demonstration, a reasonable available control

measures/reasonably available control technology (RACM/RACT) analysis, a reasonable further progress (RFP) analysis, and contingency measures. The plan also included nonattainment new source review (NNSR) regulations previously approved by the EPA.<sup>3</sup>

As discussed in sections V. and VI., below, the attainment plan included permit conditions to reduce SO<sub>2</sub> emissions at three facilities in the NAA: Grain Processing Corporation (GPC), Muscatine Power and Water (MPW), and Monsanto Company- Muscatine (Monsanto), now Bayer CropScience LP.<sup>4</sup> The conditions are contained in air construction permits issued by IDNR and were approved into the SIP as part of the attainment plan approval.<sup>5</sup> The air construction permits include specified RACT SO<sub>2</sub> emission limits, compliance monitoring, and recordkeeping and reporting requirements at GPC, MPW, and Monsanto. The RACT limits establish the maximum permitted allowable emission rate for each emission point, and Iowa based its modeled attainment demonstration on these conditions.

As a part of the EPA's approval of IDNR's attainment plan, air construction permits for the three NAA sources were incorporated into the Iowa SIP, including 52 GPC permits, four MPW permits, and two Monsanto permits. The control strategy for each source is described below.

GPC, a corn wet milling facility, was the largest source of

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<sup>3</sup> 79 FR 27763, May 15, 2014.

<sup>4</sup> The Monsanto facility in Muscatine is now under the ownership of Bayer CropScience LP. This document retains use of the Monsanto name for consistency with the Iowa submittal. Bayer CropScience L.P. assumed all construction permits for Monsanto that are relevant to this action.

<sup>5</sup> 85 FR 73218, November 17, 2020.

SO<sub>2</sub> within the NAA. At the time of the nonattainment designation, GPC had six coal-fired boilers that generated a majority of its SO<sub>2</sub> emissions, along with a sizeable list of diverse sources identified in the 2016 attainment plan. GPC converted its coal-fired boilers to only natural gas combustion in 2015 to comply with a separate consent order with the State of Iowa. IDNR issued a final air construction permit with a SO<sub>2</sub> limit that restricts these boilers to firing on natural gas only. IDNR also issued air construction permits to GPC that included process changes and the installation of six new scrubbers to further reduce SO<sub>2</sub> emissions.

MPW is a municipal electric generating station with three coal-fired boilers (Units 7, 8, and 9) and an auxiliary boiler that is not capable of burning coal but has the potential to emit SO<sub>2</sub> when firing on distillate fuel oil. IDNR issued air construction permits to MPW requiring a more stringent SO<sub>2</sub> emission limit for Units 7, 8, and 9, and a more stringent SO<sub>2</sub> emission limit for the auxiliary boiler when it is firing fuel oil.

Monsanto is a manufacturer and formulator of herbicides for agricultural use and had one coal-fired boiler (Boiler #8). Iowa issued final air construction permits to Monsanto that required a more stringent SO<sub>2</sub> emission limit for Boiler #8, a new SO<sub>2</sub> emission limit for the CAC Process Flare Burner,<sup>6</sup> and a new provision restricting its fuel use to natural gas only.

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<sup>6</sup> This emission unit is part of the process that produces chloro acetyl chloride (CAC), which is an herbicide intermediate product.

On November 17, 2021, Iowa submitted a revision to its SIP that includes modifications to SIP-approved permits, includes a maintenance plan for the 2010 1-hour primary SO<sub>2</sub> NAAQS, and requests concurrent redesignation of the Muscatine NAA to attainment for the 2010 1-hour primary SO<sub>2</sub> NAAQS. The submitted permit revisions replace some specific conditions that the EPA had previously approved into the SIP for the purpose of demonstrating attainment of the SO<sub>2</sub> standard pursuant to the nonattainment requirements of sections 172, 191, and 192 of the CAA. This request is discussed in more detail in section VI., below.

On January 26, 2022, the EPA proposed to determine that the Muscatine NAA attained the 2010 1-hour SO<sub>2</sub> NAAQS by the applicable attainment date of October 4, 2018 (87 FR 3958). The EPA issued a final determination of attainment by the attainment date for the 2010 1-hour SO<sub>2</sub> NAAQS on April 7, 2022 (87 FR 20329).

### *C. Redesignation to Attainment Criteria*

The CAA outlines the requirements for redesignation of a nonattainment area to attainment. Specifically, CAA section 107(d)(3)(E) allows for redesignation provided that the following criteria have been met: (1) the EPA has determined that the applicable NAAQS has been attained; (2) the applicable SIP has been fully approved by the EPA under CAA section 110(k); (3) the EPA has determined that the improvement in the area's air quality is due to permanent and enforceable reductions in

emissions; (4) the area has a fully approved maintenance plan, including a contingency plan, under CAA section 175A; and (5) the State has met all applicable requirements for the area under CAA section 110 and part D. The EPA has provided direction for how it would consider if these conditions have been met with respect to the 2010 1-hour SO<sub>2</sub> NAAQS in the April 23, 2014 memorandum "Guidance for 1-Hour SO<sub>2</sub> Nonattainment Area SIP Submissions" (2014 SO<sub>2</sub> Guidance).<sup>7</sup>

#### *D. Maintenance Plan Approval Criteria*

CAA section 175A and additional EPA guidance, including the September 4, 1992 memorandum "Procedures for Processing Requests to Redesignate Areas to Attainment" (Calcagni Memo),<sup>8</sup> identify the required elements for an approvable maintenance plan for areas seeking redesignation from nonattainment to attainment. Under CAA section 175A, the plan must demonstrate continued attainment of the applicable NAAQS for at least 10 years after the EPA 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 an additional 10 years following the initial 10-year period. To address the possibility of future NAAQS violations, the maintenance plan must contain contingency measures, as the EPA deems necessary, to assure prompt

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<sup>7</sup> Available in the docket for this action as 2014 SO<sub>2</sub> Guidance and at [https://www.epa.gov/sites/default/files/2016-06/documents/20140423guidance\\_nonattainment\\_sip.pdf](https://www.epa.gov/sites/default/files/2016-06/documents/20140423guidance_nonattainment_sip.pdf).

<sup>8</sup> Available in the docket for this action as Calcagni Memo and at [https://www.epa.gov/sites/default/files/2016-03/documents/calcagni\\_memo\\_-\\_procedures\\_for\\_processing\\_requests\\_to\\_redesignate\\_areas\\_to\\_attainment\\_090492.pdf](https://www.epa.gov/sites/default/files/2016-03/documents/calcagni_memo_-_procedures_for_processing_requests_to_redesignate_areas_to_attainment_090492.pdf).

correction of any future violations of the 2010 1-hour SO<sub>2</sub> NAAQS. The Calcagni Memo provides further guidance on the content of a maintenance plan, explaining that a maintenance plan should address five requirements: (1) an attainment emissions inventory that identifies the level of emissions in the area which is sufficient to attain the NAAQS; (2) a maintenance demonstration that shows future emissions of a pollutant will not exceed the level of the attainment inventory; (3) the continued operation of a monitoring network that conforms to 40 CFR part 58; (4) a means for verifying the continued attainment of the NAAQS; and (5) a contingency plan to correct any violation of the NAAQS in the area following redesignation of the area.

#### **V. What is the EPA's Analysis of the Redesignation Request and Maintenance Plan?**

The EPA's evaluation of Iowa's redesignation request and maintenance plan is based on consideration of the five redesignation criteria provided under CAA section 107(d)(3)(E) and relevant guidance, including the aforementioned 2014 SO<sub>2</sub> Guidance and Calcagni Memo.

##### *A. Criterion (1)—The Muscatine SO<sub>2</sub> Nonattainment Area Has Attained the 2010 1-Hour SO<sub>2</sub> NAAQS*

CAA section 107(d)(3)(E)(i) requires that the EPA determine if a nonattainment area has attained the applicable NAAQS in order to redesignate the area to attainment. The 2014 SO<sub>2</sub> Guidance stipulates that the EPA can interdependently consider two components to support an attainment determination: air

quality monitoring data and air quality modeling data.<sup>9</sup>

The EPA made a determination of attainment by the attainment date for the Muscatine NAA for the 2010 1-hour SO<sub>2</sub> NAAQS in its April 7, 2022 NFRM (87 FR 20329). In that action, the EPA relied upon SO<sub>2</sub> emissions data and trends, relevant air monitoring data and trends, SO<sub>2</sub> monitoring data incorporated with local meteorological data, as well as available modeling information in order to make the determination of attainment under CAA section 179(c).

The EPA also reviewed quality assured monitoring data recorded in the EPA's Air Quality System (AQS) in support of this action. Monitoring data are evaluated in accordance with 40 CFR 50.17 using data analysis procedures specified in 40 CFR part 50, appendix T. If the 3-year design value in the area violates the NAAQS prior to the EPA acting in response to the State's request, the EPA will not take final action to approve the redesignation request.<sup>10</sup> During the 2013-2024 data period, Iowa operated three SO<sub>2</sub> monitoring stations in the Muscatine SO<sub>2</sub> NAA: Greenwood Cemetery (AQS ID 19-139-0016); High School East Campus (AQS ID 19-139-0019); and Musser Park (AQS ID 19-139-0020). All three monitoring sites are located within the city limits of Muscatine in the nonattainment area. The 2022-2024 3-year design value for the Muscatine NAA is 17 ppb and continues to meet the 2010 1-hour SO<sub>2</sub> NAAQS of 75 ppb, as shown in table 1.

