



## ENVIRONMENTAL PROTECTION AGENCY

### 40 CFR Part 52

[EPA-R08-OAR-2015-0463; FRL-10015-75-Region 8]

### Approval and Promulgation of Air Quality Implementation Plans; Utah; Regional Haze State and Federal Implementation Plans

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

**ACTION:** Final rule.

**SUMMARY:** The Environmental Protection Agency (EPA) is finalizing approval of State Implementation Plan (SIP) revisions submitted by the State of Utah on July 3, 2019, as supplemented on December 3, 2019, to satisfy certain regional haze requirements for the regional haze program's first implementation period (Utah SIP revisions). The EPA is approving the Utah SIP revision that provides an alternative to best available retrofit technology (BART) controls for nitrogen oxides (NO<sub>x</sub>) at the PacifiCorp Hunter and Huntington power plants. The EPA finds that the NO<sub>x</sub> BART Alternative for Hunter and Huntington achieves greater reasonable progress toward natural visibility conditions than BART, in accordance with the requirements of the Clean Air Act (CAA) and the EPA's Regional Haze Rule. In conjunction with this approval, we are withdrawing the Federal Implementation Plan (FIP) that addresses NO<sub>x</sub> BART for the Hunter and Huntington power plants that EPA promulgated in 2016. The EPA is also approving Utah's December 3, 2019 SIP supplement that requires reporting of all deviations from compliance with the applicable requirements under particulate matter (PM) BART and the NO<sub>x</sub> BART Alternative, including the emission limits for Hunter and Huntington. The EPA is taking these actions pursuant to sections 110 and 169A of the CAA.

**DATES:** This rule is effective on **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

**ADDRESSES:** The EPA has established a docket for this action under Docket ID No. EPA-R08-OAR-2015-0463. All documents in the docket are listed on the <https://www.regulations.gov> website. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the website and will be publicly available only in hard copy form. Publicly available docket materials are available through <https://www.regulations.gov>, or please call or email the person identified in the **FOR FURTHER INFORMATION CONTACT** section for additional availability information.

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**SUPPLEMENTARY INFORMATION:**

Throughout this document wherever “we,” “us,” or “our” is used, we mean the EPA.

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## **I. Proposed Action and the EPA's Conclusion**

On July 5, 2016, the EPA promulgated a final rule titled “Approval, Disapproval, and Promulgation of Air Quality Implementation Plans; Partial Approval and Partial Disapproval of Air Quality Implementation Plans and Federal Implementation Plan; Utah; Revisions to Regional Haze State Implementation Plan; Federal Implementation Plan for Regional Haze,” which approved, in part, a regional haze SIP revision submitted by the State of Utah on June 4, 2015.<sup>1</sup> In the July 2016 final rule, the EPA also disapproved, in part, the Utah regional haze SIP submission, including the NO<sub>x</sub> BART Alternative (also “BART Alternative” or “Alternative”) for Hunter Units 1 and 2 and Huntington Units 1 and 2, which are BART units as explained in more detail below. The BART Alternative relied on sulfur dioxide (SO<sub>2</sub>), NO<sub>x</sub>, and PM emission reductions from the 2015 closure of PacifiCorp’s Carbon power plant, as well as NO<sub>x</sub> reductions achieved through combustion control upgrades at Hunter Units 1, 2 and 3 and Huntington Units 1 and 2, which were installed in 2006-2014 (Hunter Unit 3 is not a BART unit). The combustion control upgrades for Hunter Units 1 and 2 and Huntington Units 1 and 2 include an Alstom TSF 2000™ low-NO<sub>x</sub> firing system and two elevations of separated overfire air (SOFA). The combustion upgrades for Hunter Unit 3 include upgraded low-NO<sub>x</sub> burners (LNB) and overfire air (OFA). Concurrent with disapproving the NO<sub>x</sub> BART Alternative, EPA promulgated a FIP in the July 2016 final rule that imposed a NO<sub>x</sub> BART emission limit of 0.07 lb/MMBtu (30-day rolling average) for each of the four BART units based on the emission reductions achievable through the installation and operation of selective-catalytic reduction (SCR) plus upgraded combustion controls.

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<sup>1</sup> 81 FR 43894 (July 5, 2016).

On July 3, 2019, Utah submitted a revised SIP that, based on new technical information and a different regulatory test, seeks to demonstrate that the previously submitted NO<sub>x</sub> BART Alternative achieves greater reasonable progress than BART. The SIP revision also includes amendments to Utah's SO<sub>2</sub> milestone reporting requirements under the SO<sub>2</sub> Backstop Trading Program pursuant to 40 CFR 51.309 such that SO<sub>2</sub> emission reductions resulting from the closure of the Carbon plant are not counted under both the SO<sub>2</sub> Backstop Trading Program and the NO<sub>x</sub> BART Alternative. On January 22, 2020, the EPA proposed to approve the State's July 3, 2019 SIP revision based on this new information.<sup>2</sup> Specifically, we proposed to incorporate the following into Utah's SIP:

- A NO<sub>x</sub> emission limit of 0.26 lb/MMBtu (30-day rolling average) each for Hunter Units 1 and 2 and Huntington Units 1 and 2.
- A NO<sub>x</sub> emission limit of 0.34 lb/MMBtu (30-day rolling average) for Hunter Unit 3.
- A requirement to permanently close and cease operation of the Carbon power plant by August 15, 2015.
- The associated amendments to the SO<sub>2</sub> milestone reporting requirements.

Because approval of the NO<sub>x</sub> BART Alternative satisfies Utah's BART obligation for Hunter Units 1 and 2 and Huntington Units 1 and 2, we also proposed to withdraw the FIP for NO<sub>x</sub> BART at these units. In particular, we proposed to find that the NO<sub>x</sub> BART Alternative would achieve greater reasonable progress towards natural visibility conditions than would be achieved through the installation and operation of BART at Hunter Units 1 and 2 and Huntington Units 1 and 2 under EPA's 2016 FIP.

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<sup>2</sup> 85 FR 3558 (Jan. 22, 2020).

The EPA also proposed to approve a December 3, 2019 SIP supplement to the July 3, 2019 SIP revision that includes monitoring, recordkeeping, and reporting (MRR) requirements for the units subject to the NO<sub>x</sub> BART Alternative and PM BART. The supplement also includes amendments that require each source to submit a report of any deviation from applicable emission limits and operating practices, including deviations attributable to upset conditions, the probable cause of such deviations, and any corrective actions or preventive measures taken.

Finally, contingent on our approval of these two SIP revisions, we proposed to find that Utah's SIP fully satisfies the requirements of section 309 of the Regional Haze Rule and that, therefore, the State has fully complied with the requirements for reasonable progress, including BART, for the first implementation period.

EPA requested comment on its proposed approval of Utah's regional haze SIP elements related to the NO<sub>x</sub> BART Alternative under 40 CFR 51.309(d)(4)(vii) and 51.308(e)(2) and (3), as well as the MRR elements for the units subject to that BART Alternative and to PM BART. EPA previously approved Utah's regional haze SIP as meeting all other requirements of 40 CFR 51.309,<sup>3</sup> and we neither reopened nor requested comment on previously approved elements.

The EPA conducted a public hearing for our proposed action in Price, Utah on February 12, 2020. Our public comment period closed on March 23, 2020.

Our January 2020 proposed rule provided background on the requirements of the CAA and EPA's Regional Haze Rule, a summary of Utah regional haze SIP submittals and related EPA actions, and the EPA's rationale for its proposed action. That background information and rationale will not be restated here. For the reasons stated in the proposed rule, this document, and

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<sup>3</sup> See 77 FR 74355 (Dec. 14, 2012); 81 FR 43894 (July 5, 2016).

in the accompanying Response to Comments (RTC) document, the EPA concludes that Utah's NO<sub>x</sub> BART Alternative achieves greater reasonable progress under 40 CFR 51.308(e)(2) and (3).

## **II. Public Comments and EPA Responses**

We received both written and oral comments at the public hearings we held in Price, Utah. We also received comments through the internet and mail. The full text of comments received from these commenters is included in the publicly posted docket associated with this action at <https://www.regulations.gov>. Our RTC document, which is also included in the docket associated with this action, provides detailed responses to all significant comments received except for those addressed below.<sup>4</sup> Our RTC document is organized similarly to the structure presented in this section. Therefore, if additional information is desired concerning how we addressed a particular comment, the reader should refer to the appropriate section in our RTC document.

PacifiCorp, conservation organizations (HEAL Utah, Sierra Club, National Parks Conservation Association, Utah Physicians for a Healthy Environment, and Natural Resources Defense Council), Edison Electric Institute, Ute Mountain Ute Tribe, and Salt Lake City's Capitol Hill Action Group submitted detailed written comments. Many general comments were made at the public hearing.

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<sup>4</sup> Most commenter citations and footnotes are excluded from this document.

A. *Legal Issues*

*Comment summary:* Some commenters argued that the modeling assumptions used for comparing the BART Benchmark (the controls required by the 2016 FIP)<sup>5</sup> to the NO<sub>x</sub> BART Alternative overstated emissions for non-BART units in the BART Benchmark scenario. Specifically, the commenters argued that emissions for the Carbon plant should have reflected compliance with the Mercury and Air Toxics Standards (MATS) rule, which was required by April 15, 2015. According to the commenters, compliance with MATS would have resulted in a greater than 50 percent reduction in SO<sub>2</sub> emissions at Carbon Units 1 and 2 compared to its historical emissions. Additionally, the commenters argued that emissions from Hunter Unit 3 in the BART Benchmark scenario should have reflected combustion controls installed in 2007. The modeling instead assumed that under this scenario, the Carbon plant and Hunter Unit 3 would emit pollutants consistent with the 2001-2003 baseline.<sup>6</sup> The commenters argued that such assumption overstates the emissions from these sources that would have occurred under the BART Benchmark and thus understates the visibility benefits that would occur under the BART Benchmark.

*Response:* Utah's modeling of emissions at Carbon and Hunter Unit 3 under the NO<sub>x</sub> BART Alternative and the BART Benchmark is reasonable and authorized under the EPA's

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<sup>5</sup> As described above, in the July 2016 FIP, EPA determined that NO<sub>x</sub> BART for each of the four BART units constituted an emission limit of 0.07 lb/MMBtu (30-day rolling average) based on the emission reductions achievable through the installation and operation of SCR plus upgraded combustion controls. Utah's July 2019 SIP submittal thus refers to the BART Benchmark controls as the "EPA FIP," as do many of the commenters. While the controls represented by the BART Benchmark and EPA's 2016 FIP are indeed the same, the relevant comparison for this action is between the BART Benchmark and the NO<sub>x</sub> BART Alternative. 40 CFR 51.308(e)(2); see also 85 FR 3572. We therefore refer to the 2016 FIP as the BART Benchmark as appropriate in this document, the preamble to the proposed rule, and the RTC document.

<sup>6</sup> See 85 FR 3568.

regulations for BART alternatives. In particular, assuming continued emissions from sources that would not be subject to BART controls in the BART Benchmark scenario, when such emissions would be eliminated under the BART Alternative, is simply a necessary analytical step for making a proper comparison of the two scenarios to determine which achieves “greater reasonable progress.”<sup>7</sup> This is authorized by the Regional Haze Rule, and it is consistent with the EPA’s prior regulatory actions, EPA guidance, and case law.

