Technical Support Document:

Intended Round 3 Area Designations for the 2010 1-Hour SO_2 Primary National Ambient Air Quality Standard

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U.S. Environmental Protection Agency
Office of Air and Radiation

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This document includes Chapters 1 and 2. Chapters 3 through 46 are available as separate electronic files. Each chapter is separately paginated and footnoted.

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Technical Support Document:

Chapter 1
Background and History of the Intended Round 3 Area Designations for the 2010 1-Hour SO_2 Primary National Ambient Air Quality Standard

1. Overview

Pursuant to section 107(d) of the Clean Air Act (CAA), the U.S. Environmental Protection Agency (the EPA, we, or us) must designate areas as either "nonattainment," "attainment," or "unclassifiable" for the 2010 1-hour sulfur dioxide (SO_2) primary national ambient air quality standard (NAAQS) (2010 SO_2 NAAQS). The CAA defines a nonattainment area as an area that does not meet the NAAQS or that contributes to a nearby area that does not meet the NAAQS. An attainment area is defined by the CAA as any area that meets the NAAQS and does not contribute to a nearby area that does not meet the NAAQS. Unclassifiable areas are defined by the CAA as those that cannot be classified on the basis of available information as meeting or not meeting the NAAQS. In this action, the EPA has defined a nonattainment area as an area that the EPA has determined violates the 2010 SO_2 NAAQS or contributes to a violation in a nearby area, based on the most recent 3 years of air quality monitoring data, appropriate dispersion modeling analysis, and any other relevant information. An unclassifiable/attainment area is defined by the EPA as an area that either: (1) based on available information including (but not limited to) appropriate modeling analyses and/or monitoring data, the EPA has determined (i) meets the 2010 SO_2 NAAQS, and (ii) does not contribute to ambient air quality in a nearby area that does not meet the NAAQS; or (2) was not required to be characterized under 40 CFR 51.1203(c) or (d) and the EPA does not have available information including (but not limited to) appropriate modeling analyses and/or monitoring data that suggests that the area may (i) not be meeting the NAAQS, or (ii) contribute to ambient air quality in a nearby area that does not meet the NAAQS.[1] An unclassifiable area is defined by the EPA as an area that either: (1) was required to be characterized by the state under 40 CFR 51.1203(c) or (d), has not been previously designated, and on the basis of available information cannot be classified as either: (i) meeting or not meeting the 2010 SO_2 NAAQS, or (ii) contributing or not contributing to ambient air quality in a nearby area that does not meet the NAAQS; or (2) was not required to be characterized under 40 CFR 51.1203(c) or (d) and the EPA does have available information including (but not limited to) appropriate modeling analyses and/or monitoring data that suggests that the area may (i) not be meeting the NAAQS, or (ii) contribute to ambient air quality in a nearby area that does not meet the NAAQS.

[1] The term "designated attainment area" is not used in this document because the EPA uses that term only to refer to a previous nonattainment area that has been redesignated to attainment as a result of the EPA's approval of a state-submitted maintenance plan.

This technical support document (TSD) addresses designations for almost all of the remaining undesignated areas in the U.S. for the 2010 SO_2 NAAQS. In previous final actions, the EPA has issued designations for the 2010 SO_2 NAAQS for selected areas of the country.[2] The EPA is under a December 31, 2017, deadline to designate the areas addressed in this TSD as required by the U.S. District Court for the Northern District of California. [3] We are referring to the set of designations being finalized by the December 31, 2017, deadline as "Round 3" of the designations process for the 2010 SO_2 NAAQS. After the Round 3 designations are completed, the only remaining undesignated areas will be those where a state has installed and begun timely operation of a new SO_2 monitoring network meeting EPA specifications referenced in the EPA's SO_2 Data Requirements Rule (DRR) (80 FR 51052). The EPA is required to designate those remaining undesignated areas by December 31, 2020.

This chapter, Chapter 1 of the TSD, includes background information and definitions that apply to all the areas in our intended designations. Designation-related information for 14 states and territories, for which there is limited information to inform the designations, are addressed together in Chapter 2, in the interest of conciseness. Also, section 16 of Chapter 2 provides information on emission limits and shutdowns for sources on the EPA's SO_2 Data Requirements Rule (DRR) source list.[4] Section 16 covers all states and territories for which emission limits or shutdowns are a factor, not just the 14 states. The remaining 44 states, territories, and Navajo Nation each has a separate chapter in this TSD that describes the intended designations for that particular state, territory, or tribal area.[5]

2. Background and History

The Administrator signed a final rule revising the primary SO_2 NAAQS on June 2, 2010. The rule was published in the *Federal Register* on June 22, 2010 (75 FR 35520) and became effective on August 23, 2010. Based on the Administrator's review of the air quality criteria for oxides of sulfur (SO_x) and the primary NAAQS for SO_x as measured by SO_2, the EPA revised the primary SO_2 NAAQS to provide requisite protection of public health with an adequate margin of safety. Specifically, the EPA established a new 1-hour SO_2 standard at a level of 75 parts per billion (ppb), which is met at an ambient air quality monitoring site when the 3-year average of the annual 99th percentile of 1-hour daily maximum concentrations is less than or equal to 75 ppb, as determined in accordance with Appendix T of 40 CFR part 50. 40 CFR 50.17(a) and (b). The EPA also established provisions to revoke both the existing 24-hour and annual primary SO_2 standards, subject to certain conditions. 40 CFR 50.4(e).

Current scientific evidence links short-term exposures to SO_2, ranging from 5 minutes to 24 hours, with an array of adverse respiratory effects including bronchoconstriction and increased asthma symptoms. These effects are particularly important for asthmatics at elevated ventilation

[2] A total of 94 areas throughout the U.S. were previously designated in actions published on August 5, 2013 (78 FR 47191), July 12, 2016 (81 FR 45039), and December 13, 2016 (81 FR 89870).
[3] *Sierra Club v. McCarthy*, No. 3-13-cv-3953 (SI) (N.D. Cal. Mar. 2, 2015).

[4] 80 FR 51052, August 21, 2015. The rule is codified at 40 CFR part 51, subpart BB.
[5] In the state-specific chapters, the term "this TSD" is sometimes used to refer to that particular state-specific chapter rather than the entire TSD.

rates (e.g., while exercising or playing). Studies also show a connection between short-term exposure and increased visits to emergency departments and hospital admissions for respiratory illnesses, particularly in at-risk populations including children, the elderly, and asthmatics. The EPA's NAAQS for SO_2 is designed to protect against exposure to the entire group of SO_x. SO_2 is the component of greatest concern and is used as the indicator for the larger group of gaseous SO_x. Other gaseous SO_x (e.g., SO_3) are found in the atmosphere at concentrations much lower than SO_2.

Emissions that lead to high concentrations of SO_2 generally also lead to the formation of other SO_x. Control measures that reduce SO_2 can generally be expected to reduce people's exposures to all gaseous SO_x. This may also have the important co-benefit of reducing the formation of fine sulfate particles, which pose significant public health threats. SO_x can react with other compounds in the atmosphere to form small particles. These particles penetrate deeply into sensitive parts of the lungs and can cause or worsen respiratory disease, such as emphysema and bronchitis, and can aggravate existing heart disease, leading to increased hospital admissions and premature death.[6] The EPA's NAAQS for particulate matter are designed to provide protection against these health effects.

In the notice of proposed rulemaking for the revised SO_2 NAAQS (74 FR 64810; December 8, 2009), the EPA issued proposed guidance on our approach to implementing the standard, including our approach to initial area designations. The EPA solicited comment on that guidance and, in the notice of final rulemaking (75 FR 35520; June 22, 2010), provided further guidance concerning implementation of the standard and how to identify nonattainment areas and boundaries for the SO_2 NAAQS. Subsequently, on March 24, 2011, the EPA provided additional designations guidance to assist states with making their recommendations for area designations and boundaries.[7] That guidance recommended, among other things, that monitoring data from the most recent 3 consecutive years be used to identify a violation of the SO_2 NAAQS. This is appropriate because the form of the SO_2 NAAQS is calculated as a 3-year average of the 99^{th} percentile of the yearly distribution of 1-hour daily maximum SO_2 concentrations (specifically the most recent 3 consecutive years).

In the March 24, 2011, guidance, the EPA stated that the perimeter of a county containing a violating monitor would be the initial presumptive boundary for nonattainment areas, but also stated that the state, tribe, and/or the EPA could conduct additional area-specific analyses that could justify establishing either a larger or smaller area. The EPA indicated that the following factors should be considered in an analysis of whether to exclude portions of a county and whether to include additional nearby areas outside the county as part of the designated nonattainment area: 1) air quality data; 2) emissions-related data; 3) meteorology; 4) geography/topography; and 5) jurisdictional boundaries, as well as other available data. The EPA indicated that states and tribes may identify and evaluate other relevant factors or circumstances specific to a particular area.

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[6] *See* Fact Sheet titled, "Revisions to the Primary National Ambient Air Quality Standard, Monitoring Network, and Data Reporting Requirements for Sulfur Dioxide" at *http://www3.epa.gov/airquality/sulfurdioxide/pdfs/20100602fs.pdf*.

[7] *See*, "Area Designations for the 2010 Revised Primary Sulfur Dioxide National Ambient Air Quality Standards," memorandum to Regional Air Division Directors, Regions I-X, from Stephen D. Page, dated March 24, 2011.

After the EPA promulgates a new or revised NAAQS, the EPA is required to designate all areas of the country as either "nonattainment," "attainment," or "unclassifiable," for that NAAQS pursuant to section 107(d)(1) of the CAA. The process for designating areas following promulgation of a new or revised NAAQS is contained in section 107(d) of the CAA. The CAA requires the EPA to complete the initial designations process within 2 years of promulgating a new or revised standard. If the Administrator has insufficient information to make these designations by that deadline, the EPA has the authority to extend the deadline for completing designations by up to 1 year. On July 27, 2012, the EPA announced that we had insufficient information to complete the designations for the 1-hour SO_2 standard within 2 years and extended the designations deadline to June 3, 2013 (77 FR 46295; August 3, 2012).

For the 2010 SO_2 NAAQS, states' designation recommendations were due to the EPA by June 3, 2011. Designation recommendations and supporting documentation were submitted by 49 states, the District of Columbia, four territories, and five tribes to the EPA by that date. After receiving these recommendations, and after reviewing and evaluating each recommendation, the EPA provided responses to the states and tribes regarding certain areas on February 7, 2013. The state and tribal letters, including the initial recommendations, the EPA's February 2013 responses to those letters, any modifications, and the subsequent state comment letters, are in the separate docket for that first round of SO_2 designations, at Docket ID NO. EPA-HQ-OAR-2012-0233.