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<sup>9</sup> See 2014 SO<sub>2</sub> Guidance, at 62.

<sup>10</sup> See 2014 SO<sub>2</sub> Guidance, at 56.

**Table 1. Muscatine Nonattainment Area SO<sub>2</sub> Monitored Design Values (ppb)**

Site	2011 - 2013	2012 - 2014	2013 - 2015	2014 - 2016	2015 - 2017	2016 - 2018	2017 - 2019	2018 - 2020	2019 - 2021	2020 - 2022	2021 - 2023	2022 - 2024
Greenwood Cemetery	-	101	97	77	45	20	17	15	14	13	-	-
High School East Campus	-	-	128	84	42	22	21	18	18	14	13	13
Musser Park	217	194	158	113	65	34	25	20	21	25	21	17

As shown in table 1, the design values in the Muscatine NAA have significantly decreased since 2013. The 3-year design value for the Muscatine NAA decreased by 90% from 2013 to present. The 2011-2013 design value for the area (composed of the 3-year average of the annual 99th percentile of 1-hour daily maximum SO<sub>2</sub> concentrations) was 217 ppb, while the most recent design value was 17 ppb for 2022-2024.

Iowa removed the Greenwood Cemetery Special Purpose Monitor (SPM) in 2023. The Greenwood Cemetery monitor only had two complete quarters in 2023 and, therefore, does not have a valid design value after 2022. Changes to the SPM network do not require concurrence from the EPA.<sup>11</sup> Iowa continues to operate the High School East Campus SPM and the Musser Park State and Local Air Monitoring Stations (SLAMS) monitors. As discussed in more detail later in this section, Iowa has committed to continue monitoring in this area in accordance with 40 CFR part 58.

According to the 1992 Calcagni Memo, for pollutants such as

<sup>11</sup> See 40 CFR 58.20(f).

SO<sub>2</sub> a small number of monitors is not typically representative of area-wide air quality or areas of highest concentration, and dispersion modeling is generally necessary to evaluate comprehensively sources' impacts.<sup>12</sup> Similarly, the 2014 SO<sub>2</sub> Guidance states that if 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, then air quality dispersion modeling should be conducted to estimate SO<sub>2</sub> concentrations in the area.<sup>13</sup> The EPA does not have conclusive evidence to support that the Muscatine area monitors are sited in the area of maximum ambient SO<sub>2</sub> concentrations. In the 2021 SIP submission, Iowa states it is relying on the modeled attainment demonstration included with the attainment plan to support the determination of attainment. If the air agency has previously submitted a modeled attainment demonstration using allowable emissions, no further modeling is typically needed as long as the source characteristics are still reasonably represented and the submission includes a demonstration that the control strategy in the SIP has been fully implemented.<sup>14</sup> Because Iowa is requesting modifications to source permits relied upon for the modeled attainment demonstration as discussed in section VI, the State provided updated dispersion modeling in its 2021 SIP submission. As described in the maintenance demonstration section below, the 2021 SIP submission included updated modeling

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<sup>12</sup> See Calcagni Memo, at 3.

<sup>13</sup> See 2014 SO<sub>2</sub> Guidance, at 62-63.

<sup>14</sup> *Id.*

for the maximum permitted allowable emissions in the Muscatine area over a 5-year meteorological period. The EPA reviewed the updated demonstration and finds it shows continued attainment of the 1-hour SO<sub>2</sub> NAAQS. Section 3.3 of Iowa's 2021 SIP submission includes a compliance analysis demonstrating that the 2016 attainment plan has been fully implemented and that GPC, MWP, and Monsanto are in compliance with the limits and conditions in the SIP.

Therefore, the EPA's 2022 determination that the area had attained the standard by the attainment date, along with the most recent air quality monitoring data and the 2021 updated air quality modeling, are consistent with this proposed action to redesignate the area. The EPA proposes to find that Iowa has demonstrated that the requirements of CAA section 107(d)(3)(E)(i) have been met. Additional details on the EPA's review of the submitted air quality modeling and SO<sub>2</sub> monitoring trends are contained in the EPA's TSD in the docket for this action.

*B. Criterion (2)—Iowa Has a Fully Approved SIP Under Section 110(k)*

CAA section 107(d)(3)(E)(ii) requires that the EPA fully approve the applicable implementation plan for the area under CAA section 110(k) in order to redesignate that area to attainment. The EPA has fully approved the applicable Iowa SIP for the Muscatine NAA under section 110(k) of the CAA for all requirements applicable for purposes of redesignation. An area

cannot be redesignated to attainment if a required element of the SIP is the subject of a disapproval; a finding of failure to submit, or failure to implement the SIP; or a partial, conditional, or limited approval.<sup>15</sup> As described above, the 2016 attainment plan received final EPA approval on November 17, 2020.<sup>16</sup> The approved elements from the 2016 attainment plan include 2011 base-year and projection-year emissions inventories, a control strategy and air quality modeling demonstration, a reasonable available control measures/reasonably available control technology (RACM/RACT) analysis, a reasonable further progress (RFP) analysis, and contingency measures. The plan also included nonattainment new source review (NNSR) regulations previously approved by the EPA.<sup>17</sup> The EPA proposes to find that Iowa has demonstrated that the requirements of CAA section 107(d)(3)(E)(ii) have been met.

*C. Criterion (3)—The Air Quality Improvement in the Muscatine SO<sub>2</sub> Nonattainment Area Is Due to Permanent and Enforceable Reductions in Emissions*

For redesignating a nonattainment area to attainment, CAA section 107(d)(3)(E)(iii) requires the 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

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<sup>15</sup> See 2014 SO<sub>2</sub> Guidance, at 64.

<sup>16</sup> 85 FR 73218, November 17, 2020.

<sup>17</sup> 79 FR 27763, May 15, 2014.

reductions.

The implementation of multiple permanent and federally enforceable control measures at stationary point sources of SO<sub>2</sub> identified in the EPA-approved 2016 attainment plan resulted in a substantial decrease in SO<sub>2</sub> emissions, and consequently lower ambient SO<sub>2</sub> concentrations in the Muscatine NAA. The attainment SIP control strategy identified three significant sources of SO<sub>2</sub> emissions within the nonattainment area: GPC, MPW, and Monsanto. The control measures and RACT SO<sub>2</sub> emission limits on these sources were implemented through air construction permits issued by IDNR and approved into the SIP as part of the attainment plan approval. Iowa's request includes revisions to specific SIP-approved air permits relied upon for the attainment demonstration, and the EPA is proposing to add new or revised permits for Muscatine area sources into the Iowa SIP and remove certain air construction permits from the SIP as a part of this action. The permit revisions are discussed in more detail in section VI.

The air construction permits include specified control measures at each source. GPC converted its coal-fired boilers to only natural gas combustion in 2015 to comply with a separate consent order with the State of Iowa. The permit includes an SO<sub>2</sub> limit that restricts these boilers to firing on natural gas only. Additionally, GPC implemented process changes to reduce SO<sub>2</sub> emissions from steeping tanks and downstream processes, and installed six new scrubbers. For MPW, the control strategy

relied on a more stringent SO<sub>2</sub> emission limit that works in conjunction with a compliance formula across its three coal-fired boilers (Units 7, 8, and 9), and a more stringent SO<sub>2</sub> emission limit on the auxiliary boiler when it is firing fuel oil. Monsanto converted Boiler #8 from combusting primarily coal to natural gas only and the modified construction permit contains a lower SO<sub>2</sub> RACT limit. Other control measures at Monsanto include an SO<sub>2</sub> emission limit for the CAC Process Flare Burner and a provision restricting its fuel use to natural gas only. The permitted emission limits contained in the air construction permits issued by IDNR are federally enforceable and permanent because the permits are either approved into Iowa's SIP or will be approved into the SIP if finalized as proposed in this action. Permits approved into the State SIP cannot be altered without a formal SIP revision.

Collectively, the implemented controls and lower permitted SO<sub>2</sub> emissions rates at GPC, MPW, and Monsanto resulted in a 98% reduction of actual SO<sub>2</sub> annual emissions from 15,399 tons in 2013 to 236 tons in 2023.<sup>18</sup> As this reduction comes from EPA-approved SIP controls and permitted emission limits, the EPA finds the air quality improvement in the Muscatine NAA to be due to permanent and enforceable reductions in emissions. Additional details on area emissions data for the Muscatine NAA are contained in the EPA's TSD for this action. The EPA proposes to find that Iowa has demonstrated that the requirements of CAA

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<sup>18</sup> See the EPA Region 7 TSD at pp. 7, available in the docket for this action.

section 107(d)(3)(E)(iii) have been met.