First, Hunter Unit 3 and the Carbon Units are not BART sources.<sup>8</sup> Accordingly, reductions from these sources should not be included in determining emissions reductions from the BART Benchmark under 40 CFR 51.308(e)(2)(i)(C). Hunter Unit 3 and the Carbon Units are covered by Utah’s BART Alternative, however, and thus emissions reductions from these sources properly are attributed to the BART Alternative under 40 CFR 51.308(e)(2)(i)(D). Were the EPA to include these same emission reductions in the BART Benchmark scenario, even though there would have been no enforceable obligation that they occur under that scenario, a proper comparison of the relative degree of visibility improvement between the two scenarios would not be possible.

Furthermore, Utah properly applied a 2001-2003 baseline to calculate emissions reductions under both scenarios. Pursuant to 40 CFR 51.308(e)(2)(iv), a state’s SIP must demonstrate that emissions reductions resulting from an alternative measure will be surplus to those reductions resulting from measures adopted to meet requirements of the CAA “as of the baseline date of the SIP.” In promulgating the Regional Haze Rule in 1999, we explained that the “baseline date of the SIP” in this context means “the date of the emissions inventories on which

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<sup>7</sup> 40 CFR 51.308(e).

<sup>8</sup> See 85 FR 3559; 81 FR 43895; Utah Air Quality Board, “Utah State Implementation Plan Section XX,” June 24, 2019, pages 28-29.

the SIP relies,”<sup>9</sup> which is defined as 2002 for regional haze purposes.<sup>10</sup> Any measure adopted after 2002 is accordingly “surplus” under 40 CFR 51.308(e)(2)(iv). Indeed, in 2002, the EPA designated the baseline date of all regional haze SIPs as 2002.<sup>11</sup> The EPA explained that “[p]rogress in improving visibility is tracked from baseline conditions (established using air quality monitoring for the 2000-2004 period). If 2002 is used as the base year for planning purposes, then States can take credit for emission reductions that are achieved before the 2007-2008 SIP due date.”<sup>12</sup>

In other words, for purposes of calculating emissions reductions from BART alternatives, states assume a baseline of 2002 emissions and may take credit for emissions reductions after that date, even if those reductions occur as a result of, or to comply with, other CAA requirements, so long those requirements occur after that baseline. Thus, Utah’s modeling properly credited emissions reductions from Carbon’s 2015 shutdown and Hunter 3’s 2007 controls towards the BART Alternative. Furthermore, in order to properly compare the BART Benchmark to the NO<sub>x</sub> BART Alternative under 51.308(e)(2) to determine if the Alternative achieves greater reasonable progress, common sense dictates that the EPA must compare emissions reductions under each scenario from the same baseline year. Thus, Utah’s modeling also properly included Carbon and Hunter 3’s emissions from the 2001-2003 baseline period (i.e., not including any reductions from MATS compliance or 2007 controls) under the BART Benchmark because Carbon and Hunter 3 are not BART sources.

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<sup>9</sup> 64 FR 35714, 35742 (July 1, 1999).

<sup>10</sup> 70 FR 39104, 39143 (July 6, 2005).

<sup>11</sup> See Memorandum dated November 18, 2002, from Lydia Wegman and Peter Tsirigotis, Subject: “2002 Base Year Emission Inventory SIP Planning: 8-hr Ozone, PM<sub>2.5</sub>, and Regional Haze Programs.”

<sup>12</sup> Id. at 3. The first regional haze SIPs were due December 17, 2007. See 40 CFR 51.308(b).

This approach is supported by case law.<sup>13</sup> In *Yazzie v. EPA*, the United States Court of Appeals for the Ninth Circuit reviewed and upheld EPA’s FIP, which included a BART alternative instead of BART.<sup>14</sup> The petitioners argued that the EPA inconsistently credited the BART alternative, but not the BART benchmark, for emissions reductions from controls voluntarily installed in 2009-2011 for purposes of comparing the two.<sup>15</sup> Like here, the EPA used a 2001-2003 baseline from which to calculate emissions reductions under both scenarios for purposes of the comparison.<sup>16</sup> The Ninth Circuit deemed this approach reasonable under 40 CFR 51.308(e)(3).<sup>17</sup> Likewise, Utah’s approach here with respect to Hunter 3 and Carbon is reasonable.

Commenters additionally argue that the State cannot take credit for the portion of the reductions from the Carbon shutdown that would have happened anyway had Carbon remained in operation but in compliance with the MATS rule. However, as the D.C. Circuit has recognized, EPA’s regulations allow for BART alternatives even when the reductions are due to compliance with another CAA requirement. In *UARG v. EPA*, the United States Court of Appeals for the District of Columbia Circuit reviewed and upheld the EPA’s rule finding that emission reductions attributable to the 2011 Cross-State Air Pollution Rule (CSAPR)—implemented under the “good neighbor” provision of the Act, CAA section 110(a)(2)(D)(i)(I)—may be treated as a BART alternative. The petitioners there argued that the EPA should not have compared BART on its own (i.e., without CSAPR in place) to the BART alternative on its own

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<sup>13</sup> See *Utility Air Regulatory Group v. EPA*, 885 F.3d 714 (D.C. Cir. 2018); *Yazzie v. EPA*, 851 F.3d 960 (9th Cir. 2017).

<sup>14</sup> 851 F.3d at 975.

<sup>15</sup> 851 F.3d at 974.

<sup>16</sup> *Id.*

<sup>17</sup> See *id.*

(i.e., CSAPR without BART in place), but should have instead compared BART *plus* CSAPR to CSAPR, because CSAPR (like the MATS rule here), was implemented under a separate provision of the CAA and would go into effect regardless of BART.<sup>18</sup> The D.C. Circuit rejected the petitioners' argument as effectively requiring more of BART alternatives than the EPA's rule requires. The court explained that under the Regional Haze Rule, the EPA properly compares BART without the alternative or other CAA requirements to the alternative without BART.<sup>19</sup> Underlying that holding is the fact that EPA's regulations authorize BART alternatives to take advantage of emission reductions achieved to meet some other CAA requirement so long as they are surplus to requirements as of the baseline.<sup>20</sup> Thus, as in *UARG*, the EPA here properly compared the BART Benchmark without MATS compliance at Carbon to the NO<sub>x</sub> BART Alternative.

This approach is also consistent with other EPA actions. See, e.g., 79 FR 39322, 39325 (July 10, 2014) (approving Connecticut's use of emissions reductions from post-2002 regulations as surplus that could be credited to its BART alternative); 77 FR 34218, 34219 (June 11, 2012) (approving Indiana's credit to its BART alternative for reductions from a non-BART source); 78 FR 57487, 57489-91 (Sept. 19, 2013) (approving Massachusetts' comparison of the BART benchmark and the BART alternative from a common 2002 baseline, and approving the state's use of emissions reductions from post-2002 regulations as surplus that could be credited to its BART alternative); 79 FR 33438, 33441-42 (June 11, 2014) (approving Washington's credit to

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<sup>18</sup> *UARG*, 885 F.3d at 720.

<sup>19</sup> See *id.*

<sup>20</sup> See 40 CFR 51.308(e)(2)(i)(C), (e)(2)(iv). See also *UARG*, 885 F.3d at 719, 720 (finding challenge to EPA's BART alternative regulations to be time-barred).

its BART alternative for reductions achieved through controls installed post-2002 in order to meet other CAA requirements).

In sum, in this final action approving Utah's NO<sub>x</sub> BART Alternative, the EPA finds that Utah properly compared the BART Benchmark to the BART Alternative, using its modeling of the emissions reductions of each without the other from the 2001-2003 baseline period, consistent with the Regional Haze Rule, its regulatory history, EPA guidance, and case law.

*Comment summary:* Some commenters argued that there are three legal flaws with Utah's treatment of SO<sub>2</sub> emissions reductions from the Carbon plant shutdown. As explained in the preamble to the proposed rule, Utah's SIP revision continues to report historical emissions for the Carbon plant in annual milestone reports for the SO<sub>2</sub> Backstop Trading Program to ensure that SO<sub>2</sub> emissions reductions from the Carbon shutdown are not double-counted towards the NO<sub>x</sub> BART Alternative and the SO<sub>2</sub> Backstop Trading Program. First, the commenters argued that the approach violates 40 CFR 51.309(d)(4)(iii)'s requirement that reporting under the SO<sub>2</sub> Backstop Trading Program include "actual" emissions. Second, the commenters argued that the approach violates 40 CFR 51.309(d)(4)(i), which requires that participating states use the same compliance methodology during the first two years of the Program. Finally, the commenters argued that removing Carbon from the SO<sub>2</sub> Backstop Trading Program would undermine and potentially nullify the EPA's approval of that Program because the Program's inclusion of sources like Carbon was an underpinning of the EPA's approval.

*Response:* The EPA disagrees with this comment and the incorporated 2016 comments by the National Park Service. First, 40 CFR 51.309(d)(4)(iii)'s requirement that SIPs include provisions requiring "annual reporting of actual stationary source SO<sub>2</sub> emissions" must be read in context with the following sentence that such "data must be sufficient to determine annually

whether the milestone for each year through 2018 is achieved.”<sup>21</sup> The provision goes on to require that the participating states submit the data to the EPA and the regional planning organization and that the data be kept for at least 10 years. Thus, read in context, § 51.309(d)(4)(iii) plainly is meant to require reporting that allows a determination of whether the milestones have been met.<sup>22</sup> Utah’s approach to reporting Carbon’s emissions under the SO<sub>2</sub> Backstop Trading Program serves this purpose because Utah will overstate actual emissions under the Program. This conservative approach ensures that the reported data are sufficient to determine whether the SO<sub>2</sub> milestone is achieved and is therefore consistent with and achieves the purpose of the provision, and the EPA finds it approvable.

As explained in the proposal, the participating states first achieved the 2018 milestone (the most stringent milestone) in 2011 when Carbon was fully operational. Between 2011 and Carbon’s shutdown in 2015, emissions continued to stay below the 2018 milestone and decreased significantly each year. The most recent milestone report, for 2016, demonstrates that SO<sub>2</sub> emissions were 36 percent lower than the 2018 milestone.<sup>23</sup> At its highest reported SO<sub>2</sub> emissions level, Carbon’s emissions made up only 10 percent of the participating states’ three-year average SO<sub>2</sub> emissions (reported in 2014).<sup>24</sup> Thus, even with the additional emissions from Carbon, the participating states can easily achieve the 2018 milestone, and overstating Utah’s emissions for purposes of the SO<sub>2</sub> Backstop Trading Program will not impair any determination of compliance with the milestones.

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<sup>21</sup> 40 CFR 51.309(d)(4)(iii).

<sup>22</sup> See 64 FR 35751-52 (“Section 51.309(d)(4) requires monitoring and reporting of stationary source emissions of SO<sub>2</sub> in order to assess compliance with these milestones during the period 2003 to 2018.”).

<sup>23</sup> 85 FR 3570.

<sup>24</sup> Id. at Table 6.

Second, Utah’s approach does not violate 40 CFR 51.309(d)(4)(i). As an initial matter, the commenters selectively quote the provision. The complete sentence reads, “[d]uring the first two years of the program, compliance with the milestone may be measured by a methodology of the States’ choosing, so long as all States in the program use the same methodology.”<sup>25</sup> The SO<sub>2</sub> Backstop Trading Program was approved in 2012, which is more than two years ago.<sup>26</sup> Thus, this sentence is no longer applicable.

Instead, after the first two years of the Program, § 51.309(d)(4)(i) requires that participating states measure compliance by comparing “a three-year rolling average of actual emissions with a rolling average of the emissions milestones for the same three years.” Utah’s SIP revision remains consistent with this methodology. Under this methodology, each state reports its own emissions.<sup>27</sup> As explained above, using this methodology, the participating states achieved the 2018 milestone in 2011, and emissions are currently 36 percent below the 2018 milestone.<sup>28</sup> Accordingly, Wyoming and New Mexico are not prejudiced by Utah’s continued reporting of the Carbon emissions, nor do they have any reason to amend their SIPs to account for Carbon’s emissions. Indeed, the EPA approved a similar SIP revision for units in Wyoming in 2019.<sup>29</sup> Utah’s approach is consistent with § 51.309(d)(4)(i) and with the other states’ methodologies.