Although not required by section 107(d) of the CAA, the EPA also provided an opportunity for members of the public to comment on the EPA's February 2013 response letters. The EPA completed the first round of SO_2 designations on July 25, 2013, designating 29 areas in 16 states as nonattainment (78 FR 47191; August 5, 2013). The EPA based this first round of final SO_2 designations on monitored SO_2 concentrations from Federal Reference Method and Federal Equivalent Method monitors that are sited and operated in accordance with 40 CFR parts 50 and 58. In the preamble to that action, the EPA stated that in separate future actions, we intended to address designations for all other areas for which the EPA was not yet prepared to issue designations and that were consequently not addressed in that final rule. With input from a diverse group of stakeholders, the EPA developed a comprehensive implementation strategy for the future SO_2 designations actions that focuses resources on identifying and addressing unhealthy levels of SO_2 in areas where people are most likely to be exposed to violations of the standard.

Following the initial August 5, 2013, designations, three lawsuits were filed against the EPA in different U.S. District Courts, alleging the agency had failed to perform a nondiscretionary duty under the CAA by not designating all portions of the country by the June 2, 2013, deadline. In an effort intended to resolve the litigation in one of those cases, the EPA and the plaintiffs, Sierra Club and the Natural Resources Defense Council, filed a proposed consent decree with the U.S. District Court for the Northern District of California. On March 2, 2015, the court entered the consent decree and issued an enforceable order for the EPA to complete the area designations by three specific deadlines according to the court-ordered schedule.

On August 21, 2015(80 FR 51052), the EPA separately promulgated the air quality characterization requirements. The DRR requires state air agencies to provide additional monitoring or modeling information to characterize air quality in areas associated with sources

meeting certain criteria or that have otherwise been listed under the DRR by the EPA or state air agencies, or to instead impose federally enforceable emission limitations on those sources restricting their annual SO_2 emissions to less than 2,000 tons per year (tpy), or provide documentation that the sources have been shut down, by specified dates. The information generated by implementation of the DRR can help inform the designations addressed in this TSD and subsequent designations.

Updated designations guidance documents were issued by the EPA through a March 20, 2015, memorandum and a July 22, 2016, memorandum from Stephen D. Page, Director, U.S. EPA, Office of Air Quality Planning and Standards, to Air Division Directors, U.S. EPA Regions I-X. These memoranda supersede earlier designation guidance for the 2010 SO_2 NAAQS, issued on March 24, 2011, and identify factors that the EPA intends to evaluate in determining whether areas are in violation of the 2010 SO_2 NAAQS or contribute to air quality in nearby areas that are in violation of the 2010 SO_2 NAAQS. The guidance also contained the factors the EPA intended to evaluate in determining the boundaries for all remaining areas in the country, consistent with the court's order and schedule. These factors include: 1) air quality characterization via ambient monitoring or dispersion modeling results; 2) emissions-related data; 3) meteorology; 4) geography and topography; and 5) jurisdictional boundaries. This guidance was supplemented by two non-binding technical assistance documents intended to assist states and other interested parties in their efforts to characterize air quality through air dispersion modeling or ambient air quality monitoring for sources that emit SO_2. Notably, the EPA's documents titled, "SO_2 NAAQS Designations Modeling Technical Assistance Document" (Modeling TAD) and "SO_2 NAAQS Designations Source-Oriented Monitoring Technical Assistance Document" (Monitoring TAD), were first made available to states and other interested parties in spring of 2013. Both of these documents were updated in February 2016. The modeling TAD was updated again in August 2016. The February 2016 monitoring TAD is available at *https://www.epa.gov/sites/production/files/2016-06/documents/so2monitoringtad.pdf*, and the August 2016 modeling TAD is available at *https://www.epa.gov/sites/production/files/2016-06/documents/so2modelingtad.pdf*. On March 8, 2017, the EPA issued a memo to clarify what version of the AERMOD modeling system code is the most appropriate for consideration by the Agency in the SO_2 designations process.[8]

According to the court-ordered schedule, the EPA was required to complete a second round of SO_2 designations by no later than July 2, 2016. The court order specified that in the second round, the EPA must designate two groups of areas: (1) areas that have newly monitored violations of the 2010 SO_2 NAAQS and (2) areas that contain any stationary sources that had not been announced as of March 2, 2015, for retirement and that, according to the EPA's Air Markets Database, emitted in 2012 either (i) more than 16,000 tons of SO_2, or (ii) more than 2,600 tons of SO_2 with an annual average emission rate of at least 0.45 pounds of SO_2 per one million British thermal units. Specifically, a stationary source with a coal-fired electric generating unit that, as of January 1, 2010, had a capacity of over 5 megawatts and otherwise meets the emissions criteria, is excluded from the July 2, 2016, deadline if it had announced

[8] Clarification on the AERMOD Modeling System Version for Use in $S0_2$ Implementation Efforts and Other Regulatory Actions, Richard A. Wayland to EPA Regional Air Division Directors. This memo is available at *https://www3.epa.gov/ttn/scram/guidance/clarification/SO2_DRR_Designation_Modeling_Clarification_Memo-03082017.pdf*

through a company public announcement, public utilities commission filing, consent decree, public legal settlement, final state or federal permit filing, or other similar means of communication, by March 2, 2015, that it will cease burning coal at that unit.

On July 12, 2016, and on December 13, 2016 (81 FR 45039 and 81 FR 89870, respectively), the EPA published a final rule establishing air quality designations for 65 areas in 24 states for the 2010 SO_2 NAAQS including 7 nonattainment areas, 41 unclassifiable/attainment areas, and 17 unclassifiable areas. The EPA and state documents and public comments related to these two actions are in the docket for the second round of SO_2 designations at Docket ID NO. EPA-HQ-OAR-2014-0464. Many are also available on the SO_2 designations Web site *https://www.epa.gov/sulfur-dioxide-designations*.

The last two court-ordered deadlines for completing remaining designations are December 31, 2017 (Round 3), and December 31, 2020 (Round 4). In Round 3, which is the subject of this TSD, the EPA must designate any remaining undesignated areas, for which states have not installed and begun timely operating a new SO_2 monitoring network meeting the EPA's specifications referenced in the EPA's DRR. By December 31, 2020, the EPA must designate all remaining areas.

In most respects, our intended designations in this third round of designations for the SO_2 NAAQS are consistent with the previously issued, revised guidance described above. However, we are intending to apply two definitions, for "unclassifiable area" and "unclassifiable/attainment area" that do not appear in the guidance we have issued to date for the designations process. For most of the areas affected by this third round of designations, our intended designation is either "unclassifiable" or "unclassifiable/attainment." The definitions of these two types of areas are the following:

An "unclassifiable/attainment" area is an area that either: (1) based on available information including (but not limited to) appropriate modeling analyses and/or monitoring data, the EPA has determined (i) meets the 2010 SO_2 NAAQS, and (ii) does not contribute to ambient air quality in a nearby area that does not meet the NAAQS; or (2) was not required to be characterized under 40 CFR 51.1203(c) or (d) and the EPA does not have available information including (but not limited to) appropriate modeling analyses and/or monitoring data that suggests that the area may (i) not be meeting the NAAQS, or (ii) contribute to ambient air quality in a nearby area that does not meet the NAAQS.[9]

An "unclassifiable" area is an area that either: (1) was required to be characterized by the state under 40 CFR 51.1203(c) or (d), has not been previously designated, and on the basis of available information cannot be classified as either: (i) meeting or not meeting the 2010 SO_2 NAAQS, or (ii) contributing or not contributing to ambient air quality in a nearby area that does not meet the NAAQS; or (2) was not required to be characterized under 40 CFR 51.1203(c) or (d) and the EPA does have available information including (but not limited to) appropriate

[9] The term "designated attainment area" is not used in this document because the EPA uses that term only to refer to a previous nonattainment area that has been redesignated to attainment as a result of the EPA's approval of a state-submitted maintenance plan.

modeling analyses and/or monitoring data that suggests that the area may (i) not be meeting the NAAQS, or (ii) contribute to ambient air quality in a nearby area that does not meet the NAAQS.

These definitions refer to 40 CFR 51.1203(c) and (d), which are part of the EPA's Data Requirements Rule. The citation to these CFR sections is in effect a reference to any area that contains a DRR listed source, one emitting more than 2,000 tons per year of SO_2 or that was otherwise listed by the EPA or a state air agency, with respect to which the state has indicated that it will comply with the Data Requirements Rule either by establishing a new monitoring network or by submitting an air quality modeling analysis.

As specified by the March 2, 2015, court order, the EPA is required to designate by December 31, 2017, all "remaining undesignated areas in which, by January 1, 2017, states have not installed and begun operating a new SO_2 monitoring network meeting EPA specifications referenced in the EPA's" DRR. The EPA will therefore designate by December 31, 2017, all areas of the country that are not, pursuant to the DRR, timely operating new EPA-approved monitoring networks. The areas to be designated by December 31, 2017, include the areas associated with sources meeting DRR emissions criteria that states have chosen to characterize using air dispersion modeling, the areas associated with sources for which states imposed emissions limitations on DRR-listed sources to restrict their SO_2 emissions to less than 2,000 tpy, the areas associated with sources for which states provided documentation of a permanent shut down of a DRR-listed source, and other areas not specifically required to be characterized under the DRR. This includes undesignated areas where existing SO_2 monitoring networks indicate the latest 3-year design values exceed the 2010 SO_2 NAAQS.

For designations for the SO_2 NAAQS, air agencies have the flexibility to characterize air quality using either appropriately sited ambient air quality monitors or modeling of actual or allowable source emissions. The EPA issued the previously cited non-binding draft Monitoring TAD and Modeling TAD recommending how air agencies should conduct such monitoring or modeling. For the intended SO_2 designations described in the notification letters sent to governors and tribal leaders, the EPA has considered available air quality monitoring data from at least calendar years 2014-2016, and modeling submitted by state air agencies and other parties. In most of the modeling runs, the impacts of the actual emissions for one or more of the 3-year periods 2012-2014, 2013-2015, and 2014-2016 were considered, and in some cases the modeling accounted for recently effective or not-yet-effective allowable emissions limits in lieu of or as a supplement to modeling of actual emissions. As stated above, the 1-hour primary SO_2 standard is violated at an ambient air quality monitoring site (or in the case of dispersion modeling, at an ambient air quality receptor location) when the 3-year average of the annual 99th percentile of the daily maximum 1-hour average concentrations exceeds 75 ppb, as determined in accordance with Appendix T of 40 CFR part 50. To determine model-based violations, the EPA believes that dispersion modeling is an appropriate tool, as discussed in the Modeling TAD. The TAD provides recommendations on how an air agency can appropriately and sufficiently model ambient air in proximity to an SO_2 emission source to establish air quality data for comparison to the 2010 primary SO_2 NAAQS for the purposes of designations. In formulating our intended designations, we have considered these EPA recommendations but we have also considered any other information provided by the states, territories, and tribes for why a different approach is appropriate.