*D. Criterion (4)—The Muscatine SO<sub>2</sub> Nonattainment Area Has a Fully Approved Maintenance Plan Pursuant to Section 175A of the CAA*

To redesignate a NAA to attainment, CAA section 107(d)(3)(E)(iv) requires the EPA to determine that the area has a fully approved maintenance plan pursuant to CAA section 175A. The Calcagni Memo 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.<sup>19</sup>

In conjunction with its request to redesignate the Muscatine NAA to attainment for the 2010 1-hour primary SO<sub>2</sub> NAAQS, the State submitted a SIP revision to provide for the maintenance of the 2010 1-hour primary SO<sub>2</sub> NAAQS for at least 10 years after the effective date of redesignation to attainment. The EPA's evaluation of Iowa's maintenance plan is based on consideration of the elements required under CAA section 175A and relevant guidance, including the aforementioned 2014 SO<sub>2</sub> Guidance and Calcagni Memo.

1. Attainment Emissions Inventory

In a maintenance plan, states should develop an attainment inventory to identify the level of emissions in the affected area which is sufficient to attain and maintain the SO<sub>2</sub> NAAQS.<sup>20</sup> This inventory can be used as the basis for future, projected

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<sup>19</sup> See Calcagni Memo, at pp. 8-12.

<sup>20</sup> See 2014 SO<sub>2</sub> Guidance, at 66.

emission inventories that are used to show the area will remain in attainment. Iowa selected 2017 as the attainment year for developing the SO<sub>2</sub> emissions inventory, which is within the attaining design value period (i.e., 2015-2017). Iowa submitted an attainment inventory based on maximum permitted allowable SO<sub>2</sub> emissions for the four sources modeled in the maintenance plan: GPC, MPW, Monsanto, and MidAmerican Energy's Louisa Generating Station (LGS). Although LGS is located outside of the NAA, Iowa included it in its model-based attainment and maintenance demonstrations to ensure that the control strategy would be effective when including the SO<sub>2</sub> emissions from this nearby source. The attainment emissions inventory for modeled sources is provided in table 2.

<b>Table 2. Attainment Emissions Inventory - Maximum Permitted Allowable Emissions for Modeled Sources</b>			
<b>Location</b>	<b>Facility Name</b>	<b>Facility ID</b>	<b>Maximum Permitted Allowable SO<sub>2</sub> Emissions (tons per year)</b>
Inside the NAA	GPC	70-01-004	175
	MPW	70-01-011	5,051
	Monsanto	70-01-008	329
Total			5,555
Outside the NAA	LGS	58-07-001	15,188

Iowa also provided actual SO<sub>2</sub> emissions for other point, nonpoint, onroad, nonroad, and event (prescribed fire) sources from the 2017 National Emission Inventory (NEI). The NEI is a comprehensive, triennial estimate of emissions. Iowa directly used other point source and nonpoint emissions reported in the 2017 NEI, except for a correction identified in section 7.1 of

the submitted redesignation request and maintenance plan. Iowa's plan states that the 2017 NEI contains a known error in Iowa's nonpoint inventory that incorrectly yields emissions from coal-fired industrial combustion sources, even though all emissions from industrial coal combustion are accounted for in the point source category. The erroneous nonpoint emissions were excluded from Iowa's attainment emissions inventory. The emission estimates provided for nonpoint, onroad, nonroad, or event sources represent county-wide totals for all of Muscatine County, IA rather than the partial Muscatine NAA. The attainment emissions inventory for sources not explicitly modeled is provided in table 4 below.

The EPA proposes to find the attainment emissions inventory provided in Iowa's maintenance plan to be acceptable. For additional information regarding the development of the attainment emissions inventory, please see section 7.1 of the 2021 State submittal in the docket for this action.

## 2. Maintenance Demonstration

The Calcagni Memo describes two ways for a State to demonstrate maintenance of the NAAQS for a period of at least 10 years following the redesignation of the area: 1) the State can show that future emissions of a pollutant will not exceed the level of the attainment inventory, or 2) the State can model to show that the future mix of sources and emission rates will not cause a violation of the standard. The 2014 SO<sub>2</sub> Guidance says that where a state has submitted an attainment plan that relies

on air quality dispersion modeling using maximum allowable emissions, the plan 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 as long as those changes do not result in increases in maximum allowable emissions.<sup>21</sup> Iowa's demonstration meets both of these criteria from the Calcagni Memo by providing modeling of updated maximum allowable emissions and showing that emissions will not increase in the future therefore demonstrating continued maintenance.

Iowa provided updated dispersion modeling in its 2021 SIP submission to demonstrate that the Muscatine NAA will continue to attain and maintain the 2010 SO<sub>2</sub> NAAQS with the submitted permit updates. The updated demonstration is based on the modeling analysis used in the Muscatine attainment plan. Iowa modeled SO<sub>2</sub> emissions from the three sources within the nonattainment area: GPC, MPW, and Monsanto. Facilities outside the nonattainment area that were also explicitly modeled include MidAmerican Energy's Louisa Generating Station (LGS). While LGS is not located within the nonattainment area, it is currently the largest emitter of SO<sub>2</sub> in the Muscatine area and Iowa included it in both the attainment demonstration and the updated demonstration to ensure that the control strategy would be effective in the nonattainment area with this nearby source. The updated demonstration includes the following updates: permit

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<sup>21</sup> See 2014 SO<sub>2</sub> Guidance, at 67.

updates (described above), newer version of the American Meteorological Society (AMS)/EPA Regulatory Model (AERMOD) modeling system, more recent 5-year meteorological dataset, updated background concentration of 5  $\mu\text{g}/\text{m}^3$ , updated horizontal emissions point, receptors included along the levee near GPC to reflect changes to public access, and updates to LGS's main boiler stack temperature and flowrate. AERMOD is the preferred model for this application, and Iowa's updated dispersion modeling used version 19191 which was the most current version of AERMOD available at the time of the analysis.

The modeling demonstration is based on current maximum permitted allowable  $\text{SO}_2$  emissions at the four facilities. Iowa's submission states the four facilities account for all the nearby  $\text{SO}_2$  sources not adequately characterized by the background concentration. Iowa modeled seven scenarios to ensure that all scenarios demonstrated continued attainment of the standard. The scenarios vary depending upon which combination of MPW's three coal-fired boilers are running.

The EPA reviewed the modeling analysis submitted by Iowa and finds the revised control measures for GPC, MPW, and Monsanto continue to provide for attainment of the 2010  $\text{SO}_2$  NAAQS. The EPA agrees with the State's determination that its control strategy analysis results in modeled concentrations throughout the nonattainment area that are at or below 75 ppb or 196.4  $\mu\text{g}/\text{m}^3$ , as shown in table 3. The EPA's full review of the submitted modeling demonstration is included in the TSD for this

action. Iowa provided modeling files to the EPA with its submission that are too large to post in the docket. The state modeling files are available upon request from the contact listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.

<b>Table 3. Cumulative Modeled SO<sub>2</sub> Ambient Air Impacts Concentrations in the Muscatine Area (µg/m<sup>3</sup>)</b>	
<b>MPW Scenario</b>	<b>Cumulative Model Result (µg/m<sup>3</sup>)</b>
All MPW Units	163.09
Unit 9 Off	168.37
Unit 8 Off	167.26
Unit 7 Off	162.97
Unit 7 Only	166.92
Unit 8 Only	162.72
Unit 9 Only	177.53

Any increase in maximum allowable SO<sub>2</sub> emissions for GPC, MPW, and Monsanto would require a SIP revision to modify the air construction permits incorporated into the SIP. Iowa stated that it expects actual emissions from GPC, MPW, Monsanto, and LGS to remain well below the permitted maximum allowable emission rates modeled in the maintenance plan.<sup>22</sup> The EPA's review of SO<sub>2</sub> emissions trends contained in the TSD for this action support the conclusion that SO<sub>2</sub> emissions in the Muscatine NAA are well below the permitted maximum allowable rates used by Iowa in the submitted modeling demonstration.

Iowa also provided projected emissions inventories based on

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<sup>22</sup> See Iowa's 2021 maintenance plan, section 7.2 Maintenance Demonstration at 26.

the attainment inventory to further demonstrate that the area will continue to remain in attainment during the maintenance period. Emissions forecasts for the point-other, nonpoint, onroad, nonroad, and event (prescribed fire) sectors were estimated by multiplying the 2017 NEI data by population growth factors. Iowa developed growth factors for 2033 and two additional future years, 2035 and 2040, as shown in table 7-4 of the State submittal. The estimated growth factors are 1.0282 for 2033, 1.0297 for 2035, and 1.0309 for 2040. Iowa's emissions forecasts for the point-other, nonpoint, onroad, nonroad, and event (prescribed fire) sectors demonstrate nominal changes to annual SO<sub>2</sub> emissions in the Muscatine NAA. Projected emissions forecasts for these years, as well as the attainment year inventory, are available in table 4.