Finally, Utah’s approach does not undermine or nullify the EPA’s approval of the SO<sub>2</sub> Backstop Trading Program. In approving the Program as better than BART, the EPA relied on

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<sup>25</sup> 40 CFR 51.309(d)(4)(i) (emphasis added).

<sup>26</sup> See 77 FR 73926 (Dec. 12, 2012).

<sup>27</sup> See Utah Admin. Code R307-250-9(8); WY Rules and Regulations 020.0002.14 § 2(h)(viii); New Mexico Admin. Code 20.2.81.106(O) and 20.11.46.16(H) (all requiring quarterly and annual reports).

<sup>28</sup> 85 FR 3570 (Table 6).

<sup>29</sup> See 84 FR 22711, 22712, 22715 (May 20, 2019) (requiring Basin Electric to use inflated emission rates to calculate and report emissions from two units for the SO<sub>2</sub> Backstop Trading Program to ensure SO<sub>2</sub> emissions are not double counted for the SO<sub>2</sub> Program and the BART alternative).

the fact that the Program, including the 2018 SO<sub>2</sub> emissions milestone, covered 63 non-BART sources, including Carbon.<sup>30</sup> It hardly undermines the EPA's approval that one of the sources that was included in the Program has now shut down. The Program was designed to encourage sources to reduce emissions so that the emissions milestones were and are never exceeded.<sup>31</sup> In any case, Utah has not removed Carbon from the Program, but rather has decided to continue counting its emissions at historical levels towards the 2018 milestone, even though the source is now actually emitting at zero. That is, emissions from Carbon remain covered by the SO<sub>2</sub> Backstop Trading Program. Even accounting for Carbon's historical emissions, the participating states' SO<sub>2</sub> emissions are far below the 2018 milestone and there is no indication that the 2018 milestone will ever be exceeded such that emissions under the Program would exceed projected emissions under BART, thereby rendering the Program less effective than BART.

Even if it was the case that Utah had removed Carbon from the SO<sub>2</sub> Backstop Trading Program, however, the inclusion of non-BART units like Carbon was just one of several reasons the EPA deemed the Program better than BART. Additional reasons included: (1) the trading program discouraged emissions from new sources more effectively than under BART; (2) the trading program included an aggregate cap on emissions, which decreased emissions more effectively than BART; and (3) the trading program encouraged earlier reductions than under BART.<sup>32</sup> The Tenth Circuit upheld the EPA's considerations as "a reasonable basis for the EPA's approval of the 309 program."<sup>33</sup> Accordingly, Utah's continued accounting of the Carbon emissions in the SO<sub>2</sub> Backstop Trading Program, which arguably affects just one part of the

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<sup>30</sup> 77 FR 30953, 30965 (May 24, 2012).

<sup>31</sup> 77 FR 74360. Participating states must continue to meet the 2018 milestone until the Program is replaced with an EPA-approved SIP revision. See also 40 CFR 51.309(d)(4)(vi)(A).

<sup>32</sup> See 77 FR 30965; 77 FR 73927.

<sup>33</sup> *WildEarth Guardians v. EPA*, 770 F.3d 919, 935 (10th Cir. 2014).

EPA's rationale in a proportionally minor way (1/63), cannot possibly undermine or nullify the EPA's approval.

Finally, as noted above, Carbon has not been removed from the Program as the commenters contend. Rather, as explained above, Carbon's emissions continue to be included in the inventory of annual emissions notwithstanding the fact that it is shut down.<sup>34</sup> Thus, SO<sub>2</sub> emissions remain capped at the 2018 milestone, including Carbon's emissions. To the extent it may become necessary, future SO<sub>2</sub> reductions would have to come from other sources in order to allow the participating states to continue to meet the 2018 milestone.

*Comment summary:* Some commenters assert that the EPA may not approve the NO<sub>x</sub> BART Alternative because the NO<sub>x</sub> BART Alternative would allow increased emissions limits and visibility impairment without offsetting increased emissions elsewhere in Utah's SIP in violation of CAA section 110(I), 42 U.S.C. 7410(I). The commenters argue that case law supports an interpretation of CAA section 110(I) that prevents implementation plan revisions that would increase overall air pollution limits or worsen air quality. The commenters argue that the EPA's approval of the NO<sub>x</sub> BART Alternative and withdrawal of the FIP would violate CAA section 110(I) for two specific reasons. First, the commenters assert that the NO<sub>x</sub> BART Alternative would increase emissions limits and resulting NO<sub>x</sub> pollution compared to the FIP. They argue that the EPA's proposed analysis and conclusion that increased NO<sub>x</sub> emissions will not interfere with applicable CAA requirements is "woefully insufficient to support compliance with section 110(I)." Second, the commenters assert that Utah's treatment of the SO<sub>2</sub> emissions reductions from the Carbon plant, which continues to report Carbon's emissions under the SO<sub>2</sub> Backstop Trading Program so that they can be credited to the NO<sub>x</sub> BART Alternative, violates

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<sup>34</sup> See 85 FR 3574.

CAA section 110(*l*). The commenters argue that such treatment eliminates an applicable requirement under the CAA that results in an increase in overall allowed emissions.

*Response:* The EPA disagrees with these comments. CAA section 110(*l*) states in relevant part: “The Administrator shall not approve a revision of a plan if the revision would interfere with any applicable requirement concerning attainment and reasonable further progress (as defined in section 7501 of this title), and any other applicable requirement of this chapter.”<sup>35</sup> CAA section 110(*l*) applies to all requirements of the CAA and to all areas of the country, whether attainment, nonattainment, unclassifiable or maintenance for one or more of the six criteria pollutants. EPA interprets section 110(*l*) as applying to all National Ambient Air Quality Standards (NAAQS) that are in effect, including those for which SIP submissions have not been made.<sup>36</sup> However, the level of rigor needed for any CAA section 110(*l*) demonstration will vary depending on the nature and circumstances of the revision.

There are two possible paths for satisfying CAA section 110(*l*). First, a state may demonstrate through an air quality analysis that the revision will not interfere with attainment of the NAAQS, reasonable further progress, or any other applicable requirements. Second, a state may substitute equivalent emissions reductions to compensate for any change to a plan to ensure actual emissions to the air are not increased and thus preserve status quo air quality.<sup>37</sup> The

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<sup>35</sup> 42 U.S.C. 7410(*l*).

<sup>36</sup> In general, a section 110(*l*) demonstration should address all pollutants whose emissions and/or ambient concentrations would change as a result of a plan revision. Here, commenters allege that emissions and/or ambient concentrations of NO<sub>x</sub> and SO<sub>2</sub> would change as a result of this plan revision.

<sup>37</sup> “Equivalent” emissions reductions are reductions that are equal to or greater than those reductions achieved by the control measure approved into the plan. To show that compensating emissions reductions are equivalent, adequate justification must be provided. The compensating, equivalent reductions should represent actual emissions reductions achieved in a contemporaneous time frame to the change of the existing control measure in order to preserve the status quo air quality. If the status quo is preserved, noninterference is demonstrated. In addition to being contemporaneous, the equivalent emissions reductions should also be permanent, enforceable, quantifiable, and surplus.

second approach may be used, for example, where no attainment demonstrations are available to guide an analysis of whether the SIP revision would interfere with attainment of the NAAQS. However, nothing in the statute requires a state to rely on substitute emission reductions or alters the basic proposition that section 110(*l*) can be satisfied by an air quality analysis demonstrating that a plan revision will not interfere with any applicable requirement concerning attainment and reasonable further progress, or any other applicable CAA requirement. As explained in greater detail below, in this case, the EPA has concluded based on an air quality analysis that the revision will not interfere with attainment of the NAAQS or any other applicable CAA requirement and is not relying on substitute emission reductions.

Before addressing comments regarding the EPA's analysis, however, we address the commenters' suggestion that CAA section 110(*l*) *per se* prohibits approval of any SIP revision that allows an increase in emissions or weakens requirements relative to the existing implementation plan.<sup>38</sup> Such an interpretation is not supported by the statutory language or case law. First, the plain language of the provision does not prohibit every SIP revision that allows an increase in emissions or weakens the existing plan's requirements. Rather, the language prohibits EPA approval of such a SIP revision if it *would interfere with* attainment of the NAAQS, reasonable further progress, or any other applicable requirement of the CAA.<sup>39</sup> Thus, the language focuses on *interference* rather than on emissions increases or changed requirements.

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<sup>38</sup> While the EPA acknowledges that this action will allow for greater NO<sub>x</sub> emissions than the 2016 FIP, the EPA does not concede that this action weakens regional haze requirements or allows increased visibility impairment. Instead, as is explained in the preamble to the proposed rule, this document, and in the EPA's response to comments, Utah's NO<sub>x</sub> BART Alternative will achieve *greater* reasonable progress through combined NO<sub>x</sub>, SO<sub>2</sub>, and PM reductions and therefore results in a *stronger* regional haze requirement than the existing plan. See, e.g., 85 FR 3566 (Table 3), 3569, 3573.

<sup>39</sup> See 42 U.S.C. 7410(*l*).

Second, courts have upheld EPA's interpretation that the relevant inquiry under CAA section 110(l) is not whether the SIP revision allows an increase in emissions or weakens requirements, but whether there has been a demonstration that the SIP revision would interfere with the NAAQS, reasonable further progress, or any other applicable CAA requirement.

For example, in *Kentucky Resources Council v. EPA*, the petitioners argued that a new attainment demonstration, which was not due for years after action on the SIP revision, was required in order to show noninterference under CAA section 110(l). Instead, the examination in that case was based on whether the area, which was designated as a nonattainment area for the relevant NAAQS, would have more difficulty attaining and maintaining the NAAQS with the SIP revision (i.e., whether the SIP revision would interfere with attainment and maintenance of the NAAQS). In upholding the EPA's interpretation and examination, the U.S. Court of Appeals for the Sixth Circuit explained, "Congress did not intend that the EPA reject each and every SIP revision that presents some remote possibility for interference. Thus, where EPA does not find that a SIP revision would interfere with attainment, approval of the revision does no violence to the statute."<sup>40</sup> The Sixth Circuit further explained that, "[i]n rejecting [a] strict interpretation in favor of one that allows [states] more flexibility, the EPA does service to a fundamental premise underlying the Clean Air Act scheme, which is that the states have the primary responsibility for ensuring that the NAAQS are met."<sup>41</sup> Likewise, the U.S. Court of Appeals for the Eleventh Circuit upheld the EPA's interpretation stating, "[w]e agree that where interference is not demonstrated, approval of the state's SIP revision appropriately respects the state's choice to

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<sup>40</sup> 467 F.3d 986, 994 (6th Cir. 2006).