The following are definitions of important terms used in this TSD for all states in our intended designations:

1) 2010 SO_2 NAAQS – The primary NAAQS for SO_2 promulgated in 2010. This NAAQS is 75 ppb, based on the 3-year average of the 99th percentile of the annual distribution of daily maximum 1-hour average concentrations. *See* 40 CFR 50.17.
2) Design Value – a statistic computed according to the data handling procedures of the NAAQS (in 40 CFR part 50 Appendix T) that, by comparison to the level of the NAAQS, indicates whether the area is violating the NAAQS.
3) Designated nonattainment area – an area that, based on available information including (but not limited to) appropriate modeling analyses and/or monitoring data, the EPA has determined either: (1) does not meet the 2010 SO_2 NAAQS, or (2) contributes to ambient air quality in a nearby area that does not meet the NAAQS.
4) Designated unclassifiable/attainment area – an area that either: (1) based on available information including (but not limited to) appropriate modeling analyses and/or monitoring data, the EPA has determined (i) meets the 2010 SO_2 NAAQS, and (ii) does not contribute to ambient air quality in a nearby area that does not meet the NAAQS; or (2) was not required to be characterized under 40 CFR 51.1203(c) or (d) and the EPA does not have available information including (but not limited to) appropriate modeling analyses and/or monitoring data that suggests that the area may (i) not be meeting the NAAQS, or (ii) contribute to ambient air quality in a nearby area that does not meet the NAAQS.
5) Designated unclassifiable area – an area that either: (1) was required to be characterized by the state under 40 CFR 51.1203(c) or (d), has not been previously designated, and on the basis of available information cannot be classified as either: (i) meeting or not meeting the 2010 SO_2 NAAQS, or (ii) contributing or not contributing to ambient air quality in a nearby area that does not meet the NAAQS; or (2) was not required to be characterized under 40 CFR 51.1203(c) or (d) and the EPA does have available information including (but not limited to) appropriate modeling analyses and/or monitoring data that suggests that the area may (i) not be meeting the NAAQS, or (ii) contribute to ambient air quality in a nearby area that does not meet the NAAQS.
6) Modeled violation – a violation of the SO_2 NAAQS demonstrated by air dispersion modeling.
7) Recommended attainment area – an area that a state, territory, or tribe has recommended that the EPA designate as attainment.
8) Recommended nonattainment area – an area that a state, territory, or tribe has recommended that the EPA designate as nonattainment.
9) Recommended unclassifiable area – an area that a state, territory, or tribe has recommended that the EPA designate as unclassifiable.
10) Recommended unclassifiable/attainment area – an area that a state, territory, or tribe has recommended that the EPA designate as unclassifiable/attainment.
11) Violating monitor – an ambient air monitor meeting 40 CFR parts 50, 53, and 58 requirements whose valid design value exceeds 75 ppb, based on data analysis conducted in accordance with Appendix T of 40 CFR part 50.
12) We, our, and us – these refer to the EPA.

Technical Support Document:

Chapter 2
Intended Round 3 Area Designations for the 2010 1-Hour SO_2 Primary National Ambient Air Quality Standard for States with Sources Not Required to be Characterized

1. Introduction

Pursuant to section 107(d) of the Clean Air Act (CAA), the U.S. Environmental Protection Agency (the EPA, we, or us) must designate areas as either "nonattainment," "attainment," or "unclassifiable" for the 2010 1-hour sulfur dioxide (SO_2) primary national ambient air quality standard (NAAQS) (2010 SO_2 NAAQS). The CAA defines a nonattainment area as an area that does not meet the NAAQS or that contributes to a nearby area that does not meet the NAAQS. An attainment area is defined by the CAA as any area that meets the NAAQS and does not contribute to a nearby area that does not meet the NAAQS. Unclassifiable areas are defined by the CAA as those that cannot be classified on the basis of available information as meeting or not meeting the NAAQS. In this action, the EPA has defined a nonattainment area as an area that the EPA has determined violates the 2010 SO_2 NAAQS or contributes to a violation in a nearby area, based on the most recent 3 years of air quality monitoring data, appropriate dispersion modeling analysis, and any other relevant information. An unclassifiable/attainment area is defined by the EPA as an area that either: (1) based on available information including (but not limited to) appropriate modeling analyses and/or monitoring data, the EPA has determined (i) meets the 2010 SO_2 NAAQS, and (ii) does not contribute to ambient air quality in a nearby area that does not meet the NAAQS; or (2) was not required to be characterized under 40 CFR 51.1203(c) or (d) and the EPA does not have available information including (but not limited to) appropriate modeling analyses and/or monitoring data that suggests that the area may (i) not be meeting the NAAQS, or (ii) contribute to ambient air quality in a nearby area that does not meet the NAAQS.[1] An unclassifiable area is defined by the EPA as an area that either: (1) was required to be characterized by the state under 40 CFR 51.1203(c) or (d), has not been previously designated, and on the basis of available information cannot be classified as either: (i) meeting or not meeting the 2010 SO_2 NAAQS, or (ii) contributing or not contributing to ambient air quality in a nearby area that does not meet the NAAQS; or (2) was not required to be characterized under 40 CFR 51.1203(c) or (d) and the EPA does have available information including (but not limited to) appropriate modeling analyses and/or monitoring data that suggests that the area may (i) not be meeting the NAAQS, or (ii) contribute to ambient air quality in a nearby area that does not meet the NAAQS.

[1] The term "designated attainment area" is not used in this document because the EPA uses that term only to refer to a previous nonattainment area that has been redesignated to attainment as a result of the EPA's approval of a state-submitted maintenance plan.

This technical support document (TSD) addresses designations for almost all of the remaining undesignated areas in the U.S. for the 2010 SO_2 NAAQS. In previous final actions, the EPA has issued designations for the 2010 SO_2 NAAQS for selected areas of the country.[2] The EPA is under a December 31, 2017, deadline to designate the areas addressed in this TSD as required by the U.S. District Court for the Northern District of California. [3] We are referring to the set of designations being finalized by the December 31, 2017, deadline as "Round 3" of the designations process for the 2010 SO_2 NAAQS. After the Round 3 designations are completed, the only remaining undesignated areas will be those where a state has installed and begun timely operation of a new SO_2 monitoring network meeting EPA specifications referenced in the EPA's SO_2 Data Requirements Rule (DRR) (80 FR 51052). The EPA is required to designate those remaining undesignated areas by December 31, 2020.

Designation-related information for 14 states and territories, for which there is limited information to inform the designations, are addressed together in this Chapter 2, in the interest of conciseness. The 14 states addressed in this chapter have not installed and begun timely operation of a new, approved SO_2 monitoring network meeting EPA specifications referenced in the EPA's DRR for any sources of SO_2 emissions. Also, section 16 of this chapter provides information on emission limits and shutdowns for sources on the EPA's SO_2 DRR source list. Section 16 covers all states and territories for which emission limits or shutdowns are a factor, not just the 14 states. The remaining 44 states, territories, and Navajo Nation each has a separate chapter in this TSD that describes the intended designations for that particular state or tribal area.[4]

[2] A total of 94 areas throughout the U.S. were previously designated in actions published on August 5, 2013 (78 FR 47191), July 12, 2016 (81 FR 45039), and December 13, 2016 (81 FR 89870).
[3] *Sierra Club v. McCarthy*, No. 3-13-cv-3953 (SI) (N.D. Cal. Mar. 2, 2015).

[4] In the state-specific chapters, the term "this TSD" is sometimes used to refer to that particular state-specific chapter rather than the entire TSD.

2. Alaska

This section addresses designations for all areas in Alaska for the 2010 SO_2 NAAQS. In previous final actions, the EPA has issued designations for the 2010 SO_2 NAAQS for selected areas of the country.[5] No part of Alaska was designated in these previous final actions. The EPA is under a December 31, 2017, deadline to designate the areas addressed in this section as required by the U.S. District Court for the Northern District of California.[6] We are referring to the set of designations being finalized by the December 31, 2017, deadline as "Round 3" of the designations process for the 2010 SO_2 NAAQS. After the Round 3 designations are completed, the only remaining undesignated areas will be those where a state began operation of a new SO_2 monitoring network in meeting EPA specifications referenced in the EPA's SO_2 DRR. The EPA is required to designate those remaining undesignated areas by December 31, 2020. Alaska will not have any undesignated areas after Round 3.

Alaska submitted its first recommendation regarding designations for the 2010 1-hour SO_2 NAAQS on June 2, 2011. The state recommended that all areas of the state be designated unclassifiable. The state did not submit an air quality analysis or updated recommendations afterwards.

Alaska does not have any sources of SO_2 emissions for which it is required under the EPA's SO_2 Data Requirements Rule (40 CFR 51.1203(c) or (d)) to characterize SO_2 air quality.

2.1. Air Quality Monitoring Data for Areas in Alaska

The State of Alaska operates a single long-term SO_2 monitoring site. AQS monitor site ID 02-090-0034 (NCORE Monitor) located at 809 Pioneer Road, Fairbanks, Alaska, has sufficient valid data for 2012-2014, 2013-2015, and 2014-2016, and these data indicate that there was no violation of the 2010 SO_2 NAAQS at the monitoring site in those periods. This Fairbanks NCORE Monitoring site had a 2014-2016 3-year design value of 36 parts per billion (ppb), a value lower than the SO_2 NAAQS of 75 ppb. The Fairbanks NCORE Monitoring site is less than one mile from the Chena River Power Plant, which emitted 654.9 tons of SO_2 in 2014. The SO_2 Data Requirements Rule does not require Alaska to characterize air quality for the area around this source, and Alaska did not provide specific information indicating that the Fairbanks NCORE monitoring site is located in an area of maximum expected concentration in relation to this source. Air quality monitoring data discussed in this section can be found at https://www.epa.gov/air-trends/air-quality-design-values.

[5] A total of 94 areas throughout the U.S. were previously designated in actions published on August 5, 2013 (78 FR 47191), July 12, 2016 (81 FR 45039), and December 13, 2016 (81 FR 89870).
[6] *Sierra Club v. McCarthy*, No. 3-13-cv-3953 (SI) (N.D. Cal. Mar. 2, 2015).