<b>Table 4. Emissions Inventories for the Muscatine NAA (tons)</b>					
<b>Location</b>	<b>Sector</b>	<b>2017 NEI (Attainment Inventory)</b>	<b>2033 Forecast</b>	<b>2035 Forecast</b>	<b>2040 Forecast</b>
Inside the NAA	Point-Other	0.33	0.34	0.34	0.34
Muscatine County	Non-Point	6.96	7.16	7.17	7.18
	On-Road	3.17	3.25	3.26	3.26
	Non-Road	0.51	0.53	0.53	0.53
	Event (Prescribed Fires)	1.38	1.42	1.42	1.42
Total		12.36	12.71	12.72	12.74
Forecasted Growth from 2017		--	0.35	0.36	0.38

Iowa's emissions forecasts for the point-other, nonpoint, onroad, nonroad, and event (prescribed fire) sectors demonstrate

nominal changes to annual SO<sub>2</sub> emissions in the Muscatine NAA. For the year 2040, Iowa estimated that total SO<sub>2</sub> emissions from those sectors would only grow by approximately 0.38 tons. This small increase in annual emissions is not expected to impact ambient SO<sub>2</sub> concentrations in the area, as further evidenced by relatively large decreases in emissions from point sources in the area described in the EPA's TSD for this action. The EPA proposes to find the maintenance demonstration provided in Iowa's maintenance plan to be acceptable.

### 3. Monitoring Network

The 2014 SO<sub>2</sub> Guidance indicates that once an area has been redesignated to attainment, the state should continue to operate an appropriate air quality monitoring network as provided under 40 CFR part 58 to verify the attainment status of the area. IDNR has committed to continued operation of its SO<sub>2</sub> monitoring network in the Muscatine NAA to verify the attainment status and work with the EPA through the air monitoring network review process, in accordance with 40 CFR 58.10. Iowa currently operates one SPM monitor and one SLAMS monitor in the Muscatine NAA. SLAMS monitors cannot be discontinued without concurrence from the EPA. The EPA proposes to find the monitoring network information provided in Iowa's maintenance plan to be acceptable.

### 4. Verification of Continued Attainment

The 2014 SO<sub>2</sub> Guidance states that each air agency should ensure that it has the legal authority to implement and enforce

all measures necessary to attain and maintain the 2010 1-hour SO<sub>2</sub> NAAQS. The air agency's submittal should indicate how it will track the progress of the maintenance plan for the area either through air quality monitoring or modeling.<sup>23</sup>

IDNR has the legal authority to enforce and implement the maintenance plan for the Muscatine 2010 SO<sub>2</sub> nonattainment area. This includes the authority to adopt, implement, and enforce any subsequent emissions control contingency measures determined to be necessary to correct future SO<sub>2</sub> attainment problems.<sup>24</sup>

As previously indicated, IDNR will continue to operate its SO<sub>2</sub> monitoring network to verify the attainment status of the Muscatine NAA. Monitored concentrations will serve as the primary indicator for verifying continued attainment and will also act as the triggering mechanism for contingency measures, as described in section 7.5 of the State submittal.

In addition, IDNR will use emissions data to verify continued compliance with the permitted emission rates used for the model demonstration in the maintenance plan. Iowa's submittal describes the State's process for ensuring source compliance with the emissions limits, stack testing, monitoring, and recordkeeping requirements associated with the control measures in the SIP-approved construction permits for GPC, MPW, and Monsanto. All three facilities are also permitted under the Title V operating permit program. 567 IAC 22.108(5) requires

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<sup>23</sup> See 2014 SO<sub>2</sub> Guidance, at 67-68.

<sup>24</sup> The EPA approved elements of Iowa's Infrastructure SIP requirements for the 2010 SO<sub>2</sub> NAAQS to meet the requirements of section 110(a)(2)(E)(i) of the CAA on March 22, 2018 (83 FR 12486).

semi-annual reports and identification of all instances of deviations from permit requirements, including the cause of the deviation and any corrective or preventative measures taken.

In addition, in compliance with the EPA's Air Emissions Reporting Requirements (80 FR 8787), Iowa develops a comprehensive emissions inventory of point, area, and mobile sources every three years. This triennial inventory compiled by the State is contained in the EPA's NEI, which is made publicly available every three years. The EPA proposes to find that the information provided in Iowa's maintenance plan demonstrates the State has the legal authority to implement and enforce all measures necessary to attain and to maintain the 2010 1-hour SO<sub>2</sub> NAAQS.

#### 5. Contingency Measures

Section 175A(d) of the CAA requires that a maintenance plan include such contingency measures as the 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, the EPA interprets CAA section 175A's requirement for "contingency provisions" to mean that the state agency has a comprehensive program to identify sources of violations of the

SO<sub>2</sub> 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.<sup>25</sup> A State should also identify specific indicators to be used to determine when the contingency measures need to be implemented. The maintenance plan must also include a requirement that a State will continue to 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 CAA section 175A(d).

IDNR has committed to continuing implementation of all measures indicated in the 2016 attainment plan after redesignation of the Muscatine NAA. Furthermore, the State developed additional contingency provisions in the 2021 maintenance plan for added assurance that any violation of the NAAQS that occurs after redesignation of the area to attainment will promptly be corrected. The maintenance plan contains triggering indicators for contingency measures, a schedule for implementing these potential measures, and has specified multiple potential options to correct any NAAQS violation. SO<sub>2</sub> monitoring data will serve as the primary trigger for any responses to prevent or correct a NAAQS violation in the Area. Iowa's contingency plan establishes both warning level and action level responses with specific triggering indicators for each. A warning level response will occur if a certified annual

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<sup>25</sup> See 2014 SO<sub>2</sub> Guidance, at 69.

99th percentile daily maximum 1-hour SO<sub>2</sub> concentration exceeds the 2010 1-hour SO<sub>2</sub> NAAQS at any monitor site in the Muscatine NAA. IDNR will conduct a study within six months to evaluate whether the trend, if any, indicates increasing SO<sub>2</sub> concentrations in the Muscatine NAA. Any necessary control measures developed in response to a caution level trigger will be implemented as expeditiously as practicable with the intention of preventing future violations of the NAAQS from occurring.

An action level response will occur when the 1-hour design value, based on the average of three consecutive years of 99th percentile daily maximum 1-hour SO<sub>2</sub> concentrations, violates the 2010 1-hour SO<sub>2</sub> NAAQS at any monitor site in the Muscatine NAA. In response, IDNR will evaluate additional control measures needed to assure future attainment of the 2010 1-hour SO<sub>2</sub> NAAQS. IDNR will establish orders, issue new air construction permits, or modify existing permits within approximately nine months of completion of a culpability investigation that identifies such actions as being necessary to mitigate the NAAQS violation. IDNR will plan to complete the culpability investigation no later than three months after the action level response has been triggered. The contingency plan identifies multiple potential control measures for either the caution level response or the action level response including: fuel switches, improvements to existing control devices, production curtailments, reductions to operating loads, housekeeping and maintenance improvements, or

other appropriate measures necessary to mitigate the elevated SO<sub>2</sub> levels.

The EPA is proposing to conclude 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, the EPA proposes to determine that the maintenance plan for the Muscatine NAA meets the requirements of CAA section 175A and is thus proposing to approve the maintenance plan into the Iowa SIP.

*E. Criterion (5)–Iowa Has Met All Applicable Requirements Under Section 110 and Part D of Title I of the CAA*

In accordance with section 107(d)(3)(E)(v) of the CAA, to redesignate the Muscatine NAA to attainment, Iowa must meet all requirements applicable for purposes of redesignation to the Muscatine NAA under CAA section 110 (general SIP requirements) and part D of title I of the CAA (SIP requirements for nonattainment areas).

1. Section 110 General Requirements for SIPs

Pursuant to CAA section 110(a)(1), whenever new or revised NAAQS are promulgated, the CAA requires States to submit a plan (i.e., SIP) for the implementation, maintenance, and enforcement of such NAAQS. Section 110(a)(2) of title I of the CAA contains the general requirements for a SIP, also known as “infrastructure” requirements. 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 (New Source Review (NSR) permit programs); provisions for air pollution modeling; and provisions for public and local agency participation in planning and emissions 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, the 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 nonattainment area's designation and classification in that State and are therefore not applicable for purposes of an area's redesignation. The transport SIP submittal requirements, where applicable, continue to apply to a state regardless of the designation of any one area in the state.

In addition, other section 110 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 and part D requirements which are linked with an area's designation and classification are the relevant measures to evaluate in reviewing a redesignation request. This approach is consistent with the 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.<sup>26</sup>

The EPA approved elements of Iowa's July 19, 2013 SO<sub>2</sub> infrastructure SIP submittal on March 22, 2018.<sup>27</sup> As explained previously, certain general requirements of CAA section 110(a)(2) are statewide requirements that are not linked to the nonattainment status of the Muscatine NAA and are therefore not "applicable requirements" for the purpose of reviewing Iowa's redesignation request. Nevertheless, Iowa submitted and EPA approved the State's SO<sub>2</sub> infrastructure SIP. The EPA proposes to conclude that Iowa has satisfied the criterion of section 107(d)(3)(E)(v) related to section 110(a)(2) of the CAA.

## 2. Part D Requirements

In addition to the CAA section 110 requirements, section 107(d)(3)(E)(v) requires that the state meet all the requirements applicable to the nonattainment area "under part D

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<sup>26</sup> 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).