<sup>41</sup> Id. at 996.

achieve air quality standards with ‘whatever mix of emission limitations it deems best suited to its particular situation.’”<sup>42</sup>

The commenters misconstrue other cases. In *El Comite Para El Bienestar de Earlimart v. EPA* and *WildEarth Guardians v. EPA*, the U.S. Court of Appeals for the Ninth Circuit dismissed petitioners’ CAA section 110(I) challenges without addressing what is required to show that a SIP revision violates CAA section 110(I).<sup>43</sup> And contrary to the commenters’ assertion, neither *Indiana v. EPA* nor *Kentucky Resources Council v. EPA* stand for the proposition that the EPA *must* require substitute emissions reductions when a SIP revision increases emissions so that overall net emissions do not increase. In those cases, the U.S. Courts of Appeal for the Sixth and Seventh Circuits simply held that the EPA reasonably concluded that CAA section 110(I) was not violated when substitute emissions reductions were included in the SIP revisions at issue.<sup>44</sup> But as explained above, the EPA has previously identified *two options* for demonstrating noninterference under CAA section 110(I): (1) substitution of one measure by another with equivalent or greater emissions reductions/air quality benefit; and (2) an air quality analysis showing that removing the measure will not interfere with other applicable requirements (i.e., without a substitute measure).<sup>45</sup> Here the SIP submission did not include substitute measures and the EPA chose to evaluate the air quality impact of the proposed revision. As we

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<sup>42</sup> *Alabama Environmental Council v. EPA*, 711 F.3d 1277, 1293 (11th Cir. 2013) (quoting *Train v. NRDC, Inc.*, 421 U.S. 60, 79 (1975)). See also *Indiana v. EPA*, 796 F.3d 803, 811 (7th Cir. 2015) (“When deciding whether to approve Illinois’s SIP revision, EPA was required to determine whether the revision would, *going forward*, interfere with attainment.”) (emphasis in original); *Galveston-Houston Ass’n for Smog Prevention v. EPA*, 289 Fed. Appx. 745, 754 (5th Cir. 2008) (“[C]hanges to a SIP, either dropping measures or reducing measurement requirements, are not by themselves sufficient to prove interference. Rather, one must show that the substitute measures are not at least equivalent to the previous measures in achieving attainment.”).

<sup>43</sup> See *El Comite Para El Bienestar de Earlimart v. EPA*, 786 F.3d 688, 696-97 (9th Cir. 2015); *WildEarth Guardians v. EPA*, 759 F.3d 1064, 1074 (9th Cir. 2014).

<sup>44</sup> See *Kentucky Resources Council*, 467 F.3d at 995-96; *Indiana*, 796 F.3d at 812-13.

<sup>45</sup> See *Indiana*, 796 F.3d at 806.

explain below, the EPA's air quality analysis shows that the Utah SIP revisions will not interfere with attainment of the NAAQS, reasonable further progress, or any other CAA requirement.

Importantly, the statute does not require any "specific methodology" for air quality analyses under CAA section 110(*I*).<sup>46</sup> In general, the level of rigor needed for any CAA section 110(*I*) demonstration will vary depending on the nature of the revision, its potential impact on emissions and air quality, and the air quality in the affected areas.

In the proposed rule, the EPA proposed to find that the SIP revisions satisfy section 110(*I*). The document explained how the proposed SIP revisions and associated FIP withdrawal will comply with and thus could not be said to interfere with applicable regional haze requirements and general implementation plan requirements such as enforceability. The proposal also addressed potential interference with requirements concerning attainment and reasonable further progress, stating that the Utah SIP revisions will allow for greater NO<sub>x</sub> emissions at the four subject-to-BART units as compared to the 2016 FIP (which is currently judicially stayed). The proposal went on to explain that the change in these emissions compared to the FIP, however, is not anticipated to interfere with any applicable requirements under the CAA. We explained that the geographic area where the BART units are located is not part of a nonattainment area for any NAAQS. Furthermore, we explained that the approved portions of the PM<sub>2.5</sub> attainment demonstrations and clean data determinations (CDD) for the Salt Lake City, Provo, and Logan, UT-ID nonattainment areas (NAAs) do not rely on the installation of SCR at Hunter or Huntington to achieve attainment of the NAAQS. Similarly, we explained that the EPA recently approved Utah's PM<sub>10</sub> redesignation requests and maintenance plans for Salt Lake

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<sup>46</sup> *Kentucky Resources Council*, 467 F.3d at 995.

County, Utah County, and Ogden City NAAs.<sup>47</sup> These PM<sub>10</sub> redesignation requests and maintenance plans do not rely on the installation of SCR at Hunter or Huntington to achieve attainment of the NAAQS. Finally, we explained that there are no other approved attainment demonstrations in other areas of the State or outside of the State that rely on the installation of SCR at Hunter or Huntington to achieve attainment of any of the NAAQS.<sup>48</sup>

The commenters contend that the EPA's air quality analysis is inadequate but did not provide any evidence that Utah's SIP revisions will interfere with any specific applicable requirement under the CAA. Here, for the reasons explained below, the EPA now confirms the proposed conclusions from the CAA section 110(l) analysis in the proposal.

First, the geographic area where the Hunter and Huntington Units are located is not part of a nonattainment area for any NAAQS. Also, monitors in the geographic area do not currently show exceedances of the ozone NAAQS.<sup>49</sup>

Second, since the publication of the proposal on January 22, 2020, the PM<sub>10</sub> areas for Salt Lake County, Utah County, and Ogden City were redesignated as attaining the PM<sub>10</sub> NAAQS.<sup>50</sup> The areas continue to attain the PM<sub>10</sub> NAAQS based on the most recent official ambient data (2017-2019).<sup>51</sup> This means that these areas attained the NAAQS at current emission levels, i.e., the emission levels allowed by the NO<sub>x</sub> controls installed at Hunter and Huntington between 2006 and 2014 and which will be maintained under Utah's NO<sub>x</sub> BART Alternative. Because the FIP was judicially stayed and the NO<sub>x</sub> emission controls required by the FIP (SCRs) were never

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<sup>47</sup> The PM<sub>10</sub> redesignations for Salt Lake County, Utah County, and Ogden City nonattainment areas revised 40 CFR 81.345 to signify that these areas are in attainment. Utah demonstrated maintenance of the PM<sub>10</sub> standard to 2035 through the maintenance plans.

<sup>48</sup> 85 FR 3574.

<sup>49</sup> EPA, "Air Quality System Preliminary Design Value Report," October 7, 2020.

<sup>50</sup> 85 FR 10989 (Feb. 26, 2020).

<sup>51</sup> EPA, "Air Quality System Preliminary Design Value Report," September 15, 2020.

installed, current emissions levels do not reflect emission levels that would have been achieved if the FIP had been implemented. In other words, the EPA's approval of the Utah NO<sub>x</sub> BART Alternative will not cause an increase in NO<sub>x</sub> emissions at Hunter or Huntington compared to current conditions. Therefore, the SIP approval will not interfere with already-achieved NAAQS attainment for PM<sub>10</sub>, and there is no evidence, including none provided by the commenters, to suggest that PM<sub>10</sub> areas for Salt Lake County, Utah County, and Ogden City will not continue to attain the NAAQS following our approval of the SIP and concurrent withdrawal of the FIP.

Third, the Northern Wasatch Front, Southern Wasatch Front, and Uinta Basin ozone non-attainment areas were designated nonattainment for the 2015 ozone NAAQS on August 3, 2018.<sup>52</sup> As part of the 2018 ozone designation process, the EPA conducted a meteorological Hybrid Single-Particle Lagrangian Integrated Trajectory (HYSPLIT) analysis to determine whether sources near the monitors violating the NAAQS contribute to the Northern and Southern Wasatch Front ozone non-attainment areas. Evaluation of such meteorological data helps to assess the fate and transport of emissions contributing to ozone concentrations and to identify areas potentially contributing to the monitored violations. Results of the HYSPLIT analysis for the Northern and Southern Wasatch Front ozone nonattainment areas show that back trajectories rarely originated or passed through Carbon and Emery counties on high ozone days in the Wasatch Front (where Hunter and Huntington are located).<sup>53</sup> Instead, the HYSPLIT analysis indicates that emissions originating within Davis and Salt Lake Counties, the southern portion of

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<sup>52</sup> 83 FR 25776, 25836 (June 4, 2018). At that time, the ozone monitors located closest to the two power plants, in Carbon County, did not violate the 2015 ozone standard. EPA, "Utah: Northern Wasatch Front, Southern Wasatch Front, and Uinta Basin Intended Area Designations for the 2015 Ozone National Ambient Air Quality Standards Technical Support Document (TSD)," page 6 ("Utah 2015 Ozone TSD"). Also found in docket EPA-HQ-OAR-2017-0548; posted January 5, 2018.

<sup>53</sup> Utah 2015 Ozone TSD, pages 18-25.

Weber County, the northern portion of Utah County, and the eastern portion of Tooele County primarily contribute to monitor violations.<sup>54</sup> Furthermore, the monitors in the Southern Wasatch Front ozone nonattainment area (closest to the BART sources) are currently attaining the ozone standard using 2017 – 2019 and preliminary 2018 – 2020 data.<sup>55</sup>

For the Uinta Basin non-attainment area, the EPA has determined that ozone production is a highly localized phenomenon. The Uinta Basin is a winter ozone area, where violating ozone concentrations are dependent on stagnant winter conditions associated with strong temperature inversions. During the ozone designations process, the EPA used the latest data and information available to the agency (and to the states and tribes through the Ozone Designations Mapping Tool and the EPA Ozone Designations Guidance and Data web page),<sup>56</sup> to evaluate emissions and air quality data and other information for counties in the Uinta Basin. The EPA determined that the stagnant winter conditions associated with strong temperature inversions limit the influence of areas outside of the topographic Uinta Basin.<sup>57</sup> Thus, at the time of the 2018 designation, the EPA determined that sources in surrounding counties (like Hunter and Huntington) do not contribute to the violating area because of these unique geographic features and the associated winter temperature inversion meteorology.

Fourth, the Salt Lake City, Provo, and Logan, Utah-Idaho (UT-ID) PM<sub>2.5</sub> nonattainment areas were designated nonattainment for the 2006 24-hour PM<sub>2.5</sub> NAAQS on November 13,

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<sup>54</sup> Id. at 25.

<sup>55</sup> EPA, “Air Quality System Preliminary Design Value Report,” October 7, 2020.

<sup>56</sup> The EPA’s Ozone Designations Guidance and Data web page can be found at <https://www.epa.gov/ozone-designations/ozone-designations-guidance-and-data>.

<sup>57</sup> Utah 2015 Ozone TSD, pages 29, 30.

2009.<sup>58</sup> On October 19, 2018, the EPA finalized a determination of attainment for the Logan, UT-ID PM<sub>2.5</sub> nonattainment area.<sup>59</sup> Based on the most recent 3 years of valid data at that time (2015-2017), the Logan, UT-ID nonattainment area attained the 2006 primary and secondary 24-hour PM<sub>2.5</sub> NAAQS by the attainment date of December 31, 2017. Likewise, on June 8, 2020, the EPA proposed a determination of attainment, based on the most recent 3 years of valid data (2017-2019), that the Salt Lake City and Provo nonattainment areas attained the 2006 primary and secondary 24-hour PM<sub>2.5</sub> NAAQS by the attainment date of December 31, 2019.<sup>60</sup> On January 13, 2020, Utah submitted redesignation requests for the Logan, UT-ID, Salt Lake City, and Provo PM<sub>2.5</sub> nonattainment areas and the EPA is actively reviewing this submittal for future action.

Because the Logan, UT-ID PM<sub>2.5</sub> nonattainment area is now attaining the PM<sub>2.5</sub> NAAQS and we proposed to find that the Salt Lake City and Provo PM<sub>2.5</sub> nonattainment areas are also now attaining the PM<sub>2.5</sub> NAAQS at *current* emission levels, which would not increase upon approval of Utah's SIP revisions, the SIP approval will not interfere with NAAQS attainment for PM<sub>2.5</sub>. Additionally, there is no evidence, including none provided by the commenters, to suggest that these areas will not continue to attain the NAAQS following our approval of the SIP and concurrent withdrawal of the FIP.