2.2. Summary of Our Intended Designations for Alaska

For the areas in Alaska that are being designated in Round 3, Table 1 and Figure 1 identify the EPA's intended designations and the boroughs or portions of boroughs and census areas to which they would apply. It also lists Alaska's current recommendation. The state has not installed and begun timely operation of a new, approved SO_2 monitoring network meeting EPA specifications referenced in the EPA's DRR for any sources of SO_2 emissions in the areas identified in Table 1. Accordingly, the EPA must designate these areas by December 31, 2017. At this time, there are no air quality modeling results available to the EPA for these areas. In addition, there are no air quality monitoring data that currently indicate any violation of the 1-hour SO_2 NAAQS. The EPA is designating the areas in Table 1 in the state as "unclassifiable/attainment" since these areas were not required to be characterized under 40 CFR 51.1203(c) or (d) and the EPA does not have available information including (but not limited to) appropriate modeling analyses and/or monitoring data that suggests that the areas may (i) not be meeting the NAAQS, or (ii) contribute to ambient air quality in a nearby area that does not meet the NAAQS. Figure 1 shows the boundary of the intended Alaska unclassifiable/attainment area.

Table 1. Summary of the EPA's Intended Designation and the Designation Recommendation by Alaska

Boroughs/Census Areas	Alaska's Recommended Area Definition	Alaska's Recommended Designation	EPA's Intended Area Definition	EPA's Intended Designation
All Boroughs and Census Areas	Entire state	Unclassifiable	Same as State's Recommendation	Unclassifiable/ Attainment

Figure 1. The EPA's Intended Unclassifiable/Attainment Designation for Alaska

3. American Samoa

This section addresses designations for all areas in American Samoa for the 2010 SO_2 NAAQS. In previous final actions, the EPA has issued designations for the 2010 SO_2 NAAQS for selected areas of the country.[7] No part of American Samoa was designated in these previous final actions. The EPA is under a December 31, 2017, deadline to designate the areas addressed in this section as required by the U.S. District Court for the Northern District of California.[8] We are referring to the set of designations being finalized by the December 31, 2017, deadline as "Round 3" of the designations process for the 2010 SO_2 NAAQS. After the Round 3 designations are completed, the only remaining undesignated areas will be those where a state began operation of a new SO_2 monitoring network in meeting EPA specifications referenced in the EPA's SO_2 DRR. The EPA is required to designate those remaining undesignated areas by December 31, 2020. American Samoa will not have any undesignated areas after Round 3.

American Samoa did not submit recommendations regarding designations for the 2010 1-hour SO_2 NAAQS, in 2011 or subsequently. Also, American Samoa did not submit any air quality analyses to the EPA.

American Samoa does not have any sources of SO_2 emissions for which it is required under the EPA's SO_2 Data Requirements Rule (40 CFR 51.1203(c) or (d)) to characterize SO_2 air quality.

3.1. Air Quality Monitoring Data for American Samoa

There are no regulatory ambient air quality SO_2 monitors in American Samoa.

3.2. Other Information Relevant to the Designations for American Samoa

American Samoa consists of five volcanic islands and two coral atolls, and is administratively divided into three districts (the Eastern, Western, and Manu'a Districts), and two atolls (Swains and Rose Islands).

Previous designations for American Samoa have either designated all of American Samoa as a whole "state," or territory-wide, without listing the district subdivisions (*e.g.*, for the 1971 SO_2 NAAQS, 2010 NO_2 1-hour NAAQS, 2008 8-hour ozone NAAQS, and 2008 lead NAAQS), or have listed out the three districts and two atolls as separate areas (*e.g.*, the 1997 and 2012 Annual $PM_{2.5}$ NAAQS, and the 1997 and 2006 24-hour $PM_{2.5}$ NAAQS).[9] Generally, all areas of American Samoa are designated as unclassifiable/attainment for all other NAAQS.[10]

[7] A total of 94 areas throughout the U.S. were previously designated in actions published on August 5, 2013 (78 FR 47191), July 12, 2016 (81 FR 45039), and December 13, 2016 (81 FR 89870).

[8] *Sierra Club v. McCarthy*, No. 3-13-cv-3953 (SI) (N.D. Cal. Mar. 2, 2015).

[9] 40 CFR 81.352 – American Samoa.

[10] American Samoa is designated as "better than national standards" for TSP and the 1971 SO_2 NAAQS.

3.3. Summary of Our Intended Designation for American Samoa

After careful evaluation of all available relevant information, the EPA intends to designate American Samoa as a single unclassifiable/attainment area for the 2010 SO_2 NAAQS.

Table 2. Summary of the EPA's Intended Designation and the Designation Recommendation for American Samoa

Area of American Samoa	American Samoa's Recommended Area Definition	American Samoa's Recommended Designation	EPA's Intended Area Definition	EPA's Intended Designation
Territory-wide: Consisting of all three American Samoa Districts (Eastern, Western, and Manu'a) and two atolls (Swains Island and Rose Island)	None Received	None Received	All of American Samoa	Unclassifiable/ Attainment

Figure 2. The EPA's Intended Unclassifiable/Attainment Designation for American Samoa

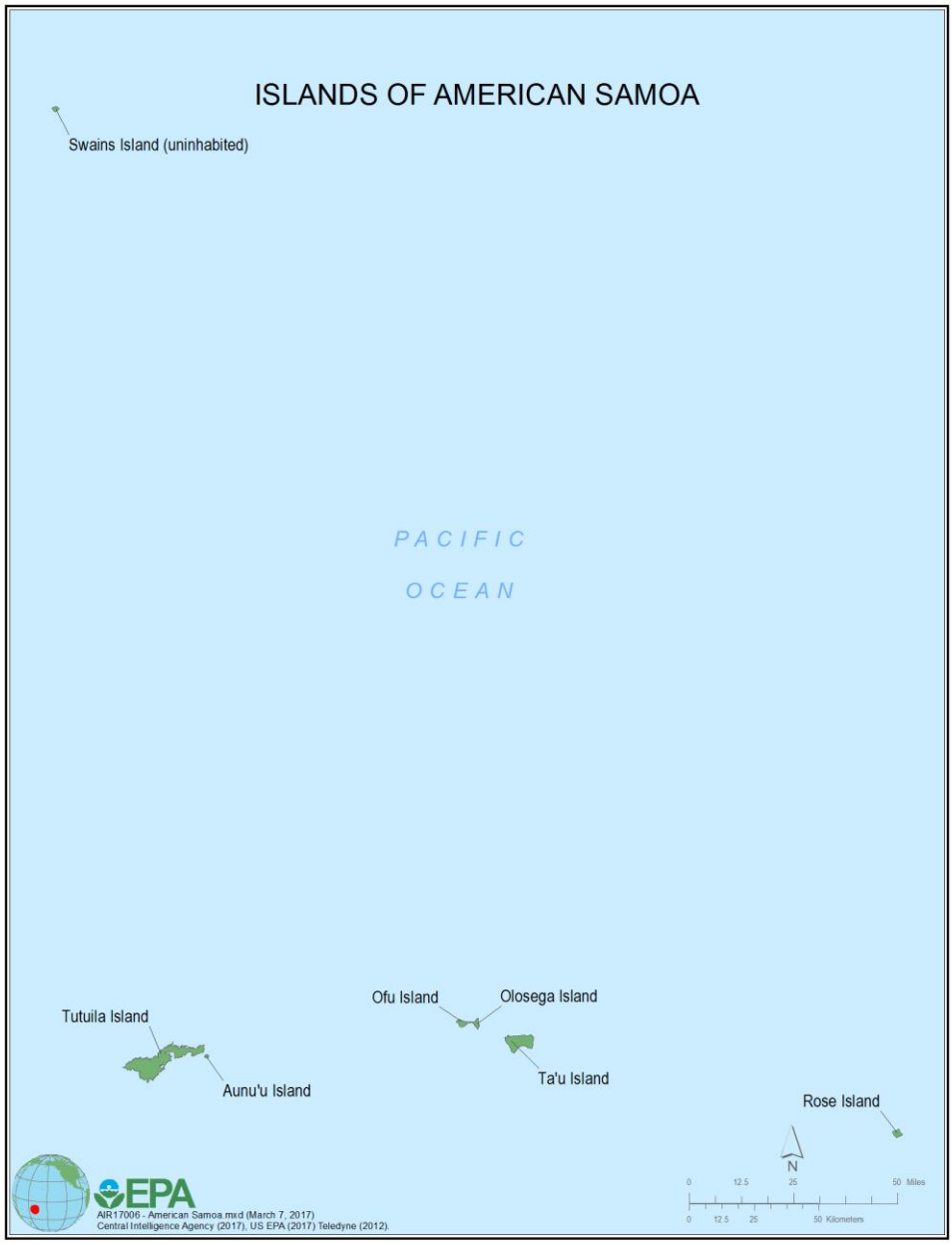


Table 2 and Figure 2 identify the EPA's intended designations for American Samoa. As indicated in Table 2, American Samoa has not offered a recommendation regarding designations. The territory has not installed and begun timely operation of a new, approved SO_2 monitoring network meeting EPA specifications referenced in the EPA's DRR for any sources of SO_2 emissions in the territory. Accordingly, the EPA must designate all of the territory by December 31, 2017. At this time, there are no air quality modeling results available to the EPA for any of the territory. In addition, there are no air quality monitoring data that currently indicate any

violation of the 1-hour SO_2 NAAQS. The EPA is designating American Samoa as a single "unclassifiable/ attainment" area since no part of the territory was required to be characterized under 40 CFR 51.1203(c) or (d) and the EPA does not have available information including (but not limited to) appropriate modeling analyses and/or monitoring data that suggests that any part of the territory may (i) not be meeting the NAAQS, or (ii) contribute to ambient air quality in a nearby area that does not meet the NAAQS.

Figure 2 above shows the boundaries of the intended American Samoa unclassifiable/attainment area.

4. Commonwealth of the Northern Mariana Islands

This section addresses designations for all areas in the Commonwealth of the Northern Mariana Islands (CNMI) for the 2010 SO_2 NAAQS. In previous final actions, the EPA has issued designations for the 2010 SO_2 NAAQS for selected areas of the country.[11] No part of the CNMI was designated in these previous final actions. The EPA is under a December 31, 2017, deadline to designate the areas addressed in this section as required by the U.S. District Court for the Northern District of California.[12] We are referring to the set of designations being finalized by the December 31, 2017, deadline as "Round 3" of the designations process for the 2010 SO_2 NAAQS. After the Round 3 designations are completed, the only remaining undesignated areas will be those where a state began operation of a new SO_2 monitoring network in meeting EPA specifications referenced in the EPA's SO_2 DRR. The EPA is required to designate those remaining undesignated areas by December 31, 2020. The CNMI will not have any undesignated areas after Round 3.