<sup>27</sup> 83 FR 12486, March 22, 2018.

of this subchapter" for the nonattainment area to be redesignated. Both section 107 and part D are within subchapter 1 of the CAA. Part D, entitled "Plan Requirements for Nonattainment Areas," consists of six subparts, of which only subparts 1 and 5 are applicable to SO<sub>2</sub> nonattainment areas. Subpart 1 (sections 171 through 179B) contains provisions that can apply to all nonattainment areas for all criteria pollutants, while subpart 5 (sections 191 through 192) contains additional provisions for SO<sub>2</sub>, NO<sub>x</sub>, or lead nonattainment areas. The requirements applicable to this redesignation are discussed below.

a. Subpart 1 Requirements

CAA section 172 requires states with nonattainment areas to submit plans that provide for timely attainment of the NAAQS. More specifically, CAA section 172(c) contains general requirements for nonattainment plans. A thorough discussion of these requirements is found in the General Preamble for Implementation of title I.<sup>28</sup>

As noted in the General Preamble, certain attainment-related planning requirements under section 172(c) no longer have meaning for an area that is already attaining the NAAQS, and therefore are not applicable for purposes of redesignation. For example, for an area that is already attaining the NAAQS, there would be nothing for the State to provide to show reasonable further progress to attainment in that area.

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<sup>28</sup> 57 FR 13498, April 16, 1992.

Similarly, the CAA section 172 requirements for the attainment demonstration, implementation of reasonably available control measures, including reasonably available control technology, and contingency measures that are triggered if an area fails to meet RFP or fails to attain are also not applicable for purposes of redesignation. Nevertheless, as discussed earlier, Iowa submitted and EPA approved an attainment plan addressing the attainment planning requirements.<sup>29</sup>

With respect to CAA section 172(c)(3), Iowa was required to submit an actual current emissions inventory with its attainment plan. Iowa had submitted a base year inventory with its attainment plan SIP on May 26, 2016, and the EPA approved this element on November 17, 2020.<sup>30</sup>

Section 173 of the CAA includes requirements for permit programs that are required in a nonattainment area for new sources as required by section 172(c)(5), known as nonattainment new source review (NNSR). However, the EPA has a longstanding interpretation that because the NNSR permit program is replaced by the PSD permit program upon an area's redesignation to attainment, nonattainment areas seeking redesignation to attainment do not need a fully approved part D NNSR program to be redesignated. A more detailed rationale for this view is described in a memorandum from Mary Nichols, Assistant Administrator for Air and Radiation, dated October 14, 1994, entitled, "Part D New Source Review Requirements for Areas

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<sup>29</sup> 85 FR 73218, November 17, 2020.

<sup>30</sup> *Id.*

Requesting Redesignation to Attainment.”<sup>31</sup> Nevertheless, the EPA notes that the Iowa currently has fully-approved NNSR and PSD programs in place at 567 IAC Chapter 31 and 567 IAC Chapter 33, respectively. Iowa’s PSD program will become applicable for SO<sub>2</sub> in the Muscatine NAA upon redesignation to attainment.

CAA section 175A requires that states seeking redesignation of an area to attainment submit a “maintenance plan” containing certain elements. Iowa included a maintenance plan for the Muscatine NAA with its November 17, 2021 redesignation request, which the EPA is proposing to approve in conjunction with the redesignation, and it is discussed in detail in section V., Criterion (4) of this document.

Section 176(c) of the CAA requires that Federal actions conform to the air quality planning goals in the applicable SIP. The requirement to determine conformity applies to transportation plans, programs, and projects that are developed, funded, or approved under title 23 of the United States Code and the Federal Transit Act (transportation conformity) as well as to all other Federally-supported or funded projects (general conformity). Section 176(c) of the CAA also requires that states establish criteria and procedures to ensure that Federally-supported or funded transportation plans, transportation improvement programs (TIPs) and projects conform to the goals of the applicable SIP. This is referred to as a transportation conformity SIP. In the preamble to the January 1993 proposed

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<sup>31</sup> Available at <https://www.epa.gov/sites/default/files/2015-07/documents/101494m.pdf>.

transportation conformity rule, the EPA stated that, "Based on available emissions information, the EPA believes highway and transit motor vehicles are not significant sources of lead or sulfur dioxide. Therefore, transportation plans, TIPs, and projects are presumed to conform to the applicable implementation plans for these pollutants."<sup>32</sup> In November 1993, the EPA finalized its transportation conformity regulations. One section of those regulations addressed the geographic applicability of the transportation conformity regulations. The regulation stated at that time that, "The provisions of this subpart apply with respect to emissions of the following criteria pollutants: Ozone, carbon monoxide, nitrogen dioxide, and particles with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10)."<sup>33</sup> Based on this provision, transportation conformity does not apply in nonattainment or maintenance areas for SO<sub>2</sub>. Therefore, a transportation conformity SIP is not required for SO<sub>2</sub> nonattainment and maintenance areas and is not necessary for an SO<sub>2</sub> nonattainment area to be redesignated to attainment, and the EPA's transportation conformity rules do not apply to SO<sub>2</sub> for the Muscatine NAA.

Section 179(a) of the CAA addresses potential sanctions for the failure of a State to submit certain required SIP elements by statutory deadlines. The EPA is not aware of any missing or incomplete Muscatine NAA planning elements subject to section

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<sup>32</sup> 58 FR 3776, January 11, 1993.

<sup>33</sup> This provision has been revised to include particles with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers (PM2.5). See 40 CFR 93.102(b)(1).

179(a) of the CAA.

b. Subpart 5 Requirements

The subpart 5 requirements, which consist of sections 191 and 192 of the CAA, are specific provisions applicable to SO<sub>2</sub>, NO<sub>2</sub>, or lead nonattainment areas. Section 191 of the CAA requires states with areas designated nonattainment for SO<sub>2</sub>, NO<sub>2</sub>, or lead after November 15, 1990, to submit within 18 months of the designation an implementation plan meeting the requirements of part D. The substance of the required plans is established by section 172(c). As noted, Iowa submitted its attainment plan and EPA approved that plan on November 17, 2020.<sup>34</sup>

Section 192 sets forth attainment dates for nonattainment areas under section 191. For SO<sub>2</sub>, section 192(a) requires that attainment plans provide for attainment of the primary standard as expeditiously as possible, but no later than five years from the date of the nonattainment designation. The EPA designated the Muscatine NAA as nonattainment on August 5, 2013, with an attainment date of October 4, 2018.<sup>35</sup> However, because the EPA is reviewing a redesignation request under section 107(d)(3)(E), rather than a determination of attainment under section 179(c), the determination of whether the Area attained by the attainment date set forth in section 192 is not applicable to this action proposing approval of Iowa's redesignation request.

Based on the above, the EPA is proposing to find that Iowa has satisfied the applicable requirements for the redesignation

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<sup>34</sup> 85 FR 73218, November 17, 2020.

<sup>35</sup> 78 FR 47191, August 5, 2013.

of the Muscatine NAA under section 110 and part D of title I of the CAA.

**VI. What is the EPA's Analysis of the SIP-approved Permit Modifications?**

Iowa's 2021 redesignation request and maintenance plan for the Muscatine NAA requests revisions to source-specific air construction permits relied upon in the 2016 attainment plan. The State's model-based attainment demonstration from its 2016 attainment plan, which the EPA approved on November 17, 2020, was based on SO<sub>2</sub> controls and emission limitations contained in final air construction permits issued by IDNR and the EPA's approval action incorporated a total of 58 construction permits into the Iowa SIP. Iowa's 2021 submittal requests that the EPA make several revisions to SIP-approved construction permits for the three sources within the nonattainment area, and also requests removal of twelve permits from the SIP for GPC. The 2021 SIP submission also includes modeling to demonstrate that the Muscatine area will continue to attain the 2010 SO<sub>2</sub> NAAQS as a result of compliance with the revised permit limits.

As part of the 2021 submission, Iowa also requests to remove eight permits for these three sources that were originally incorporated into the Iowa SIP pursuant to the 1971 24-hour SO<sub>2</sub> primary standard. In 1994, the EPA designated a portion of Muscatine County as nonattainment. The state subsequently developed an attainment plan that contained control

measures for GPC, MPW, and Monsanto.<sup>36</sup> The EPA redesignated the area to attainment in 1998 (63 FR 13343, March 19, 1998) and approved the state's second 10-year maintenance plan on August 1, 2007 (72 FR 41900). The underlying permit requirements associated with those actions are no longer needed due to the revocation of the 1971 24-hour and annual primary SO<sub>2</sub> NAAQS.<sup>37</sup>

All of the permit changes requested by Iowa are summarized below and in sections 5.1 *Source Summary Tables* and 9. *Removal of Provisions for the Revoked SO<sub>2</sub> Standards* of the State submittal included in the docket for this action. The new and modified permits being incorporated into the SIP are contained in Attachments 1 through 3 of the State submittal in the docket for this action.

*A. Removal of Permits from the Iowa SIP*

Iowa requests to remove twelve GPC permits relied upon in the 2016 attainment plan for emission points (stacks) no longer in service. The permit removals are described in table 5.