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<sup>58</sup> 74 FR 58688 (Nov. 13, 2009).

<sup>59</sup> 83 FR 52983 (Oct. 19, 2018). A nonattainment area may be issued a determination of attainment by the EPA only if monitored data demonstrate that air quality has improved enough that the NAAQS is now being achieved. These determinations are based upon complete, quality-assured data gathered at established state and local air monitoring stations and national air monitoring stations in the nonattainment area and must include a notice and comment rulemaking by the EPA determining that the area is attaining the relevant standard. Although a determination of attainment is not equivalent to a redesignation in 40 CFR part 81, a determination of attainment shows that monitored air quality no longer violates the NAAQS.

<sup>60</sup> 85 FR 35033 (June 8, 2020).

Fifth, contrary to the commenters' argument, the EPA demonstrated that the SIP approval will not interfere with the CAA's BART requirements, including the SO<sub>2</sub> Backstop Trading Program. As explained elsewhere in this document, Utah's amendments to the SO<sub>2</sub> Backstop Trading Program do not alter the applicable 2018 SO<sub>2</sub> milestone or the sources covered by the Program, and thus maintain compliance with the Program and the Regional Haze Rule. The SIP amendments to Utah's SO<sub>2</sub> milestone reporting requirements under the SO<sub>2</sub> Backstop Trading Program are merely an accounting exercise to ensure that emission reductions resulting from the Carbon plant's closure are not credited towards both the SO<sub>2</sub> Backstop Trading Program and the NO<sub>x</sub> BART Alternative. The SIP amendments further do not result in an actual increase in emissions.

In summary, we find that Utah's SIP revisions will not interfere with attainment of the NAAQS, reasonable further progress, or other CAA requirements because: (1) the geographic area where the Hunter and Huntington Units are located is not part of a nonattainment area for any NAAQS; (2) the recently redesignated former PM<sub>10</sub> nonattainment areas in Salt Lake County, Utah County, and Ogden City are attaining the PM<sub>10</sub> NAAQS at current emission levels, which would remain unchanged with approval of Utah's SIP revisions; (3) we determined in 2018 that the Hunter and Huntington power plants do not contribute to the Northern Wasatch Front and Southern Wasatch Front ozone non-attainment areas, and that the Uinta Basin non-attainment area is a highly localized phenomenon and sources in surrounding counties, including the Hunter and Huntington power plants, do not contribute to the violating area; (4) the Logan, UT-ID PM<sub>2.5</sub> nonattainment area is attaining the PM<sub>2.5</sub> NAAQS, and we proposed to find that the Salt Lake City and Provo PM<sub>2.5</sub> nonattainment areas are also attaining the PM<sub>2.5</sub> NAAQS, all at current emission levels that would not increase under Utah's SIP revisions; and (5) the Utah SIP

revisions properly account for SO<sub>2</sub> emissions in accordance with applicable requirements. Furthermore, the commenters provided no analysis or information to indicate otherwise. Thus, we confirm our position in the proposed rule that Utah's SIP revisions are not anticipated to interfere with applicable requirements of the CAA and therefore CAA section 110(l) does not prohibit approval of this SIP and concurrent withdrawal of the FIP.

*B. BART Alternative Requirements*

*Comment summary:* Some commenters asserted that because the EPA's proposed rule would result in a significantly different distribution of emissions from BART, it fails to show "greater reasonable progress" under 40 CFR 51.308(e)(3) than the EPA's previously issued FIP. Specifically, the commenters assert that when alleged technical deficiencies including those in the CAMx dispersion modeling are corrected, the EPA is unable to prove "greater reasonable progress" because visibility will decline in one or more Class I areas and there is not an overall improvement in visibility over all affected Class I areas.

*Response:* We disagree with this comment. The three plants (Hunter, Huntington, and Carbon) are all located within 40 miles of each other in Central Utah and are therefore similarly situated to the affected Class I areas. But Utah chose to use CAMx dispersion modeling to assess whether the NO<sub>x</sub> BART Alternative achieves greater reasonable progress for the worst and best 20 percent of days (i.e., the two-prong test). This is the regulatory test required under § 51.308(e)(3) if the distribution of emissions *were* substantially different.<sup>61</sup> Thus, the question of emissions distribution is not pertinent to the EPA's approval of Utah's NO<sub>x</sub> BART Alternative. Any influence that the respective geographic relationship of the emission reductions from BART

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<sup>61</sup> See 40 CFR 51.308(e)(3).

and the NO<sub>x</sub> BART Alternative have on visibility impacts at the Class I areas is resolved by the CAMx modeling.

We respond to specific comments related to alleged technical deficiencies in the modeling in more detail below and in the RTC document. We find that the CAMx modeling used for the greater reasonable progress demonstration was performed consistent with EPA guidance and that the model performance was similar to applications of the CAMx model that the EPA and states have used in previous actions for regional haze.<sup>62</sup> The CAMx modeling results showed that the NO<sub>x</sub> BART Alternative met the requirements of the greater reasonable progress two-prong test, i.e., visibility does not decline in any Class I area under the BART Alternative relative to the Baseline on both the 20% best and 20% worst days, and the average visibility improvement across all affected Class I areas is greater under the BART Alternative than under the BART Benchmark.<sup>63</sup>

*C. BART Alternative “Greater Reasonable Progress” Determination*

*Comment summary:* Some commenters asserted that the CAMx modeling supporting the Utah NO<sub>x</sub> BART Alternative is flawed because it continues to assume that the installation and operation of SCR on Hunter Units 1 and 2 and Huntington Units 1 and 2 would achieve a NO<sub>x</sub> emission rate of 0.07 lb/MMBtu on a 30-day rolling average, as approved by the EPA four years ago in its FIP. The commenters contend that there are several electric generating units (EGUs) that have achieved NO<sub>x</sub> emission rates of 0.04 lb/MMBtu or lower on an annual average basis. The commenters further contend that the EPA recently adopted a BART alternative for the

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<sup>62</sup> Previous actions that relied on CAMx modeling include the Cross-State Air Pollution Rule (CSAPR) (76 FR 48208 (Aug. 8, 2011)); the FIP revision for Laramie River Station in Wyoming (84 FR 22711 (May 20, 2019)); and the SIP revision for Coronado Generating Station in Arizona (82 FR 46903 (Oct. 10, 2017)).

<sup>63</sup> See 85 FR 3573.

Laramie River Station in Wyoming and acknowledged that a 0.04 lb/MMBtu NO<sub>x</sub> emission rate would be achieved with SCR on an annual average basis under a 0.06 lb/MMBtu NO<sub>x</sub> limit applicable on a 30-day average basis.

The commenters further assert that while the Hunter and Huntington BART units have been achieving 0.19-0.20 lb/MMBtu NO<sub>x</sub> rates on an annual average basis in the last two years, these units should be able to readily achieve a 0.04 lb/MMBtu annual average NO<sub>x</sub> rate with SCR. The commenters contend that such a NO<sub>x</sub> rate equates to a 74-80% NO<sub>x</sub> removal efficiency across the SCR, and SCR systems are routinely designed to achieve 90% NO<sub>x</sub> removal. The commenters therefore argue that it is improper to judge the Utah BART Alternative against a BART Benchmark that utilizes obsolete emissions information and that the EPA should not have assumed a controlled annual average NO<sub>x</sub> rate any higher than 0.04 lb/MMBtu for the Hunter and Huntington Units in BART modeling.

*Response:* We disagree with this comment. By way of background, the EPA's FIP used an assumed emission rate of 0.05 lb/MMBtu on an *annual* basis, but required compliance with a 0.07 lb/MMBtu, *30-day rolling average* limit.<sup>64</sup> The commenters here contend that EPA should have used a lower annual limit, which would in turn lower the 30-day rolling average limit, for purposes of the BART Benchmark. As an initial matter, emission limits associated with BART do not need to meet the lowest emission rate achieved with that technology at any coal-fired power plant. The Regional Haze Rule provides that “[t]he determination of BART must be based on an analysis of the best system of continuous emission control technology available and

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<sup>64</sup> 81 FR 43903.

associated emission reductions achievable for each BART-eligible source that is subject to BART.”<sup>65</sup>

Additionally, the BART Guidelines state that: “[i]n assessing the capability of the control alternative, latitude exists to consider special circumstances pertinent to the specific source under review, or regarding the prior application of the control alternative,”<sup>66</sup> and that “[t]o complete the BART process, you must establish enforceable emission limits that reflect the BART requirements.”<sup>67</sup> The five factor BART analysis described in the Guidelines is a case-by-case analysis that considers site-specific factors in assessing the best technology for continuous emission controls. After a technology is determined as BART, the BART Guidelines require establishment of an emission limit that reflects the BART requirements, but does not specify that the emission limit must represent the maximum level of control achieved by the technology selected as BART.

While the BART Guidelines and the Regional Haze Rule do not preclude selection of the maximum level of control achieved by a given technology as BART, the emission limit must be set to reflect BART which in turn must be determined based on a consideration and weighing of the five statutory BART factors. Therefore, limits set in other BART determinations, Best Available Control Technology during Prevention of Significant Deterioration review, or emission rates achieved from the operation of individual facilities under an emissions trading program (e.g., CSAPR) may provide important information, but should not be construed to automatically represent the most appropriate BART limit for a given technology.

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<sup>65</sup> 40 CFR 51.308(e)(1)(ii)(A).

<sup>66</sup> 40 CFR part 51, appendix Y, section IV.D.3.

<sup>67</sup> 40 CFR part 51, appendix Y, section V.

Additionally, while the commenters cite actual annual emission rates found in the EPA's Air Markets Program Database (AMPD) to support their claim that an annual emission rate of 0.04 lb/MMBtu is achievable with SCR, a more thorough review of the data supports the EPA's conclusion that an annual emission rate no lower than 0.05 lb/MMBtu is representative of what can be achieved when retrofitting SCR to an existing boiler. Of the 155 coal-fired EGUs equipped with SCR operating in 2019 with actual annual emission rates below 0.10 lb/MMBtu, 135 (87.1%) had actual annual emissions greater than 0.05 lb/MMBtu, 18 (11.6%) had actual annual emissions greater than 0.04 lb/MMBtu and less than or equal to 0.05 lb/MMBtu, and only 2 (1.3%) had actual annual emissions less than or equal 0.04 lb/MMBtu.<sup>68</sup> The figure in our RTC document shows the number of coal-fired EGUs equipped with SCR by actual annual emission range in increments of 0.01 lb/MMBtu. Notwithstanding the site-specific nature of SCR retrofits, these data support the conclusion that an annual emission rate of 0.05 lb/MMBtu is appropriate for the Utah BART units, and confirm that the assumption is relatively conservative because the majority of EGUs equipped with SCR have actual annual emission rates that are higher.

Moreover, the lowest emission rates found in the AMPD database may not be indicative of what can be expected at the Utah BART units for a number of reasons. As noted above, the site-specific characteristic of each SCR installation must be taken into account when determining the anticipated actual annual emission rate. For example, the commenter lists Dry Fork Unit 1 in Wyoming among units that are achieving an actual annual emission rate of 0.04 lb/MMBtu.<sup>69</sup>

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<sup>68</sup> See spreadsheet titled "SCR Actual Annual Emissions by Range.xlsx" in the docket. Note that AMPD query returned a total of 265 coal-fired EGUs equipped with SCR operating in 2019. However, many of these units had actual annual emission rates well in excess of what would be anticipated with an SCR when operated on a year-round basis. For that reason, the EPA eliminated all units with an actual annual emission rate in excess of 0.10 lb/MMBtu from consideration, leaving 155 units.

<sup>69</sup> AMPD data for 2019 show actual annual emissions of 0.0432 lb/MMBtu, above 0.04 lb/MMBtu.