The territory submitted a recommendation that CNMI be designated unclassifiable for the 2010 1-hour SO_2 NAAQS on June 1, 2011.[13] CNMI did not submit any air quality analyses to the EPA.

CNMI does not have any sources of SO_2 emissions for which it is required under the EPA's SO_2 Data Requirements Rule (40 CFR 51.1203(c) or (d)) to characterize SO_2 air quality.

4.1. Air Quality Monitoring Data for CNMI

There are no regulatory ambient air quality SO_2 monitors in CNMI.

4.2. Other Information Relevant to the Designations for CNMI

CNMI is divided into four municipalities encompassing the 15 islands of CNMI.
Previous designations for CNMI have either designated CNMI as a whole "state," or as the "Northern Mariana Islands" without listing out jurisdictional subdivisions (*e.g.*, 2010 1-hour NO_2 NAAQS, 1997 and 2008 8-hour ozone NAAQS, 2008 lead NAAQS, 1971 SO_2 NAAQS), or designated CNMI as a "territory-wide" area and listed out the four municipalities of CNMI: The Northern Islands, Rota, Saipan, and Tinian Municipalities (*e.g.*, 1997 and 2010 Annual $PM_{2.5}$ NAAQS, and the 1997 and 2006 24-hour $PM_{2.5}$ NAAQS).[14] Generally, CNMI is designated unclassifiable/attainment for all other NAAQS.[15]

[11] A total of 94 areas throughout the U.S. were previously designated in actions published on August 5, 2013 (78 FR 47191), July 12, 2016 (81 FR 45039), and December 13, 2016 (81 FR 89870).
[12] *Sierra Club v. McCarthy*, No. 3-13-cv-3953 (SI) (N.D. Cal. Mar. 2, 2015).

[13] *See* letter dated June 1, 2011, from Eloy S. Inos, Commonwealth of the Northern Mariana Islands, to Deborah Jordan, EPA Region IX.
[14] 40 CFR 81.354 – Northern Mariana Islands.
[15] CNMI is designated as "better than national standards" for TSP and the 1971 SO_2 NAAQS.

4.3. Summary of the EPA's Intended Designation for CNMI

CNMI recommended that all of CNMI, be designated as unclassifiable based on the lack of monitoring or modeling data to characterize air quality in CNMI. After careful evaluation of the territory's recommendation and supporting information, as well as all available relevant information, the EPA intends to modify the territory's recommendation and intends to designate the areas in Table 3 as a single unclassifiable/attainment area for the 2010 SO_2 NAAQS. Our intended unclassifiable/attainment area, all of CNMI, has clearly defined legal boundaries, and we intend to find these boundaries to be a suitable basis for defining our intended unclassifiable/attainment area.

Table 3. Summary of the EPA's Intended Designations and the Designation Recommendations by CNMI

Area of CNMI	CNMI's Recommended Area Definition	CNMI's Recommended Designation	EPA's Intended Area Definition	EPA's Intended Designation
Territory-wide*	All of CNMI	Unclassifiable	Same as CNMI's recommendation	Unclassifiable/ Attainment

Figure 3. The EPA's Intended Unclassifiable/Attainment Designation for CNMI

Figure 3 above shows the location and boundary of the intended CNMI unclassifiable/attainment area.

5. Delaware

This section addresses designations for all areas in Delaware for the 2010 SO_2 NAAQS. In previous final actions, the EPA has issued designations for the 2010 SO_2 NAAQS for selected areas of the country.[16] No part of Delaware was designated in these previous final actions. The EPA is under a December 31, 2017, deadline to designate the areas addressed in this section as required by the U.S. District Court for the Northern District of California.[17] We are referring to the set of designations being finalized by the December 31, 2017, deadline as "Round 3" of the designations process for the 2010 SO_2 NAAQS. After the Round 3 designations are completed, the only remaining undesignated areas will be those where a state began operation of a new SO_2 monitoring network in meeting EPA specifications referenced in the EPA's SO_2 DRR. The EPA is required to designate those remaining undesignated areas by December 31, 2020. Delaware will not have any undesignated areas after Round 3.

Delaware submitted its first recommendation regarding designations for the 2010 1-hour SO_2 NAAQS on June 13, 2011 and recommended a designation of unclassifiable for all counties. It is not clear from this letter whether at this time Delaware intended that the three counties in Delaware be designated separately or as part of one state-wide designated area. On June 5, 2013, Delaware submitted an air quality analysis to support an updated recommendation for a designation of attainment for the entire state for the 2010 SO_2 1-hour standard. In general, the modeling supports this conclusion. However, the Delaware modeling was performed using an older version of AERMOD, version 12060, which was released in February 2012. This version does not include bug fixes applied to the modeling system since version 12060 that can affect model results. The modeling submitted by the state was performed prior to the EPA releasing our Modeling TAD and uses outdated emissions data that do not reflect more recent emissions levels, and therefore does not necessarily provide an indicator of current air quality for purposes of designations in Round 3. This information is in Docket # EPA-HQ-OAR-2012-0233 and can be found here: https://www.regulations.gov/document?D=EPA-HQ-OAR-2012-0233-0299. In our intended designations, we have considered all the submissions from the state, except where a recommendation in a later submission regarding a particular area indicates that it completely replaces an earlier recommendation for that area; in those cases, we have considered the recommendation in the later submission.

Delaware does not have any sources of SO_2 emissions for which it is required under the EPA's SO_2 Data Requirements Rule (40 CFR 51.1203(c) or (d)) to characterize SO_2 air quality.

5.1. Air Quality Monitoring Data for the State of Delaware

This factor considers the SO_2 air quality monitoring data in Delaware. Although the state did not provide specific monitoring data, the EPA reviewed all available monitoring data for the state that are in AQS. All the valid DVs are well below the 75 ppb standard. Monitors with incomplete

[16] A total of 94 areas throughout the U.S. were previously designated in actions published on August 5, 2013 (78 FR 47191), July 12, 2016 (81 FR 45039), and December 13, 2016 (81 FR 89870).
[17] *Sierra Club v. McCarthy*, No. 3-13-cv-3953 (SI) (N.D. Cal. Mar. 2, 2015).

data also have very low SO_2 values. The available monitoring data are summarized in Table 4. Note that * indicates an incomplete/invalid design value.

Table 4. Air Quality Monitoring Data for the State of Delaware

County/City	AQS Monitor ID	Latitude	Longitude	2011-2013 Design Value	2012-2014 Design Value	2013-2015 Design Value	2014-2016 Design Value
New Castle	10-003-1007	39.5513	- 75.732	10*	7*	10*	9*
New Castle	10-003-1008	39.57768	-75.6036	19*	17	11	12
New Castle	10-003-1013	39.773889	-75.496389	12*	9*	10	9
New Castle	10-003-2004	39.739444	-75.558056	13*	13*	13*	10
Sussex	10-005-1003	38.7791	-76.16323	9*	8*	6	4

While these data were available to EPA for consideration in the designation process, the EPA does not have information indicating that any of the existing monitors are located in an area of maximum concentration around specific SO_2 sources. Air quality monitoring data discussed in this section can be found at https://www.epa.gov/air-trends/air-quality-design-values.

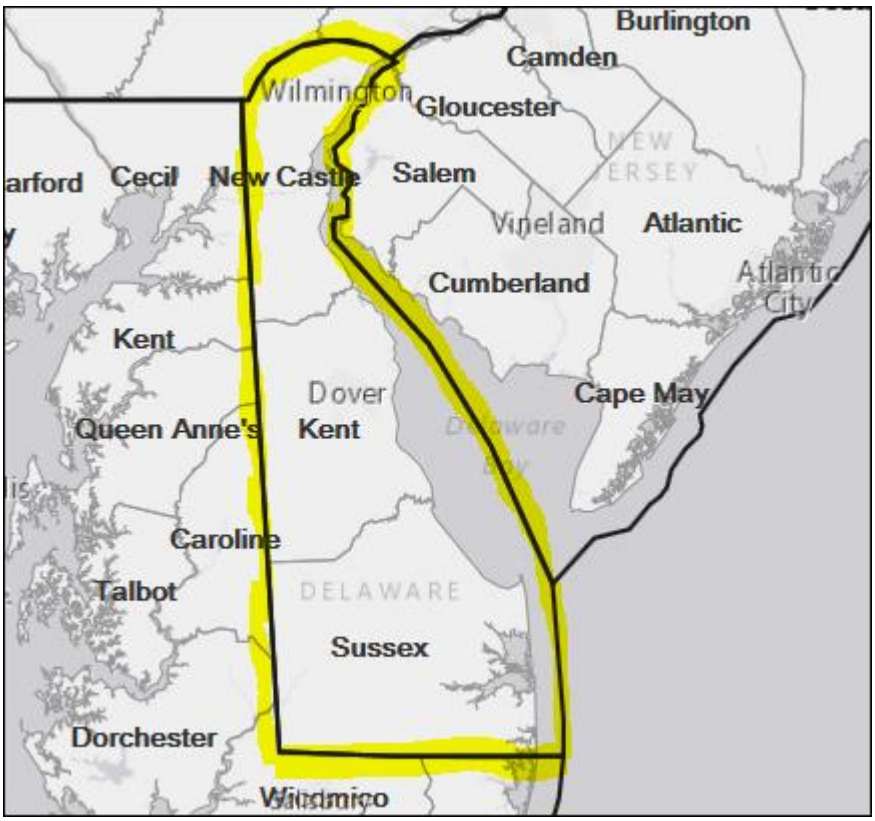
5.2. Summary of Our Intended Designations for Delaware

For the areas in Delaware that are being designated in Round 3, Table 4 and Figure 4 identify the EPA's intended designations and the areas to which they would apply. It also lists Delaware's current recommendations. The state has not installed and begun timely operation of a new, approved SO_2 monitoring network meeting EPA specifications referenced in the EPA's DRR for any sources of SO_2 emissions in the counties identified in Table 4. Accordingly, the EPA must designate these counties by December 31, 2017. At this time, there are no air quality modeling results available to the EPA for these counties. In addition, there are no air quality monitoring data that currently indicate any violation of the 1-hour SO_2 NAAQS. The EPA is designating the counties in Table 5 in the state as "unclassifiable/attainment" since these counties were not required to be characterized under 40 CFR 51.1203(c) or (d) and the EPA does not have available information including (but not limited to) appropriate modeling analyses and/or monitoring data that suggests that the area may (i) not be meeting the NAAQS, or (ii) contribute to ambient air quality in a nearby area that does not meet the NAAQS. Figure 4 shows the boundary of the intended unclassifiable/attainment designation for Delaware.