<b>Table 5. GPC Permits for Removal from the Iowa SIP</b>	
<b>Permit number</b>	<b>Justification</b>
15-A-078	Two stacks removed from service and the emission units were vented to a new stack with scrubbers and a SO <sub>2</sub> RACT limit (see permit #17-A-298).
79-A-194-S2	
74-A-014-S1	Three stacks removed from service and the emission units were vented to a new stack with scrubbers and a SO <sub>2</sub> RACT limit (see permit #17-A-299).
74-A-015-S2	
79-A-195-S2	
71-A-067-S4	Stack was removed from service and the emission source was decommissioned.

<sup>36</sup> The attainment plan and permits were submitted in 1996 (revised in 1997) and approved by EPA on December 1, 1997 (62 FR 63454).

<sup>37</sup> The 2010 primary SO<sub>2</sub> NAAQS revision (75 FR 35519, June 22, 2010) included provisions to revoke both the 24-hour and annual average primary SO<sub>2</sub> standards. In Muscatine, those standards ceased to apply on October 4, 2014, one year after its designation for the 2010 1-hour SO<sub>2</sub> standard.

15-A-202	Two stacks were removed from service and the units were vented to an existing emission point with a scrubber (see permit #15-A-200-S1).
15-A-209	
11-A-338-S1	Two stacks were removed from service and the units were vented to an existing emission point (see permit #15-A-213-S2).
15-A-354	
05-A-926-S4	One stack was removed from service and some units were vented to a new stack (see permit #17-A-112). Some units were decommissioned.
75-A-087-S1	One stack was removed from service and the emission units were vented to a new stack with a SO <sub>2</sub> RACT limit (see #19-A-515-S1).

Iowa also requests that EPA remove eight permits from the SIP due to the revocation of the 24-hour and annual primary SO<sub>2</sub> NAAQS. The permit removals are described in table 6.

<b>Facility</b>	<b>Permit number</b>	<b>Justification</b>
GPC	74-A-015-S	This emission point no longer exists.
	79-A-194-S	This emission point no longer exists.
	79-A-195-S	This emission point no longer exists.
	95-A-374	Replaced by SIP-approved permit 95-A-374-S4.*
MPW	74-A-175-S	Replaced by SIP-approved permit 74-A-175-S4.*
	95-A-373	Replaced by SIP-approved permit 95-A-373-P3*; updating to 95-A-373-P4.
Monsanto	76-A-161S3	In 2012, Boilers #6 and #7 were both restricted to combusting only natural gas and their SO <sub>2</sub> limits were removed from the modified permits.
	76-A-265S3	

\* Approved by EPA on November 17, 2020 (85 FR 73218), as part of the DNR's attainment plan for the 1-hour SO<sub>2</sub> NAAQS.

#### *B. New Permits to be Added to the Iowa SIP*

Iowa requests to add five new permits into the SIP for the 2010 1-hour SO<sub>2</sub> NAAQS. The new permits are for four new stacks and one newly identified SO<sub>2</sub> emission source. The new permits are summarized in table 7.

<b>Permit number</b>	<b>Justification</b>
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17-A-298	New stack with scrubbers and a SO <sub>2</sub> RACT limit.
17-A-299	New stack with scrubbers and a SO <sub>2</sub> RACT limit.
17-A-112	New stack retains some existing units, adds new units, and retains the unchanged SO <sub>2</sub> RACT limit from the previous stack.
19-A-515-S1	New stack with a SO <sub>2</sub> RACT limit.
18-A-136	Permit to establish a SO <sub>2</sub> RACT limit for a previously unidentified SO <sub>2</sub> source.

*C. Modifications to Existing Permits in the Iowa SIP*

Iowa also requests to modify twenty GPC permits, two MPW permits, and one Monsanto permit in the Iowa SIP that were relied upon in the 2016 attainment plan. Several revisions to GPC permits establish a Collection of Air Permits (CAP) which is a type of air construction permit issued by IDNR that combines the requirements and conditions for multiple emission points (and thus multiple permit numbers) into one document. The permit modifications are described in table 8.

<b>Table 8. Modifications to Existing Permits in the Iowa SIP</b>			
<b>Facility</b>	<b>Outdated permit no.</b>	<b>Replacement permit no.</b>	<b>Description of modification</b>
GPC	80-A-149-S5	CAP: 80-A-149-S6	All requirements moved into a CAP, SO <sub>2</sub> RACT limit unchanged.
GPC	80-A-150-S5	CAP: 80-A-150-S6	
GPC	85-A-031-S2	CAP: 85-A-031-S5	All requirements moved into a CAP, dispersion parameters updated, RACT limit changed from 0.014 to 0.017 lb/hr (combined).
GPC	85-A-032-S2	CAP: 85-A-032-S5	
GPC	91-A-068-S2	91-A-068-S3	Increase in operating capacity, SO <sub>2</sub> RACT limit unchanged.
GPC	92-A-383-S2	92-A-383-S3	Dispersion parameters updated, SO <sub>2</sub> RACT limit unchanged.
GPC	92-A-385-S1	92-A-385-S2	Dispersion parameters updated, SO <sub>2</sub> RACT limit unchanged.
GPC	94-A-055-S1	CAP: 94-A-055-S3	All requirements moved into a CAP, dispersion parameters updated, new low emissions burner for other pollutants, SO <sub>2</sub> RACT limit unchanged.
GPC	94-A-061-S1	CAP: 94-A-061-S3	
GPC	02-A-781-S2	02-A-781-S3	Permit update unrelated to SO <sub>2</sub> .
GPC	02-A-782-S2	02-A-782-S3	Permit update unrelated to SO <sub>2</sub> .

GPC	10-A-563-S1	10-A-563-S2	Dispersion parameters updated, SO2 RACT limit unchanged.
GPC	15-A-200	15-A-200-S1	Added emission units vented to this stack, retained the sodium bisulfate requirements, SO2 RACT limit unchanged.
GPC	15-A-201	15-A-201-S1	Additional equipment (e.g., tanks, grinding & separation equipment) identified as SO2 sources and vented here, scrubber installed as previously required, sodium bisulfite requirements retained, SO2 RACT limit unchanged.
GPC	15-A-213	15-A-213-S2	Added emission units vented to this stack, updated the dispersion parameters, SO2 RACT limit unchanged.
GPC	15-A-486	15-A-486-S1	Additional equipment permitted (adds capacity), SO2 RACT limit changed from 0.201 to 0.27 lb/hr.
GPC	15-A-326	15-A-326-S1	Capacity restrictions added, SO2 RACT limit unchanged.
GPC	03-A-471-S1	03-A-471-S3	Dispersion parameters updated, SO2 RACT limit unchanged.
GPC	06-A-1261-S1	06-A-1261-S2	Permit update unrelated to SO2.
GPC	15-A-199	15-A-199-S1	Annual throughput revised, SO2 RACT limit unchanged.
MPW	95-A-373-P3	95-A-373-P4	Permit update unrelated to SO2.
MPW	80-A-191-P3	80-A-191-P4	Permit update unrelated to SO2.
Monsanto	82-A-092-P11	82-A-092-P12	Converted Boiler #8 from combusting primarily coal to natural gas only, updated the dispersion parameters, and reduced the SO <sub>2</sub> RACT limit.

#### *D. EPA Analysis of Permit Revisions*

With the proposed revisions, Iowa's SIP will contain a total of 51 air construction permits for the 2010 SO<sub>2</sub> NAAQS. The total number of GPC permits will be reduced from 52 to 45 permits. The total number of MPW permits will remain at four and the total number of Monsanto permits will remain at two.

The new and modified air construction permits include emission limits, timetables for compliance, reporting, and recordkeeping requirements. Each permit also contains

performance testing (emissions testing) obligations with specific schedules, methods, and frequencies for compliance. Additionally, GPC, MPW, and Monsanto are major sources under the Title V operating permit program and are subject to semi-annual reports requirements.

The EPA reviewed the submitted permit revisions in accordance with the anti-backsliding provisions of CAA section 110(1). With the submitted permit revisions, the total maximum permitted allowable emissions for the three facilities in the NAA were reduced from 6,414 tpy in the 2016 attainment plan to 5,555 tpy in the 2021 maintenance plan. While some RACT limits were increased in the modified permits and new RACT limits were added in new permits, the EPA finds the resulting relatively small emissions increase is offset by larger emissions reductions from the removal or modification of other permits. To further demonstrate that the Muscatine NAA will continue to attain and maintain the 2010 SO<sub>2</sub> NAAQS with the submitted permit updates, Iowa also provided updated dispersion modeling based on the maximum permitted allowable emissions in its 2021 SIP submission. As discussed in the maintenance demonstration section above, the EPA reviewed the modeling analysis submitted by Iowa and finds the revised control measures for GPC, MPW, and Monsanto continue to provide for attainment and maintenance of the 2010 SO<sub>2</sub> NAAQS.

For the removal of source-specific permits due to the revocation of the 24-hour and annual primary SO<sub>2</sub> NAAQS, the anti-

backsliding provisions of CAA section 110(1) are satisfied by replacement with the attainment plan, maintenance plan, and associated permits for the more stringent 2010 1-hour SO<sub>2</sub> standard. Accordingly, the emission limits approved into the SIP for the 1-hour SO<sub>2</sub> NAAQS (through the permits incorporated into the SIP either through the attainment or maintenance plan) are more stringent than the prior emission limits for the revoked 24-hour or annual primary SO<sub>2</sub> NAAQS. These permits were specifically for units that either no longer operate or have more stringent limits in place.