However, construction on Dry Fork Unit 1 began in 2007 and SCR was integrated into the original design, and not installed as a retrofit as would be the case with the Utah BART units.

Our use of an anticipated actual annual emission rate with SCR of 0.05 lb/MMBtu here is also consistent with our 2016 FIP.<sup>70</sup> The EPA is unaware of, and the commenters have not cited, any advancements in SCR retrofit technology that have occurred since our July 2016 final rule. Accordingly, we have no reason to conclude that the assumptions we made at that time regarding SCR performance are now obsolete.

Finally, the commenters have incorrectly assumed that a 90% control efficiency can be achieved in all SCR applications regardless of the input NO<sub>x</sub> emission rate or other parameters. In our July 2016 final rule, the EPA used an actual annual average emission rate for LNB/SOFA (i.e., pre-SCR) at the Utah BART units of 0.20 lb/MMBtu to 0.22 lb/MMBtu.<sup>71</sup> A 90% reduction with SCR from these emission rates would yield annual emission rates of 0.020 lb/MMBtu to 0.022lb/MMBtu. As can be seen from the AMPD data discussed above, no EGU has achieved this level of control with SCR. Thus, because this level of control has not been achieved in practice, it is not a realistic expectation for the Utah BART units.

*Comment summary:* Some commenters criticized the selection of Class I areas for inclusion in the CAMx modeling domain. The commenters asserted that the modeling included Class I areas beyond 300 kilometers from the Carbon, Hunter, and Huntington power plants, and afforded equal weight to areas near and distant from the pollution sources even though there is higher confidence in the CAMx modeling at sites within 300 kilometers of the sources. The commenters further asserted that PacifiCorp included certain areas (e.g. San Pedro Parks

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<sup>70</sup> 81 FR 2034.

<sup>71</sup> See 81 FR 43903, Tables 2 through 5.

Wilderness Area (New Mexico)) farther than 500km from the sources, while apparently omitting others a similar distance away (e.g. Craters of the Moon in Idaho; Jarbidge in Nevada; Yellowstone, Grand Teton, Washakie, Fitzpatrick, and Bridger in Wyoming; Petrified Forest and Sycamore Canyon in Arizona; and Rocky Mountain, Eagles Nest, Rawah, and Great Sand Dunes in Colorado, among others). The commenters also stated that while Utah appeared to give undue weight to visibility benefits at certain distant Class I areas, Utah gave zero weight (and did not even analyze) visibility impacts at similarly distant sites. The commenters therefore argue that the assessed Class I areas were selected in an arbitrary manner, and that the analysis does not account for visibility impacts “over all affected Class I areas,” as required by the Regional Haze Rule.<sup>72</sup> The commenters argue that if corrected, the alleged errors may flip the outcome of Utah’s analysis; i.e., if the Class I areas outside of 300 kilometers from the power plants are omitted, the modeling fails to demonstrate that the average visibility benefit of the BART Alternative will be greater than the 2016 FIP (BART Benchmark).

*Response:* The EPA disagrees with this comment. The draft modeling protocol prepared by PacifiCorp included a rectangular modeling domain that included all of the Class I areas within a distance of 300 km of the Hunter and Huntington Units that had been considered in previous CALPUFF modeling applications for these BART sources. The EPA reviewed the proposed modeling domain and recommended that the boundaries of the domain be extended farther east, north, and south to include terrain features that could affect the transport of pollutants from the BART sources.<sup>73</sup> PacifiCorp agreed to extend the size of the domain as requested by the EPA. Thus, for example, the domain was extended farther north to include the

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<sup>72</sup> 40 CFR 51.308(e)(3)(ii).

<sup>73</sup> E-mail dated September 20, 2017, from Aaron Worstell (EPA) to Jay Baker (UDAQ), Subject: Updated invitation: Utah Regional Haze CAMx Model Review, docket ID EPA-R08-OAR-2015-0463-0228.

Uinta mountain range in northern Utah, and the domain was extended farther east such that the relevant Class I areas were fully included in the model domain and were not located close to the boundary of the domain. Because of the possibility of modeling artifacts at domain boundaries,<sup>74</sup> the EPA believed that the larger model domain was technically more defensible. The motivation for expanding the size of the model domain was to provide more accurate model results, not to include more Class I areas. However, given that additional Class I areas were included within the domain, the EPA determined that it was appropriate to consider visibility benefits at all Class I areas for which model results were available. The EPA determined that it would have been arbitrary to include some Class I areas but not to include other nearby Class I areas for which modeling results were available. The additional Class I areas (Mount Zirkel Wilderness Area [WA], Maroon Bells/Snowmass WA, West Elk WA, La Garita WA, Weminuche WA, and San Pedro Parks WA) are located close to and within the same air basins as the other Class I areas previously included in the CALPUFF modeling. While there are other Class I areas located within 500 km of the sources, prevailing wind patterns and terrain features make it less likely that emissions from Hunter and Huntington would impact those areas, and the EPA did not find that it was reasonable to recommend further expansion of the model domain to include these Class I areas. In addition, the calculation of the average difference between BART and the BART Alternative is most influenced by the Class I areas closest to and most impacted by Hunter, Huntington and Carbon. Therefore, small modeled impacts at additional distant Class I areas would likely have little or no impact on the average impact across all affected Class I areas.

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<sup>74</sup> For example, if emissions plumes near the model domain boundaries are transported out of the model domain, those emissions are permanently lost to the model, even if meteorological recirculation patterns might cause those emissions to re-enter the domain. Selecting a large model domain reduces the possibility that emissions plumes will be transported out of the model domain.

We also disagree with the comment that there is higher confidence in the CAMx modeling at sites within 300 kilometers of the sources. Higher confidence in modeling for sites within 300 kilometers is a feature of the CALPUFF model. For example, the Interagency Workgroup on Air Quality Modeling report recommended the “use of CALPUFF for transport distances of order 200 km and less. Use of CALPUFF for characterizing transport beyond 200 to 300 km should be done cautiously with an awareness of the likely problems involved.”<sup>75</sup> The CAMx model is not subject to this limitation because it was developed and has been widely used and evaluated for applications at distances much greater than 300 kilometers, including modeling and regulatory analyses for interstate transport of ozone and PM<sub>2.5</sub>. Photochemical grid models such as CAMx are recommended by the EPA in Appendix W<sup>76</sup> for long range transport modeling for secondary pollutants, including regional haze.

*Comment summary:* Some commenters asserted that the CAMx modeling cannot support the NO<sub>x</sub> BART Alternative because it employs the wrong metric for comparison. Specifically, the commenters argue that instead of using “the worst and best 20 percent of days” to demonstrate greater reasonable progress under 40 CFR 51.308(e)(3), Utah should have substituted an analysis for the 20% of days in a calendar year “with the highest amount of anthropogenic visibility impairment” under the EPA’s 2017 revisions to the Regional Haze Rule. The commenters argue that without such modeling, the EPA cannot demonstrate in accordance with the regional haze requirements that the BART Alternative would result in greater reasonable progress than BART as determined in the EPA’s FIP (BART Benchmark), and the BART Alternative is not approvable.

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<sup>75</sup> EPA, “Interagency Workgroup on Air Quality Modeling (IWAQM) Phase 2 Summary Report and Recommendations for Modeling Long Range Transport Impacts,” December 1998, pages 18 and D-11.

<sup>76</sup> 40 CFR part 51, appendix W.

*Response:* We disagree that the CAMx modeling relied on in Utah’s SIP submittal employs the wrong metric for comparison of the BART Benchmark and NO<sub>x</sub> BART Alternative. First, as explained elsewhere in the preamble to the proposed rule, the RTC document, and this document, Utah submitted its NO<sub>x</sub> BART Alternative, and the EPA proposed to approve it, under the two-prong test in 40 CFR 51.308(e)(3)(i) and (ii). The two-prong test requires that “the State must conduct dispersion modeling to determine differences in visibility between BART and the [alternative] for each impacted Class I area, *for the worst and best 20 percent of days.*”<sup>77</sup> The 2017 revisions to the Regional Haze Rule discussed by the commenter did not change 40 CFR 51.308(e)(3).<sup>78</sup> Indeed, § 51.308(e)(3) is a BART provision applicable to the first regional haze planning period, and the EPA explicitly did not make any changes to the Regional Haze Rule’s BART provisions in the 2017 revisions.<sup>79</sup> Because Utah’s SIP revisions are intended to satisfy first planning period BART requirements,<sup>80</sup> the CAMx modeling properly employed the haziest days metric rather than the new “most impaired days” metric.

*Comment summary:* Commenters assert that the most fundamental technical deficiency in the CAMx modeling is the emissions information used by Utah for the “typical year” scenario (also called the 2011 reference case). Commenters assert that the EPA provided no explanation as to why the 2011 reference case was modeled with the 2001-2003 baseline period emissions at Carbon, Hunter and Huntington. Commenters note that in the interval between the baseline

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<sup>77</sup> 40 CFR 51.308(e)(3) (emphasis added).

<sup>78</sup> See 82 FR 3078, 3124 (Jan. 10, 2017).

<sup>79</sup> See 81 FR 26942, 26947 (May 4, 2016) (“States undertook the BART determination process during the first implementation period. The BART requirement was a one-time requirement . . . . Consequently, we are not proposing any changes to the BART provisions in this rulemaking.”).

<sup>80</sup> See 85 FR 3575.

period and the typical year, PacifiCorp installed significant emissions control improvements at both Hunter and Huntington, which resulted in substantial SO<sub>2</sub> reductions.

Commenters assert that the Hunter and Huntington emission controls are important because the associated impact of such controls on visibility conditions in Class I areas in Utah and neighboring states already would be reflected in the 2009-2013 five-year average Interagency Monitoring of Protected Visual Environments (IMPROVE) data used in the CAMx modeling. Commenters claim that by using the 2001-2003 baseline emissions to describe the Hunter and Huntington plants for the 2011 reference year, the post-2003 SO<sub>2</sub> reductions at Hunter and Huntington are essentially double counted. Commenters conclude that Utah's approach to typical year emissions for the Hunter, Huntington and Carbon power plants presents a fundamental error with the CAMx modeling and the resulting implication is that the modeling results cannot be used to support Utah's conclusion that the Utah NO<sub>x</sub> BART Alternative would result in greater visibility improvement compared to the EPA FIP (BART Benchmark).

*Response:* We disagree with this comment. As an initial matter, the commenters have not explained how the emissions data used in the 2011 Typical Year scenario results in a faulty outcome to the two-prong regulatory analysis required under 40 CFR 51.308(e)(3). Indeed, the modeling was appropriately designed to assess each prong in a reasonable and technically defensible way.<sup>81</sup>

As we explained in the proposed rule, CAMx was configured to simulate four modeling scenarios: the 2011 Typical Year, the 2025 Baseline, the BART Benchmark, and the Utah NO<sub>x</sub> BART Alternative. The 2011 Typical Year scenario includes emissions for Carbon, Hunter and

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<sup>81</sup> See AECOM, "Photochemical Modeling Protocol to Assess Visibility Impacts for PacifiCorp Power Plants Located in Utah," January 2018.

Huntington at 2001-2003 levels, while all other sources remain at 2011 levels. The annual NO<sub>x</sub> and SO<sub>2</sub> emissions modeled for each of these scenarios are shown in Table 1 below.