Table 5. Summary of the EPA's Intended Designations and the Designation Recommendations by Delaware

Area/County	Delaware's Recommended Area Definition	Delaware's Recommended Designation	EPA's Intended Area Definition	EPA's Intended Designation
State of Delaware	Entire State	Attainment	Entire State	Unclassifiable/ Attainment

Figure 4. The EPA's Intended Unclassifiable/Attainment Designation for Delaware



6. District of Columbia

This section addresses designations for all areas in the District of Columbia (DC) for the 2010 SO_2 NAAQS. In previous final actions, the EPA has issued designations for the 2010 SO_2 NAAQS for selected areas of the country.[18] No part of DC was designated in these previous final actions. The EPA is under a December 31, 2017, deadline to designate the areas addressed in this section as required by the U.S. District Court for the Northern District of California.[19] We are referring to the set of designations being finalized by the December 31, 2017, deadline as "Round 3" of the designations process for the 2010 SO_2 NAAQS. After the Round 3 designations are completed, the only remaining undesignated areas will be those where a state began operation of a new SO_2 monitoring network in meeting EPA specifications referenced in the EPA's SO_2 Data Requirements Rule (DRR). (80 FR 51052). The EPA is required to designate those remaining undesignated areas by December 31, 2020. The District of Columbia will not have any undesignated areas after Round 3.

The District submitted its first recommendation regarding designations for the 2010 1-hour SO_2 NAAQS on May 23, 2011, and recommended a designation of unclassifiable for the entire District. On November 4, 2016, the District updated its recommendation and recommended attainment for the entire district, based on newer data from a monitor that had begun operation in 2012. In our intended designations, we have considered all the submissions from the state, except where a recommendation in a later submission regarding a particular area indicates that it completely replaces an earlier recommendation for that area we have considered the recommendation in the later submission.

The District does not have any sources of SO_2 emissions for which it is required under the EPA's SO_2 Data Requirements Rule (40 CFR 51.1203(c) or (d)) to characterize SO_2 air quality.

[18] A total of 94 areas throughout the U.S. were previously designated in actions published on August 5, 2013 (78 FR 47191), July 12, 2016 (81 FR 45039), and December 13, 2016 (81 FR 89870).
[19] *Sierra Club v. McCarthy*, No. 3-13-cv-3953 (SI) (N.D. Cal. Mar. 2, 2015).

6.1. Air Quality Monitoring Data for the District of Columbia Area

Table 6. Monitored Data in the District of Columbia

Monitor	Latitude	Longitude	2012-2014 Design Value (ppb)	2013-2015 Design Value (ppb)		2014-2016 Design Value (ppb)
11-001-0043	38.921847	-77.013178	11	12		11
11-001-0041	38.895572	-76.958072	10*	10*		8*

* Denotes incomplete data

There are two monitors located in the District of Columbia. In 2012, the District began operation of a new SO_2 monitor (11-001-0043) at the McMillan Reservoir Station. The monitor met all EPA specifications for monitoring. AQS monitor 11-001-0043 has sufficient valid data for the 2012 - 2014, 2013 - 2015, and 2014 - 2016 periods and these data indicate that there was no violation of the 2010 SO_2 NAAQS at the monitoring site in those periods as shown on Table 6. While these data were available to the EPA for consideration in the designation process, the EPA does not have information indicating that any of the existing monitors are located in an area of maximum concentration around specific SO_2 sources.

AQS monitor 11-001-0041, located at River Terrace, had incomplete data in the second quarter of 2014 through the first quarter of 2016 because of construction on the building where it is sited. This monitor began collecting data again starting with the second quarter of 2016 through the present.

Air quality monitoring data discussed in this section can be found at https://www.epa.gov/air-trends/air-quality-design-values.

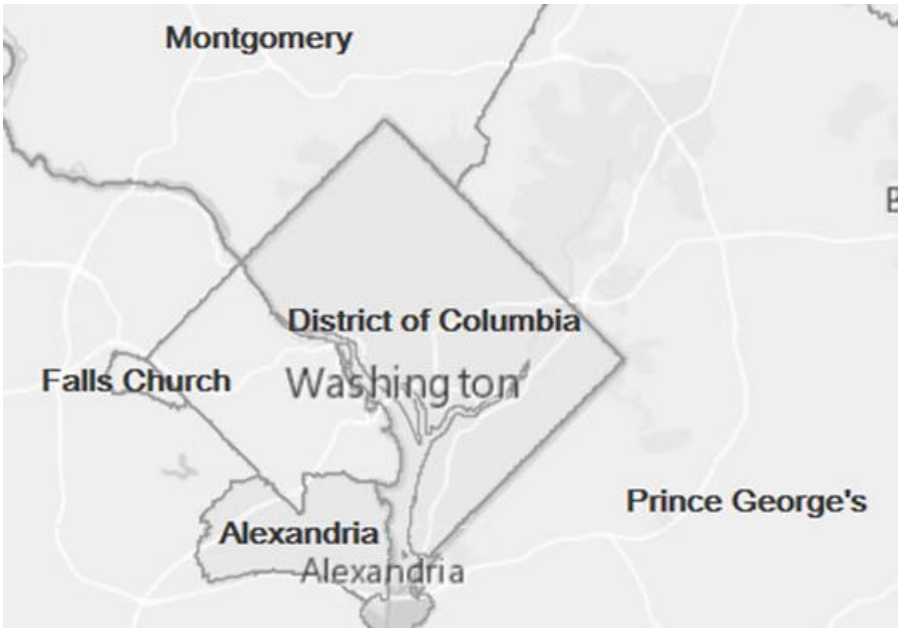
6.2. Summary of Our Intended Designation for the District of Columbia

Since the District is being designated in Round 3, Table 7 and Figure 5 identify the EPA's intended designation. It also lists the District's current recommendations. The District has not installed and begun timely operation of a new, approved SO_2 monitoring network meeting EPA specifications referenced in the EPA's DRR for any sources of SO_2 emissions in the District. Accordingly, the EPA must designate the District by December 31, 2017. At this time, there are no air quality modeling results available to the EPA for the District. In addition, there are no air quality monitoring data that currently indicate any violation of the 1-hour SO_2 NAAQS. The EPA is designating the District as "unclassifiable/ attainment" since the District was not required to be characterized under 40 CFR 51.1203(c) or (d) and the EPA does not have available information including (but not limited to) appropriate modeling analyses and/or monitoring data that suggests that the area may (i) not be meeting the NAAQS, or (ii) contribute to ambient air quality in a nearby area that does not meet the NAAQS.

Table 7. Summary of the EPA's Intended Designation and the Designation Recommendation by the District of Columbia

Area/County	District of Columbia's Recommended Area Definition	District of Columbia's Recommended Designation	EPA's Intended Area Definition	EPA's Intended Designation
District of Columbia	Entire District of Columbia	Attainment	Entire District of Columbia	Unclassifiable/ Attainment

Figure 5. Boundary of the Intended District of Columbia Unclassifiable/Attainment Area



The EPA intends to designate the District of Columbia Area as unclassifiable/attainment for the 2010 SO_2 NAAQS. Specifically, the boundary is comprised of the entire District of Columbia area.

7. Hawaii

This section addresses designations for all areas in Hawaii for the 2010 SO_2 NAAQS. In previous final actions, the EPA has issued designations for the 2010 SO_2 NAAQS for selected areas of the country.[20] The EPA is under a December 31, 2017, deadline to designate the areas addressed in this section as required by the U.S. District Court for the Northern District of California.[21] We are referring to the set of designations being finalized by the December 31, 2017, deadline as "Round 3" of the designations process for the 2010 SO_2 NAAQS. After the Round 3 designations are completed, the only remaining undesignated area in Hawaii will be Honolulu County, the area where Hawaii began operation of a new SO_2 monitoring network in meeting EPA specifications referenced in the EPA's SO_2 DRR. The EPA is required to designate this remaining undesignated area by December 31, 2020.

Hawaii submitted its recommendation that all counties in Hawaii be designated unclassifiable for the 2010 SO_2 NAAQS on May 19, 2011.[22] In our intended designations, we have considered all the submissions from the state.

Hawaii does not have any sources of SO_2 emissions for which it is required under the EPA's SO_2 Data Requirements Rule (40 CFR 51.1203(c) or (d)) to characterize SO_2 air quality.

7.1. Air Quality Monitoring Data for Kauai, Kalawao, and Maui Counties

AQS monitor 15-007-0007 located at 2342 Hulemalua Road on Kauai has a valid 2014-2016 design value of 19 ppb. While these data were available to the EPA for consideration in the designation process, the EPA does not have information indicating that any of the existing monitors are located in an area of maximum concentration around specific SO_2 sources. Air quality monitoring data discussed in this section can be found at https://www.epa.gov/air-trends/air-quality-design-values.

7.2. Other Information Relevant to the Designations for Kauai, Kalawao, and Maui Counties

The state of Hawaii is composed of five counties: The City and County of Honolulu, Hawaii County, Maui County, Kauai County, and Kalawao County. Kalawao County is located on the north coast of the island of Molokai. Maui County consists of the islands of Maui, Lanai, Molokai (except for the Kalawao County portion of Molokai), Kahoolawe, and Molokini. Kauai County consists of the islands of Kauai, Niihau, Lehua, and Kaula. The Clean Air Branch of the Hawaii Department of Health administers air quality programs in all of Hawaii.

[20] A total of 94 areas throughout the U.S. were previously designated in actions published on August 5, 2013 (78 FR 47191), July 12, 2016 (81 FR 45039), and December 13, 2016 (81 FR 89870).
[21] *Sierra Club v. McCarthy*, No. 3-13-cv-3953 (SI) (N.D. Cal. Mar. 2, 2015).

[22] *See* letter dated May 19, 2011, from Neil Abercrombie, Governor of Hawaii, to Jared Blumenfeld, EPA Region IX.