For these reasons, the EPA proposes to find that the submitted permit revisions in Iowa's 2021 SIP request will not interfere with any applicable requirement concerning attainment and reasonable further progress (as defined in section 171 of the CAA) or any other applicable requirement of the CAA, as required under section 110(1) of the Act. Accordingly, the EPA proposes to approve revisions to source-specific permits to add five new permits, replace twenty-three revised permits, and remove twenty permits for Muscatine area sources in the Iowa SIP as detailed in sections 5.1 and 9 of the State submission. For new or revised permits, the EPA is proposing to approve the entire permits into the SIP, consistent with Iowa's request.

#### **VII. What Action is the EPA Proposing to Take?**

The EPA is proposing to approve Iowa's redesignation request for the Muscatine NAA. Final approval of the redesignation request would change the legal designation of the

portion of Muscatine County designated nonattainment at 40 CFR 81.316 to attainment for the 2010 1-hour primary SO<sub>2</sub> NAAQS. The EPA is also proposing to approve Iowa's maintenance plan for the 2010 1-hour SO<sub>2</sub> NAAQS for the Muscatine nonattainment area.

Finally, the EPA is proposing to add new or revised permits for Muscatine area sources into the Iowa SIP and remove certain air construction permits from the SIP. The EPA is processing this as a proposed action because we are soliciting comments on this proposed action. Final rulemaking will occur after consideration of any comments.

#### **VIII. Incorporation by Reference**

In this document, the EPA is proposing to include regulatory text in an EPA final rule that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, the EPA is proposing to delete Iowa permits #74-A-015-S, #79-A-194-S, #79-A-195-S, #95-A-374, #74-A-175-S, #95-A-373, #76-A-161S3, #76-A-265S3, #15-A-078, #79-A-194-S2, #71-A-067-S4, #75-A-087-S1, #74-A-014-S1, #74-A-015-S2, #79-A-195-S2, #80-A-149-S5, #80-A-150-S5, #85-A-031-S2, #85-A-032-S2, #91-A-068-S2, #92-A-383-S2, #92-A-385-S1, #94-A-055-S1, #94-A-061-S1, #02-A-781-S2, #02-A-782-S2, #10-A-563-S1, #15-A-200, #15-A-201, #15-A-202, #15-A-209, #15-A-213, #15-A-486, #15-A-326, #03-A-471-S1, #05-A-926-S4, #06-A-1261-S1, #11-A-338-S1, #15-A-354, #15-A-199, #95-A-373-P3, #80-A-191-P3, and #82-A-092-P11. The EPA is proposing to add incorporation by reference of Iowa permits #17-A-298, #17-A-299, #19-A-515-S1, #18-A-136, #17-A-112, #80-A-149-S6, #80-A-

150-S6, #85-A-031-S5, #85-A-032-S5, #91-A-068-S3, #92-A-383-S3, #92-A-385-S2, #94-A-055-S3, #94-A-061-S3, #02-A-781-S3, #02-A-782-S3, #10-A-563-S2, #15-A-200-S1, #15-A-201-S1, #15-A-213-S2, #15-A-486-S1, #15-A-326-S1, #03-A-471-S3, #06-A-1261-S2, #15-A-199-S1, #95-A-373-P4, #80-A-191-P4, and #82-A-092-P12 discussed in sections IV.-VII. of this preamble and as set forth below in the proposed amendments to 40 CFR part 52. The EPA has made, and will continue to make, these materials generally available through <https://www.regulations.gov> and at the EPA Region 7 Office (please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section of this preamble for more information).

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

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the CAA and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, the EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- Is not subject to Executive Order 14192 (90 FR 9065,

February 6, 2025) because SIP actions are exempt from review under Executive Order 12866;

- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4);
- Does not have federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997) because it approves a state program;
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001); and
- Is not subject to requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA.

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where the EPA or an Indian Tribe has demonstrated that a Tribe has jurisdiction. In those areas of Indian country, the rule does not have Tribal implications and will not impose substantial direct costs on

Tribal governments or preempt Tribal law as specified by  
Executive Order 13175 (65 FR 67249, November 9, 2000).

**List of Subjects**

*40 CFR Part 52*

Environmental protection, Air pollution control,  
Incorporation by reference, Maintenance plan, Redesignation,  
Sulfur oxides.

*40 CFR Part 81*

Environmental protection, Air pollution control,  
Designations, Intergovernmental relations, Redesignation,  
Reporting and recordkeeping requirements, Sulfur oxides.

Dated: \_\_\_\_\_

August 8, 2025.

\_\_\_\_\_  
James Macy,  
Regional Administrator,  
Region 7.

For the reasons stated in the preamble, the EPA proposes to amend 40 CFR parts 52 and 81 as set forth below:

**PART 52--APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS**

1. The authority citation for part 52 continues to read as follows:

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

**Subpart Q-Iowa**

2. In § 52.820:

a. The table in paragraph (d) is amended by:

- i. Revising the entries "(113)," "(114)," "(115)," "(116)," "(118)," "(122)," "(123)," "(124)," "(125)," "(129)," "(131)," "(132)," "(133)," "(134)," "(135)," "(136)," "(138)," "(139)," "(140)," "(153)," "(156)," "(157)," "(158)," "(160)," "(163)," "(166)," "(167)," and "(168)"; and
- ii. Removing and reserving entries "(3)," "(4)," "(5)," "(6)," "(7)," "(8)," "(9)," "(10)," "(119)," "(121)," "(141)," "(148)," "(159)," "(161)," and "(162)".

b. The table in paragraph (e) is amended by adding the entry "(57)" to the end of the table.

The revisions and addition read as follows:

**§ 52.820 Identification of plan.**

\* \* \* \* \*

(d) \* \* \*

**EPA-APPROVED IOWA SOURCE-SPECIFIC ORDERS/PERMITS**

Name of source	Order/Permit No.	State effective date	EPA Approval date	Explanation
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* * * * *				
(3) Reserved				
(4) Reserved				
(5) Reserved				
(6) Reserved				
(7) Reserved				
(8) Reserved				
(9) Reserved				
(10) Reserved				
* * * * *				
(113) Grain Processing Corporation	17-A-298	4/12/2018	<b>[Date of publication of the final rule in the Federal Register], 90 FR [Federal Register page where the document begins of the final rule]</b>	2010 1-hour SO2 NAAQS Attainment Plan; EPA-R07-OAR-2025-0818; FRL-12901-01-R7.
(114) Grain Processing Corporation	17-A-299	4/12/2018	<b>[Date of publication of the final rule in the Federal Register], 90 FR [Federal Register page where the document begins of the final rule]</b>	2010 1-hour SO2 NAAQS Attainment Plan; EPA-R07-OAR-2025-0818; FRL-12901-01-R7.
(115) Grain Processing Corporation	19-A-515-S1	12/22/2020	<b>[Date of publication of the final rule in the Federal Register], 90 FR [Federal Register page where the document begins of the final rule]</b>	2010 1-hour SO2 NAAQS Attainment Plan; EPA-R07-OAR-2025-0818; FRL-12901-01-R7.
(116) Grain Processing Corporation	18-A-136	5/30/2018	<b>[Date of publication of the final rule in the Federal Register], 90 FR [Federal Register page where the document begins of the final rule]</b>	2010 1-hour SO2 NAAQS Attainment Plan; EPA-R07-OAR-2025-0818; FRL-12901-01-R7.
* * * * *				
(118) Grain Processing Corporation	17-A-112	5/2/2017	<b>[Date of publication of the final rule in the Federal Register], 90 FR [Federal Register page where the document begins of the final rule]</b>	2010 1-hour SO2 NAAQS Attainment Plan; EPA-R07-OAR-2025-0818; FRL-12901-01-R7.
(119) Reserved				
* * * * *				
(121) Reserved				