**Table 1 – Annual NO<sub>x</sub> and SO<sub>2</sub> Emissions by Modeling Scenario**

Plant	Unit	2011 Typical Year		2025 Baseline		2025 BART Benchmark		2025 Utah NO <sub>x</sub> BART Alternative	
		NO <sub>x</sub> (tpy)	SO <sub>2</sub> (tpy)	NO <sub>x</sub> (tpy)	SO <sub>2</sub> (tpy)	NO <sub>x</sub> (tpy)	SO <sub>2</sub> (tpy)	NO <sub>x</sub> (tpy)	SO <sub>2</sub> (tpy)
Carbon	1	1,312	2,286	1,312	2,286	1,312	2,286	0	0
	2	1,977	3,528	1,977	3,528	1,977	3,528	0	0
Hunter	1	6,380	2,535	6,380	2,535	796	1,153	3,166	1,153
	2	6,092	2,531	6,092	2,531	798	1,408	3,028	1,408
	3	6,530	1,204	6,530	1,204	6,530	1,230	4,490	1,230
Huntington	1	5,944	2,380	5,944	2,380	793	1,254	3,147	1,254
	2	5,817	12,308	5,816	12,308	753	1,201	3,366	1,201

The modeling relied on the 2011 emissions data because a robust, well-evaluated modeling platform was available only for 2011 and was not available for any other year.

The 2025 Baseline modeling scenario, which is based on the 2011 Typical Year scenario with emissions projected to 2025, also uses 2001-2003 emissions for PacifiCorp’s units in order to reflect only those controls that were in place at those units in the baseline period (i.e., pre-regional haze measures).<sup>82</sup> This allows for a straightforward comparison of the effects of the BART Benchmark versus the Utah NO<sub>x</sub> BART Alternative relative to the 2025 Baseline (i.e., relative to conditions without any regional haze measures applied to the Utah BART sources).

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<sup>82</sup> Utah Regional Haze State Implementation Plan, Staff Review of Recommended Alternative to BART for NO<sub>x</sub>, May 28, 2019, page 13.

Because measures included in the BART Alternative were installed starting in 2006, using emissions from a later year to represent the baseline would not accurately reflect the impacts of each of the two scenarios. While Utah could have chosen to use different years to represent baseline emissions from Hunter, Huntington, and Carbon, it chose to use a consistent period for these Units that is also consistent with the baseline period of the regional haze SIP, and we find this to be a reasonable approach.<sup>83</sup>

The 2011 Typical Year and the 2025 Baseline scenarios were used in the development of relative response factors (RRFs) that were applied to publicly available IMPROVE monitoring data in order to predict future visibility conditions in 2025 for the BART Benchmark and the NO<sub>x</sub> BART Alternative scenarios. The BART Benchmark and BART Alternative results were then both compared to the 2025 Baseline scenario and to each other to determine whether the BART Alternative passes the two-prong test in § 51.308(e)(3).

The BART Benchmark scenario includes 2001-2003 Carbon and Hunter 3 emissions, because Carbon and Hunter 3 are not BART sources. But the BART Benchmark reflects predicted NO<sub>x</sub> emissions reductions from the installation of SCR controls on Hunter and Huntington Units 1 and 2 because those controls were required by EPA's 2016 FIP. The BART Benchmark scenario also includes SO<sub>2</sub> emissions from Hunter and Huntington from 2014-2016 in order to match the BART Alternative scenario, which as explained below, is important for the comparison in § 51.308(e)(3)(ii). The BART Alternative scenario includes emissions from Hunter and Huntington from 2014-2016 to reflect all emissions controls required by the Alternative, and zero emissions from Carbon because the Alternative requires Carbon's 2015 shutdown. As described below, these modeling scenarios allow an accurate comparison between

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<sup>83</sup> Contrary to the commenters' claim, EPA explained this approach in the proposed rule. 85 FR 3572.

the BART Benchmark and the Utah NO<sub>x</sub> BART Alternative under the two-prong test in § 51.308(e)(3).

The first step (prong 1) of the two-prong test requires a demonstration that the BART alternative does not result in a decline in visibility at any Class I area relative to a baseline.<sup>84</sup> The record clearly establishes that there is no decline in visibility under the NO<sub>x</sub> BART Alternative when visibility impacts of the NO<sub>x</sub> BART Alternative are compared to the 2025 Baseline scenario.<sup>85</sup> As we explained in the proposed rule under prong 1, while the post-2003 SO<sub>2</sub> reductions from Hunter and Huntington increase the apparent overall visibility benefit of the BART Alternative relative to the Baseline, there would not be an anticipated decline in visibility relative to the Baseline in the absence of those SO<sub>2</sub> reductions from Hunter and Huntington because the BART Alternative would still result in overall NO<sub>x</sub>, SO<sub>2</sub>, and PM emissions decreases compared to the Baseline.<sup>86</sup>

At the second step of the (e)(3) test (prong 2), the state must establish that there is “an overall improvement in visibility, determined by comparing the average differences between BART and the alternative.”<sup>87</sup> Thus, the purpose of the modeling at this step is to allow for a comparison between two control scenarios—the BART benchmark and the BART alternative—relative to a baseline. It is not critical that the baseline itself be entirely representative of what might be expected to happen in 2025 so long as the emissions and meteorological data used in the modeling allow for the comparison between the BART benchmark and BART alternative.

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<sup>84</sup> 40 CFR 51.308(e)(3)(i).

<sup>85</sup> See 85 FR 3568-69, 3573, and Tables 4 and 5 (column D).

<sup>86</sup> Id. at 3573.

<sup>87</sup> 40 CFR 51.308(e)(3)(ii).

As noted above, the commenters have not demonstrated that the 2025 Baseline scenario here does not serve that purpose.

As we explained in the proposed rule, the relative to the 2025 Baseline, the BART Benchmark and BART Alternative include actual SO<sub>2</sub> reductions from Hunter and Huntington that occurred after the 2001-2003 baseline due to scrubber upgrades. Thus, the CAMx modeling results for the BART Benchmark and BART Alternative shown in Tables 4 and 5 of the proposed rule reflect these SO<sub>2</sub> reductions. The treatment of these SO<sub>2</sub> reductions in the modeling does not affect the determination of greater reasonable progress under the two-prong test. Under prong 2, because the SO<sub>2</sub> reductions from Hunter and Huntington are equal under the BART Alternative and BART Benchmark, they do not advantage either control scenario.<sup>88</sup>

In other words, even if the CAMx modeling counts Huntington and Hunter as creating an additional visibility improvement in the BART Benchmark and NO<sub>x</sub> BART Alternative scenarios relative to the 2025 Baseline scenario, this artifact of the data is present for both the BART Benchmark and BART Alternative scenarios. Thus, it does not have a meaningful effect on the comparison in *relative* improvement in visibility *between those scenarios*. The modeling does not, and need not, purport to establish actual, absolute improvements in visibility under the two scenarios; it simply needs to allow for a comparison between the scenarios. In order to pass the second prong under § 51.308(e)(3), a BART alternative must show an overall average improvement in visibility over the BART benchmark. Here, Utah's NO<sub>x</sub> BART Alternative demonstrated an overall average improvement over the BART benchmark of 0.00494 deciviews across all Class I areas on the 20 percent best days and 0.00058 deciviews on the 20 percent

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<sup>88</sup> 85 FR 3572-73.

worst days.<sup>89</sup> Thus, Utah's NO<sub>x</sub> BART Alternative passes the second prong of 40 CFR 51.308(e)(3).

In sum, there is no merit to commenters' assertion that the data used in the CAMx modeling cannot be used to support Utah's conclusion that the Utah NO<sub>x</sub> BART Alternative would result in greater visibility improvement compared to the EPA FIP (BART Benchmark) under the two-prong test in § 51.308(e)(3).

### **III. The EPA's Final Action**

For the reasons stated in the preamble to the proposed rule, in the RTC document, and in this document, we are fully approving the SIP revisions submitted by the State of Utah on July 3, 2019, as supplemented on December 3, 2019.

#### *A. 2019 Utah Regional Haze SIP Revisions*

We are approving these aspects of the 2019 Utah RH SIP revisions:

- NO<sub>x</sub> BART Alternative, including NO<sub>x</sub> emission reductions from Hunter Units 1, 2 and 3 and Huntington Units 1 and 2, and SO<sub>2</sub>, NO<sub>x</sub> and PM emission reductions from Carbon Units 1 and 2.
- A NO<sub>x</sub> emission limit of 0.26 lb/MMBtu (30-day rolling average) each for Hunter Units 1 and 2 and Huntington Units 1 and 2.
- A NO<sub>x</sub> emission limit of 0.34 lb/MMBtu (30-day rolling average) for Hunter Unit 3.
- A requirement to permanently close and cease operation of the Carbon power plant by August 15, 2015.
- The associated amendments to the SO<sub>2</sub> milestone reporting requirements.

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<sup>89</sup> Id. at 3569.

- MRR requirements for units subject to the NO<sub>x</sub> BART Alternative and the PM BART emission limits.

We also note that the regulatory text amendments contained in this document include incorporation of additional parts of SIP section XX (XX.B–C and XX.E–N) and section XXIII, which were not addressed in the proposed action or in this final action. The EPA approved these SIP sections as meeting the requirements of the CAA and applicable regulations in previous actions;<sup>90</sup> however, we inadvertently did not incorporate all approved sections in 40 CFR 52.2320(e). We are remedying this oversight and reorganizing 40 CFR 52.2320(e) to better reflect the structure of Utah’s SIP submissions here. We did not reopen these previously approved SIP sections in this rulemaking.

Finally, consistent with our approval of Utah’s July 2019 and December 2019 SIP submissions, we find that Utah’s SIP fully satisfies the requirements of section 309 of the Regional Haze Rule and therefore the State has fully complied with the requirements for reasonable progress, including BART, for the first implementation period.

*B. FIP Withdrawal*

Because we find that Utah’s July 2019 and December 2019 SIP submissions satisfy the NO<sub>x</sub> BART and MRR requirements currently addressed by the EPA’s 2016 FIP, we are also withdrawing in whole the Utah Regional Haze FIP at 40 CFR 52.2336 that imposes NO<sub>x</sub> BART requirements on Hunter Units 1 and 2 and Huntington Units 1 and 2.

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<sup>90</sup> 73 FR 16543 (Mar. 28, 2008); 77 FR 74355 (Dec. 14, 2012); 78 FR 4072 (Jan. 18, 2013); 81 FR 43894 (July 5, 2016).

C. *Clean Air Act Section 110(l)*

As we explain in detail in section II.A of this document and in the RTC document that accompanies this action, we find that our approval of the 2019 Utah SIP revisions and concurrent withdrawal of the corresponding the FIP is consistent with CAA section 110(l), 42 U.S.C. 7410(l).

**IV. Incorporation by Reference**

In this document, the EPA is finalizing regulatory text that includes incorporation by reference. In accordance with the requirements of 1 CFR 51.5, the EPA is finalizing the incorporation by reference of the SIP amendments described in section III.A of this preamble and set forth below. The EPA has made, and will continue to make, these materials generally available through <https://www.regulations.gov> (refer to docket EPA–R08–OAR–2015–0463) and at the EPA Region 8 Office (please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section of this preamble for more information).

Therefore, these materials have been approved by the EPA for inclusion in the SIP, have been incorporated by reference by the EPA into that plan, are fully federally enforceable under sections 110 and 113 of the CAA as of the effective date of the final rulemaking of the EPA’s approval, and will be incorporated by reference by the Director of the *Federal Register* in the next update to the SIP compilation.<sup>91</sup>

**V. Statutory and Executive Order Reviews**

A. *Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review*

This action is not a “significant regulatory action” under the terms of Executive Order

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<sup>91</sup> 62 FR 27968 (May 22, 1997).

12866<sup>92</sup> and was therefore not submitted to the Office of Management and Budget (OMB) for review. This final rule applies to three facilities in the State of Utah. It is therefore not a rule of general applicability.