Previous designations of areas in Hawaii have generally relied on county boundaries to define separate county-level unclassifiable/attainment areas for other NAAQS (*e.g.*, 2008 8-hour ozone NAAQS, 2010 NO_2 NAAQS, 1997 and 2012 Annual $PM_{2.5}$ NAAQS, and 1997 and 2006 24-hour $PM_{2.5}$ NAAQS), or designated the whole state as one area, both by listing the five counties in Hawaii (*e.g.*, carbon monoxide NAAQS, 1-hour ozone NAAQS), and without listing out the counties (*e.g.*, TSP NAAQS, and 1971 SO_2 NAAQS).[23]

7.3. Summary of Our Intended Designation for Hawaii

For the areas in Hawaii that are being designated in the Round 3 designations process, Table 8 and Figure 6 identify the EPA's intended designation of Hawaii as distinct unclassifiable/attainment areas. It also lists Hawaii's current recommendations. The state has not installed and begun timely operation of a new, approved SO_2 monitoring network meeting EPA specifications referenced in the EPA's DRR for any sources of SO_2 emissions in the counties identified in Table 8. Accordingly, the EPA must designate these counties by December 31, 2017. At this time, there are no air quality modeling results available to the EPA for these counties. In addition, there are no air quality monitoring data that currently indicate any violation of the 1-hour SO_2 NAAQS. The EPA is designating the counties in Table 8 in the state as "unclassifiable/ attainment" since these counties were not required to be characterized under 40 CFR 51.1203(c) or (d) and the EPA does not have available information including (but not limited to) appropriate modeling analyses and/or monitoring data that suggests that the area may (i) not be meeting the NAAQS, or (ii) contribute to ambient air quality in a nearby area that does not meet the NAAQS.

Table 8. Summary of the EPA's Intended Designations and the Designation Recommendations by Hawaii

Area/County	Hawaii's Recommended Area Definition	Hawaii's Recommended Designation	EPA's Intended Area Definition	EPA's Intended Designation
Kauai County	Kauai County	Unclassifiable	Same as Hawaii's Recommendation	Unclassifiable/ Attainment
Kalawao County	Kalawao County	Unclassifiable	Same as Hawaii's Recommendation	Unclassifiable/ Attainment
Maui County	Maui County	Unclassifiable	Same as Hawaii's Recommendation	Unclassifiable/ Attainment

Areas for which Hawaii elected to install and began operation of a new, approved SO_2 monitoring network are listed in Table 9. The EPA is required to designate these areas, pursuant to a court ordered schedule, by December 31, 2020. Table 9 also lists the SO_2 emissions sources around which each new, approved monitoring network has been established.

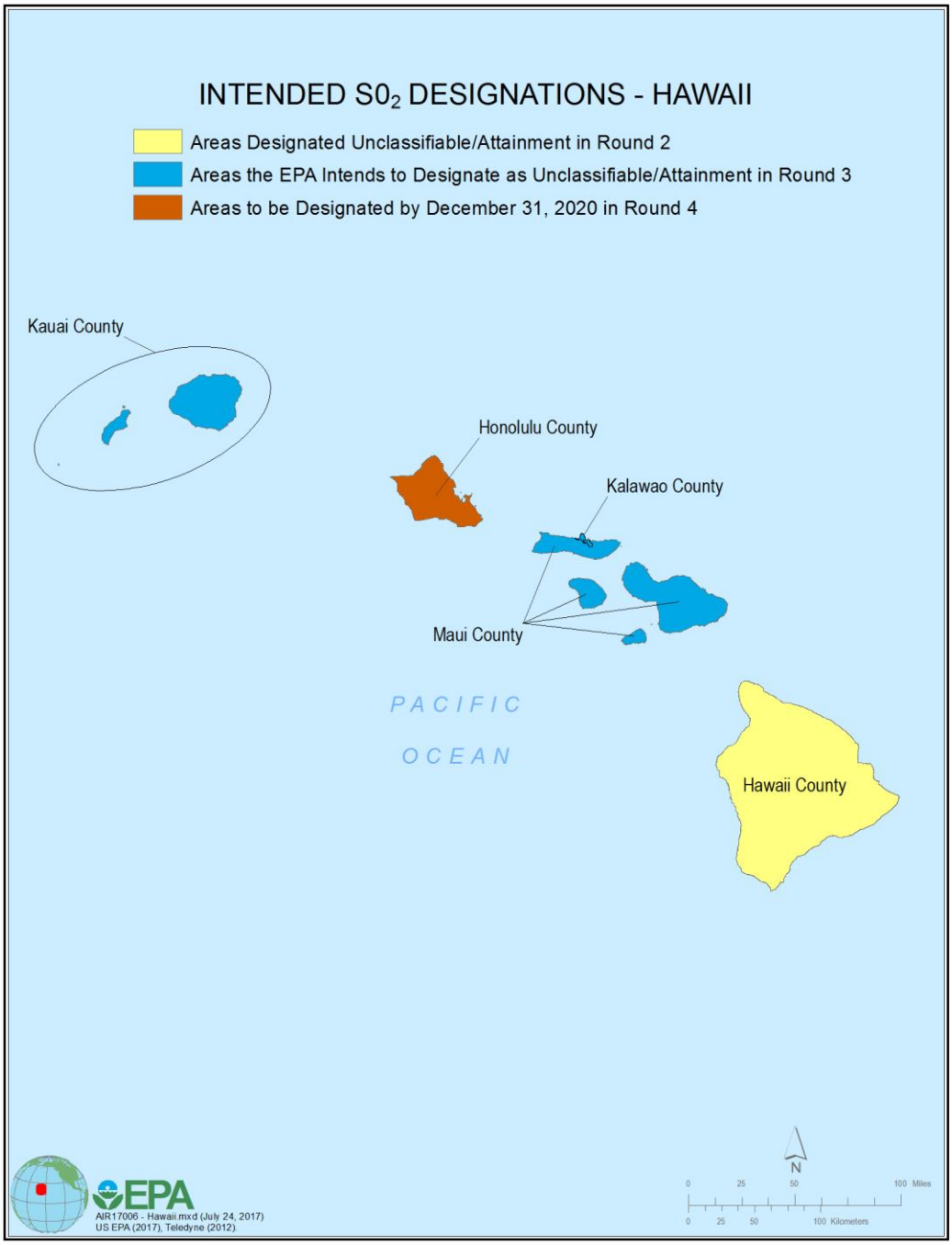
[23] 40 CFR 81.312 Hawaii.

Table 9 – Undesignated Areas Which the EPA Is Not Addressing in this Round of Designations (and Associated Source or Sources)

Area	Source(s)
Honolulu County	Kahe Generating Station; Waiau Generating Station; Kalaeloa Cogeneration Plant; AES Hawaii, Inc.

Areas in Hawaii that the EPA previously designated in Round 1 (*see* 78 FR 47191) and Round 2 (*see* 81 FR 45039 and 81 FR 89870) are not affected by the designations in Round 3 unless otherwise noted. Hawaii County was designated unclassifiable/attainment in Round 2.

Figure 6. The EPA's Intended Unclassifiable/Attainment Designation(s) for Counties in Hawaii



The state recommended that each of the counties of Kauai, Kalawao, and Maui be designated unclassifiable based on the lack of modeling data in these areas. After careful evaluation of the state's recommendation and supporting information, as well as all available relevant information, the EPA intends to modify the state's recommendation and intends to designate Kauai, Kalawao, and Maui Counties as three separate unclassifiable/attainment areas for the 2010 SO_2 NAAQS. Our intended unclassifiable/attainment areas, bounded by county boundaries, have clearly

defined legal boundaries, and we intend to find these boundaries to be a suitable basis for defining these three intended unclassifiable/attainment areas. Specifically, the boundaries are comprised of the boundaries for each of these counties.

Figure 6 above shows the location of these areas within Hawaii and the intended Kauai, Kalawao, and Maui County unclassifiable/attainment areas.

At this time, our intended designations for the state only apply to Kauai, Kalawao, and Maui Counties. Honolulu County, the remaining undesignated county in Hawaii, will be designated by December 31, 2020.

8. Idaho

This section addresses designations for all areas in Idaho for the 2010 SO_2 NAAQS. In previous final actions, the EPA has issued designations for the 2010 SO_2 NAAQS for selected areas of the country.[24] No part of Idaho was designated in these previous final actions. The EPA is under a December 31, 2017, deadline to designate the areas addressed in this section as required by the U.S. District Court for the Northern District of California.[25] We are referring to the set of designations being finalized by the December 31, 2017, deadline as "Round 3" of the designations process for the 2010 SO_2 NAAQS. After the Round 3 designations are completed, the only remaining undesignated areas will be those where a state began operation of a new SO_2 monitoring network in meeting EPA specifications referenced in the EPA's SO_2 DRR. The EPA is required to designate those remaining undesignated areas by December 31, 2020. Idaho will not have any undesignated areas after Round 3.

Idaho submitted its first recommendation regarding designations for the 2010 1-hour SO_2 NAAQS on May 19, 2011. This recommendation was that the entire State of Idaho and all four of Idaho's Air Quality Control Regions be designated unclassifiable. The state submitted an updated air quality analysis based on monitoring along with updated recommendations on January 13, 2016. The updated recommendations were that Ada, Canyon, Bannock, and Caribou Counties be designated attainment. In our intended designations, we have considered all the submissions from the state, except where a recommendation in a later submission regarding a particular area indicates that it completely replaces an earlier recommendation for that area we have considered the recommendation in the later submission.

Idaho does not have any sources of SO_2 emissions for which it is required under the EPA's SO_2 Data Requirements Rule (40 CFR 51.1203(c) or (d)) to characterize SO_2 air quality.

8.1. Air Quality Monitoring Data for Idaho

AQS monitor 16-005-0004 located at Pocatello monitoring site in Bannock County has sufficient valid data for 2014-2016 and these data indicate that there was no violation of the 2010 SO_2 NAAQS at the monitoring site in that period. AQS monitor 160290031 located at Soda Springs monitoring site 16-029-0031 in Caribou County has sufficient valid data for 2014-2016 and these data indicate that there was no violation of the 2010 SO_2 NAAQS at the monitoring site in that period. AQS monitor 16-001-0010 located at Meridian monitoring site in Ada County has sufficient valid data for 2014-2016 and these data indicate that there was no violation of the 2010 SO_2 NAAQS at the monitoring site in that period. While these data were available to the EPA for consideration in the designation process, the EPA does not have information indicating that any of the existing monitors are located in an area of maximum concentration around specific SO_2 sources. Air quality monitoring data discussed in this section can be found at https://www.epa.gov/air-trends/air-quality-design-values.

[24] A total of 94 areas throughout the U.S. were previously designated in actions published on August 5, 2013 (78 FR 47191), July 12, 2016 (81 FR 45039), and December 13, 2016 (81 FR 89870).
[25] *Sierra Club v. McCarthy*, No. 3-13-cv-3953 (SI) (N.D. Cal. Mar. 2, 2015).