(122) Grain Processing Corporation	80-A-149-S6	2/21/2017	[Date of publication of the final rule in the Federal Register], 90 FR [Federal Register page where the document begins of the final rule]	2010 1-hour SO2 NAAQS Attainment Plan; EPA-R07-OAR-2025-0818; FRL-12901-01-R7.
(123) Grain Processing Corporation	80-A-150-S6	2/21/2017	[Date of publication of the final rule in the Federal Register], 90 FR [Federal Register page where the document begins of the final rule]	2010 1-hour SO2 NAAQS Attainment Plan; EPA-R07-OAR-2025-0818; FRL-12901-01-R7.
(124) Grain Processing Corporation	85-A-031-S5	5/19/2020	[Date of publication of the final rule in the Federal Register], 90 FR [Federal Register page where the document begins of the final rule]	2010 1-hour SO2 NAAQS Attainment Plan; EPA-R07-OAR-2025-0818; FRL-12901-01-R7.
(125) Grain Processing Corporation	85-A-032-S5	5/19/2020	[Date of publication of the final rule in the Federal Register], 90 FR [Federal Register page where the document begins of the final rule]	2010 1-hour SO2 NAAQS Attainment Plan; EPA-R07-OAR-2025-0818; FRL-12901-01-R7.
* * * * *				
(129) Grain Processing Corporation	91-A-068-S3	11/4/2019	[Date of publication of the final rule in the Federal Register], 90 FR [Federal Register page where the document begins of the final rule]	2010 1-hour SO2 NAAQS Attainment Plan; EPA-R07-OAR-2025-0818; FRL-12901-01-R7.
* * * * *				
(131) Grain Processing Corporation	92-A-383-S3	10/11/2016	[Date of publication of the final rule in the Federal Register], 90 FR [Federal Register page where the document begins of the final rule]	2010 1-hour SO2 NAAQS Attainment Plan; EPA-R07-OAR-2025-0818; FRL-12901-01-R7.
(132) Grain Processing Corporation	92-A-385-S2	10/11/2016	[Date of publication of the final rule in the Federal Register], 90 FR [Federal Register page where the document begins of the final rule]	2010 1-hour SO2 NAAQS Attainment Plan; EPA-R07-OAR-2025-0818; FRL-12901-01-R7.
(133) Grain Processing Corporation	94-A-055-S3	5/13/2021	[Date of publication of the final rule in the Federal Register], 90 FR [Federal Register page where the document	2010 1-hour SO2 NAAQS Attainment Plan; EPA-R07-OAR-2025-0818;

			begins of the final rule]	FRL-12901-01-R7.
(134) Grain Processing Corporation	94-A-061-S3	5/13/2021	[Date of publication of the final rule in the Federal Register], 90 FR [Federal Register page where the document begins of the final rule]	2010 1-hour SO2 NAAQS Attainment Plan; EPA-R07-OAR-2025-0818; FRL-12901-01-R7.
(135) Grain Processing Corporation	02-A-781-S3	2/8/2018	[Date of publication of the final rule in the Federal Register], 90 FR [Federal Register page where the document begins of the final rule]	2010 1-hour SO2 NAAQS Attainment Plan; EPA-R07-OAR-2025-0818; FRL-12901-01-R7.
(136) Grain Processing Corporation	02-A-782-S3	2/8/2018	[Date of publication of the final rule in the Federal Register], 90 FR [Federal Register page where the document begins of the final rule]	2010 1-hour SO2 NAAQS Attainment Plan; EPA-R07-OAR-2025-0818; FRL-12901-01-R7.
* * * * *				
(138) Grain Processing Corporation	10-A-563-S2	7/25/2017	[Date of publication of the final rule in the Federal Register], 90 FR [Federal Register page where the document begins of the final rule]	2010 1-hour SO2 NAAQS Attainment Plan; EPA-R07-OAR-2025-0818; FRL-12901-01-R7.
(139) Grain Processing Corporation	15-A-200-S1	4/12/2018	[Date of publication of the final rule in the Federal Register], 90 FR [Federal Register page where the document begins of the final rule]	2010 1-hour SO2 NAAQS Attainment Plan; EPA-R07-OAR-2025-0818; FRL-12901-01-R7.
(140) Grain Processing Corporation	15-A-201-S1	4/12/2018	[Date of publication of the final rule in the Federal Register], 90 FR [Federal Register page where the document begins of the final rule]	2010 1-hour SO2 NAAQS Attainment Plan; EPA-R07-OAR-2025-0818; FRL-12901-01-R7.
(141) Reserved				
* * * * *				
(148) Reserved				
* * * * *				
(153) Grain Processing Corporation	15-A-213-S2	12/22/2020	[Date of publication of the final rule in the Federal Register], 90 FR [Federal Register page where the document	2010 1-hour SO2 NAAQS Attainment Plan; EPA-R07-OAR-2025-0818;

			begins of the final rule]	FRL-12901-01-R7.
* * * * *				
(156) Grain Processing Corporation	15-A-486-S1	11/4/2019	[Date of publication of the final rule in the Federal Register], 90 FR [Federal Register page where the document begins of the final rule]	2010 1-hour SO2 NAAQS Attainment Plan; EPA-R07-OAR-2025-0818; FRL-12901-01-R7.
(157) Grain Processing Corporation	15-A-326-S1	3/4/2020	[Date of publication of the final rule in the Federal Register], 90 FR [Federal Register page where the document begins of the final rule]	2010 1-hour SO2 NAAQS Attainment Plan; EPA-R07-OAR-2025-0818; FRL-12901-01-R7.
(158) Grain Processing Corporation	03-A-471-S3	5/30/2018	[Date of publication of the final rule in the Federal Register], 90 FR [Federal Register page where the document begins of the final rule]	2010 1-hour SO2 NAAQS Attainment Plan; EPA-R07-OAR-2025-0818; FRL-12901-01-R7.
(159) Reserved				
(160) Grain Processing Corporation	06-A-1261-S2	12/22/2020	[Date of publication of the final rule in the Federal Register], 90 FR [Federal Register page where the document begins of the final rule]	2010 1-hour SO2 NAAQS Attainment Plan; EPA-R07-OAR-2025-0818; FRL-12901-01-R7.
(161) Reserved				
(162) Reserved				
(163) Grain Processing Corporation	15-A-199-S1	1/11/2021	[Date of publication of the final rule in the Federal Register], 90 FR [Federal Register page where the document begins of the final rule]	2010 1-hour SO2 NAAQS Attainment Plan; EPA-R07-OAR-2025-0818; FRL-12901-01-R7.
* * * * *				
(166) Muscatine Power and Water	95-A-373-P4	6/1/2016	[Date of publication of the final rule in the Federal Register], 90 FR [Federal Register page where the document begins of the final rule]	2010 1-hour SO2 NAAQS Attainment Plan; EPA-R07-OAR-2025-0818; FRL-12901-01-R7.
(167) Muscatine Power and Water	80-A-191-P4	6/1/2016	[Date of publication of the final rule in the Federal Register], 90 FR [Federal Register page where the document	2010 1-hour SO2 NAAQS Attainment Plan; EPA-R07-OAR-2025-0818;

			begins of the final rule]	FRL-12901-01-R7.
(168) Monsanto	82-A-092-P12	11/1/2016	[Date of publication of the final rule in the Federal Register], 90 FR [Federal Register page where the document begins of the final rule]	2010 1-hour SO2 NAAQS Attainment Plan; EPA-R07-OAR-2025-0818; FRL-12901-01-R7.
* * * * *				

(e) \* \* \*

**EPA-APPROVED IOWA NONREGULATORY PROVISIONS**

Name of nonregulatory SIP provision	Applicable geographic or nonattainment area	State submittal date	EPA Approval date	Explanation
* * * * *				
(57) 2010 1-hour primary SO <sub>2</sub> NAAQS Maintenance Plan	A portion of Muscatine County	11/17/2021	[Date of publication of the final rule in the Federal Register], 90 FR [Federal Register page where the document begins of the final rule]	EPA-R07-OAR-2025-0818; FRL-12901-01-R7.

3. In § 52.834, add paragraph (c) to read as follows:

**§ 52.834 Control strategy: Sulfur dioxide.**

\* \* \* \* \*

(c) *Redesignation to attainment.* EPA has determined, as of **[date of publication of the final rule in the Federal Register]**, that the Muscatine County 2010 SO<sub>2</sub> nonattainment area is redesignated to attainment of the 2010 SO<sub>2</sub> 1-hour National Ambient Air Quality Standard (NAAQS) in accordance with the requirements of Clean Air Act (CAA) section 107(d) (3) and has approved its maintenance plan and supplemental modeling demonstration analyses as meeting the requirements of CAA section 175A.

**PART 81-DESIGNATION OF AREAS FOR AIR QUALITY PLANNING PURPOSES**

4. The authority citation for part 81 continues to read as follows:

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

**Subpart C-Section 107 Attainment Status Designations**

5. In § 81.316, the table entitled "Iowa-2010 Sulfur Dioxide NAAQS [Primary]" is amended by revising the entry "Muscatine, IA" to read as follows:

**§ 81.316 Iowa.**

\* \* \* \* \*

**Iowa-2010 Sulfur Dioxide NAAQS  
[Primary]**

Designated area <sup>1</sup>	Designation	
	Date <sup>2</sup>	Type
Muscatine, IA	[Date of publication of the final rule in the Federal Register]	Attainment.
Muscatine County (part)		
Sections 1-3, 10-15, 22-27, 34-36 of T77N, R3W (Lake Township)		
Sections 1-3, 10-15, 22-27, 34-36 of T76N, R3W (Seventy-six Township)		
T77N, R2W (Bloomington Township)		
T76N, R2W (Fruitland Township)		
All sections except 1, 12, 13, 24, 25, 36 of T77N, R1W (Sweetland Township)		
*****		

<sup>1</sup> Includes any Indian country in each county or area, unless otherwise specified. EPA is not determining the boundaries of any area of Indian country in this table, including any area of Indian country located in the larger designation area. The inclusion of any Indian country in the designation area is not a determination that the state has

regulatory authority under the Clean Air Act for such Indian country.

<sup>2</sup> This date is April 9, 2018, unless otherwise noted.

[FR Doc. 2025-15983 Filed: 8/20/2025 8:45 am; Publication Date: 8/21/2025]