*B. Executive Order 13771: Reducing Regulations and Controlling Regulatory Costs*

This action is not an Executive Order 13771 regulatory action because it is not significant under Executive Order 12866 for the reasons stated in section V.A above. Instead, it is a *Rule of Particular Applicability* that is exempted under Executive Order 12866.

*C. Paperwork Reduction Act*

This action does not impose an information collection burden under the PRA. Because this rule revises regional haze reporting requirements for three facilities, the PRA does not apply.

*D. Regulatory Flexibility Act*

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This action will not impose any requirements on small entities. This rule does not impose any requirements or create impacts on small entities as no small entities are subject to the requirements of this rule.<sup>93</sup>

*E. Unfunded Mandates Reform Act (UMRA)*

This action does not contain an unfunded mandate of \$100 million or more as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments.

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<sup>92</sup> 58 FR 51735, 51738 (Oct. 4, 1993).

<sup>93</sup> See 13 CFR 121.201, Sector 22, Subsector 221.

*F. Executive Order 13132: Federalism*

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the National Government and the states, or on the distribution of power and responsibilities among the various levels of government.

*G. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments*

This action does not have tribal implications as specified in Executive Order 13175. It will not have substantial direct effects on tribal governments. Thus, Executive Order 13175 does not apply to this action.

In comments on the proposed rule, the Ute Mountain Ute Tribe requested consultation. In response, the EPA offered consultation, but the Ute Mountain Ute Tribe later waived the opportunity for consultation.

*H. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks*

This action is not subject to Executive Order 13045.<sup>94</sup> The EPA interprets Executive Order 13045 as applying only to those regulatory actions that concern environmental health or safety risks that the EPA has reason to believe may disproportionately affect children, per the definition of “covered regulatory action” in section 2-202 of the Executive order. This action is not subject to Executive Order 13045 because it does not concern an environmental health risk or safety risk.

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<sup>94</sup> 62 FR 19885 (Apr. 23, 1997).

*I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use*

This action is not subject to Executive Order 13211<sup>95</sup> because it is not a significant regulatory action under Executive Order 12866.

*J. National Technology Transfer and Advancement (NTTAA)*

This rulemaking does not involve technical standards.

*K. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*

The EPA believes that this action does not have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994).

The documentation for this decision is contained in EPA's EJ analysis. The EPA's *Guidance on Considering Environmental Justice During the Development of Regulatory Actions*<sup>96</sup> is the Agency's guide for determining when environmental justice should be considered when developing regulations. In support of this guidance, the EPA used EJSCREEN<sup>97</sup> to identify areas of potential environmental justice (EJ) concerns associated with this rulemaking. A 300-kilometer radius zone of impact was used in the EJSCREEN analysis consistent with other regional haze actions. The results do not identify any areas of potential EJ concerns.<sup>98</sup> Moreover as explained in the preamble to the final rule and in response to comments, the Utah Regional Haze SIP, as revised by this action, will ensure a significant reduction in

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<sup>95</sup> 66 FR 28355 (May 22, 2001).

<sup>96</sup> <https://www.epa.gov/sites/production/files/2015-06/documents/considering-ej-in-rulemaking-guide-final.pdf>

<sup>97</sup> EJSCREEN: Environmental Justice Screening and Mapping Tool is available at <https://www.epa.gov/ejscreen>.

<sup>98</sup> Results in the EJSCREEN Report for the Hunter and Huntington Power Plants show percentiles of less than 80 for all EJ Indexes evaluated. See EJSCREEN Report in the docket.

emissions compared to regional haze baseline levels (2002). Finally, the EPA's analysis under CAA section 110(l) shows that this action will not interfere with any applicable requirement concerning attainment and reasonable further progress or any other applicable CAA requirements. Thus, this final action will not create a disproportionately high and adverse effect on minority, low-income, and/or indigenous/tribal populations.

The availability of regulations.gov to submit written comments and a public hearing in Price, Utah provided meaningful opportunities for public participation in the proposed rulemaking. The EPA considered input received during the public comment period regarding environmental justice considerations.

*L. Determination Under Section Clean Air Act Section 307(d)*

Pursuant to CAA sections 307(d)(1)(B) and 307(d)(1)(V), the Administrator determines that this action is subject to the provisions of section 307(d). CAA section 307(d)(1)(B) provides that section 307(d) applies to, among other things, “the promulgation or revision of an implementation plan by the Administrator under [CAA section 110(c)].”<sup>99</sup> Under section 307(d)(1)(V), the provisions of section 307(d) also apply to “such other actions as the Administrator may determine.”<sup>100</sup> To the extent the approval of Utah's SIP submittals is not expressly identified under section 307(d), the Administrator hereby determines that section 307(d) applies to this aspect of this action. The agency has complied with the procedural requirements of CAA section 307(d) during the course of this rulemaking.

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<sup>99</sup> 42 U.S.C. 7607(d)(1)(B).

<sup>100</sup> 42 U.S.C. 7607(d)(1)(V).

*M. Congressional Review Act (CRA)*

This rule is exempt from the CRA because it is a rule of particular applicability that only applies to three named facilities.

*N. Judicial Review*

Under section 307(b)(1) of the CAA, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. See CAA section 307(b)(2).

**List of Subjects in 40 CFR Part 52**

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

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Andrew Wheeler,  
Administrator.

For the reasons set forth in the preamble, 40 CFR part 52 is to be amended as follows:

**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 TT—Utah**

2. In §52.2320:

a. The table in paragraph (c) is amended by revising the entries “R307-110-17,” “R307-110-28,” and “R307-150-03”.

b. The table in paragraph (e) is amended by:

i. Adding the entries “Section IX.H.21. General Requirements: Control Measures for Area and Point Sources, Emission Limits and Operating Practices, Regional Haze Requirements” and “Section IX.H.22. Source Specific Emission Limitations: Regional Haze Requirements, Best Available Retrofit Technology” in numerical order.

ii. Removing from under the center heading “XVII. Visibility Protection” the entries “Progress Report for Utah’s State Implementation Plan for Regional Haze,” “Section XX.D.6. Best Available Retrofit Technology (BART) Assessment for NO<sub>x</sub> and PM,” and “Section XX.G. Long-Term Strategy for Fire Programs.”

iii. Adding the center heading “XX. Regional Haze” and the entries “Section XX.A. Executive Summary,” “Section XX.B. Background on the Regional Haze Rule,” “Section XX.C. Long-Term Strategy for the Clean-Air Corridor,” “Section XX.D. Long-Term Strategy for Stationary Sources,” “Section XX.E. Sulfur Dioxide Milestones and Backstop Trading Program,” “Section XX.F. Long-Term Strategy for Mobile Sources,” “Section XX.G. Long-Term Strategy for Fire Programs,” “Section XX.H. Assessment of Emissions from Paved and Unpaved Road Dust”,

“Section XX.I. Pollution Prevention and Renewable Energy Programs”, “Section XX.J. Other GCVTC Recommendations”, “Section XX.K. Projection of Visibility Improvement Anticipated from Long-Term Strategy”, “Section XX.L. Periodic Implementation Plan Revisions”, “Section XX.M. State Planning/Interstate Coordination and Tribal Implementation”, “Section XX.N. Enforceable Commitments for the Utah Regional Haze SIP”, and “Progress Report for Utah’s State Implementation Plan for Regional Haze” in numerical order and after the entry “Section XXIII. Interstate Transport”.

The revisions and additions read as follows:

**§52.2320 Identification of plan.**

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(c) \* \* \*

<b>Rule No.</b>	<b>Rule title</b>	<b>State effective date</b>	<b>Final rule citation, date</b>	<b>Comments</b>
* * * * *				
<b>R307-110. General Requirements: State Implementation Plan</b>				
* * * * *				
R307-110-17	Section IX. Control Measures for Area and Point Sources, Part H, Emission Limits	11/25/2019	[INSERT FEDERAL REGISTER CITATION], [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]	
* * * * *				
R307-110-28	Section XX. Regional Haze	8/15/2019	[INSERT FEDERAL REGISTER CITATION], [INSERT DATE OF PUBLICATION IN THE	

			<b>FEDERAL REGISTER]</b>	
*****				
<b>R307-150. Emission Inventories</b>				
*****				
R307-150-03	Applicability	6/25/2019	<b>[INSERT FEDERAL REGISTER CITATION], [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b>	
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(e) \*\*\*

<b>Rule title</b>	<b>State effective date</b>	<b>Final rule citation, date</b>	<b>Comments</b>
*****			
<b>IX. Control Measures for Area and Point Sources</b>			
*****			
Section IX.H.21. General Requirements: Control Measures for Area and Point Sources, Emission Limits and Operating Practices, Regional Haze Requirements	11/25/2019	<b>[INSERT FEDERAL REGISTER CITATION], [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b>	
Section IX.H.22. Source Specific Emission Limitations: Regional Haze Requirements, Best Available Retrofit Technology	11/25/2019	<b>[INSERT FEDERAL REGISTER CITATION], [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b>	
*****			
<b>XX. Regional Haze</b>			

Section XX.A. Executive Summary	8/15/2019	[INSERT FEDERAL REGISTER CITATION], [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]	
Section XX.B. Background on the Regional Haze Rule	8/15/2019	[INSERT FEDERAL REGISTER CITATION], [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]	
Section XX.C. Long-Term Strategy for the Clean-Air Corridor	8/15/2019	[INSERT FEDERAL REGISTER CITATION], [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]	
Section XX.D. Long-Term Strategy for Stationary Sources	8/15/2019	[INSERT FEDERAL REGISTER CITATION], [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]	
Section XX.E. Sulfur Dioxide Milestones and Backstop Trading Program	8/15/2019	[INSERT FEDERAL REGISTER CITATION], [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]	
Section XX.F. Long-Term Strategy for Mobile Sources	8/15/2019	[INSERT FEDERAL REGISTER CITATION], [INSERT DATE OF PUBLICATION IN	

		<b>THE FEDERAL REGISTER]</b>	
Section XX.G. Long-Term Strategy for Fire Programs	4/7/2011	<b>[INSERT FEDERAL REGISTER CITATION], [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b>	
Section XX.H. Assessment of Emissions from Paved and Unpaved Road Dust	8/15/2019	<b>[INSERT FEDERAL REGISTER CITATION], [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b>	
Section XX.I. Pollution Prevention and Renewable Energy Programs	8/15/2019	<b>[INSERT FEDERAL REGISTER CITATION], [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b>	
Section XX.J. Other GCVTC Recommendations	8/15/2019	<b>[INSERT FEDERAL REGISTER CITATION], [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b>	
Section XX.K. Projection of Visibility Improvement Anticipated from Long-Term Strategy	8/15/2019	<b>[INSERT FEDERAL REGISTER CITATION], [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b>	
Section XX.L. Periodic Implementation Plan Revisions	8/15/2019	<b>[INSERT FEDERAL REGISTER CITATION],</b>	

		<b>[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b>	
Section XX.M. State Planning/Interstate Coordination and Tribal Implementation	8/15/2019	<b>[INSERT FEDERAL REGISTER CITATION], [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b>	
Section XX.N. Enforceable Commitments for the Utah Regional Haze SIP	8/15/2019	<b>[INSERT FEDERAL REGISTER CITATION], [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b>	
Progress Report for Utah's State Implementation Plan for Regional Haze	2/4/2016	85 FR 64050, 10/9/2020	
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**§52.2336 [Removed and Reserved]**

3. Remove and reserve §52.2336.

[FR Doc. 2020-23994 Filed: 11/25/2020 8:45 am; Publication Date: 11/27/2020]