8.2. Summary of Our Intended Designations for Idaho

For the areas in Idaho that are being designated in Round 3, Table 10and Figure 7 identify the EPA's intended designation of Idaho as a single 3 designations unclassifiable/attainment area. It also lists Idaho's current recommendations. The state has not installed and begun timely operation of a new, approved SO_2 monitoring network meeting EPA specifications referenced in the EPA's DRR for any sources of SO_2 emissions in the counties identified in Table 10. Accordingly, the EPA must designate these counties by December 31, 2017. At this time, there are no air quality modeling results available to the EPA for these counties. In addition, there are no air quality monitoring data that currently indicate any violation of the 1-hour SO_2 NAAQS. The EPA is designating the entire state of Idaho as "unclassifiable/ attainment" since no portion of Idaho was required to be characterized under 40 CFR 51.1203(c) or (d) and the EPA does not have available information including (but not limited to) appropriate modeling analyses and/or monitoring data that suggests that any area in the state may (i) not be meeting the NAAQS, or (ii) contribute to ambient air quality in a nearby area that does not meet the NAAQS.

Table 10. The EPA's Intended Designations and the Designation Recommendations by Idaho

Area	Idaho's Recommended Area Definition	Idaho's Recommended Designation	EPA's Intended Area Definition	EPA's Intended Designation
Entire State of Idaho	Ada, Canyon, Bannock, & Caribou Counties	Attainment	Entire State of Idaho as One Designated Area	Unclassifiable/ Attainment
	Remaining Counties	Unclassifiable		

Figure 7. The EPA's Intended Unclassifiable/Attainment Designation for Idaho

The EPA intends to designate the entire State of Idaho as a single unclassifiable/attainment area for the 2010 SO_2 NAAQS. Specifically, the boundaries are comprised of all areas within the borders of the State of Idaho.

Figure 7 above shows the boundary of the intended Idaho unclassifiable/attainment area.

9. Kansas

This section addresses designations for all areas in Kansas for the 2010 SO_2 NAAQS. In previous final actions, the EPA has issued designations for the 2010 SO_2 NAAQS for selected areas of the country.[26] The EPA is under a December 31, 2017, deadline to designate the areas addressed in this section as required by the U.S. District Court for the Northern District of California.[27] We are referring to the set of designations being finalized by the December 31, 2017, deadline as "Round 3" of the designations process for the 2010 SO_2 NAAQS. After the Round 3 designations are completed, the only remaining undesignated areas will be those where a state began operation of a new SO_2 monitoring network in meeting EPA specifications referenced in the EPA's SO_2 DRR. The EPA is required to designate those remaining undesignated areas by December 31, 2020. Kansas will not have any undesignated areas after Round 3.

Kansas submitted its first recommendation regarding designations for the 2010 1-hour SO_2 NAAQS on June 13, 2011. This recommendation was that each of the 105 counties in Kansas be designated as a separate unclassifiable area. Kansas submitted revised recommendations for Linn, Wyandotte, and Shawnee Counties on September 9, 2015. The revised recommendations were that Linn County be designated attainment and that Wyandotte and Shawnee County be designated unclassifiable/attainment. The EPA designated Linn County as unclassifiable/attainment and Wyandotte and Shawnee Counties as unclassifiable in an action published July 12, 2016. The state submitted recommendations for the redesignation of Wyandotte and Shawnee Counties to unclassifiable/attainment on January 12, 2017, along with air quality modeling results for these two counties. We will respond to Kansas' recommendations to redesignate these two areas in a separate action. In our intended designations for the areas not yet designated, we have considered all the submissions from the state.

Kansas does not have any sources of SO_2 emissions for which it is required under the EPA's SO_2 Data Requirements Rule (40 CFR 51.1203(c) or (d)) to characterize SO_2 air quality.

9.1. Air Quality Monitoring Data for Kansas

The following AQS monitors in Kansas have sufficient valid data for 2014–2016 and these data indicate that there were no violations of the 2010 SO_2 NAAQS at these monitoring sites in that period:

[26] A total of 94 areas throughout the U.S. were previously designated in actions published on August 5, 2013 (78 FR 47191), July 12, 2016 (81 FR 45039), and December 13, 2016 (81 FR 89870).
[27] *Sierra Club v. McCarthy*, No. 3-13-cv-3953 (SI) (N.D. Cal. Mar. 2, 2015).

(1) Trego County Monitor, AQS ID #20-195-0001, Pronghorn and Muley, Cedar Bluff Reservoir, Lat N 38.77027, Long W -99.76361;

(2) Peck Monitor, AQS ID #20-191-0002, 707 E 119th Street South, Peck, Lat 37.476890, Long. -97.366399; and

(3) Kansas City JFK Monitor, AQS ID #20-209-0021, Kansas City, Lat. 39.117219, Long. -94.635605.

While these data were available to the EPA for consideration in the designation process, the EPA does not have information indicating that any of the existing monitors are located in an area of maximum concentration around specific SO_2 sources. Air quality monitoring data discussed in this section can be found at https://www.epa.gov/air-trends/air-quality-design-values.

9.2. Other Relevant Information for Our Intended Designations

The state of Missouri submitted a modeling analysis for the area around the Empire District Electric Company Asbury Plant, which is close to the border between Missouri and Kansas. The receptor grid for the modeling included all of Cherokee and Crawford Counties in Kansas. The modeling did not predict any SO_2 NAAQS violation. *See* Chapter 22 of this TSD for additional details on this modeling by Missouri.

9.3. Summary of Our Intended Designations for Kansas

For the areas in Kansas that are being designated in Round 3, Tables 11 and Figure 8 identify the EPA's intended designations and the counties to which they would apply. It also lists Kansas' recommendations. The state has not installed and begun timely operation of a new, approved SO_2 monitoring network meeting EPA specifications referenced in the EPA's DRR for any sources of SO_2 emissions in the counties identified in Table 11. Accordingly, the EPA must designate these counties by December 31, 2017. At this time, there are no air quality modeling results available to the EPA for these counties. In addition, there are no air quality monitoring data that currently indicate any violation of the 1-hour SO_2 NAAQS. The EPA is designating the counties in Table 11 in the state as "unclassifiable/ attainment" since these counties were not required to be characterized under 40 CFR 51.1203(c) or (d) and the EPA does not have available information including (but not limited to) appropriate modeling analyses and/or monitoring data that suggests that the areas may (i) not be meeting the NAAQS, or (ii) contribute to ambient air quality in a nearby area that does not meet the NAAQS.

Table 11. Summary of the EPA's Intended Designations and the Designation Recommendations by Kansas

County	Kansas' Recommended Area Definition	Kansas' Recommended Designation	EPA's Intended Area Definition	EPA's Intended Designation
Allen	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Anderson	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Atchison	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Barber	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Barton	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Bourbon	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Brown	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Butler	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Chase	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Chautauqua	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Cherokee	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Cheyenne	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Clark	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Clay	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Cloud	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Coffey	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Comanche	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Cowley	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Crawford	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Decatur	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment

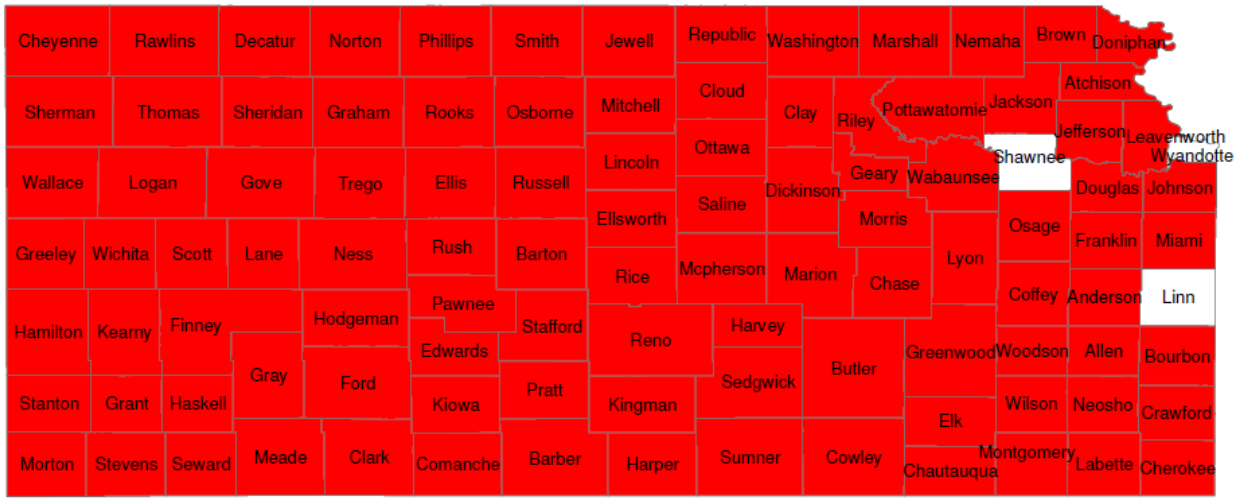
County	Kansas' Recommended Area Definition	Kansas' Recommended Designation	EPA's Intended Area Definition	EPA's Intended Designation
Dickinson	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Doniphan	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Douglas	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Edwards	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Elk	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Ellis	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Ellsworth	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Finney	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Ford	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Franklin	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Geary	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Gove	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Graham	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Grant	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Gray	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Greeley	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Greenwood	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Hamilton	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Harper	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Harvey	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Haskell	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment

County	Kansas' Recommended Area Definition	Kansas' Recommended Designation	EPA's Intended Area Definition	EPA's Intended Designation
Hodgeman	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Jackson	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Jefferson	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Jewell	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Johnson	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Kearny	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Kingman	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Kiowa	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Labette	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Lane	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Leavenworth	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Lincoln	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Logan	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Lyon	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Marion	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Marshall	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
McPherson	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Meade	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Miami	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Mitchell	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Montgomery	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment

County	Kansas' Recommended Area Definition	Kansas' Recommended Designation	EPA's Intended Area Definition	EPA's Intended Designation
Morris	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Morton	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Nemaha	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Neosho	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Ness	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Norton	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Osage	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Osborne	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Ottawa	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Pawnee	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Phillips	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Pottawatomie	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Pratt	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Rawlins	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Reno	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Republic	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Rice	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Riley	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Rooks	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Rush	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Russell	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment

County	Kansas' Recommended Area Definition	Kansas' Recommended Designation	EPA's Intended Area Definition	EPA's Intended Designation
Saline	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Scott	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Sedgwick	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Seward	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Sheridan	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Sherman	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Smith	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Stafford	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Stanton	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Stevens	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Sumner	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Thomas	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Trego	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Wabaunsee	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Wallace	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Washington	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Wichita	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Wilson	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment
Woodson	Unclassifiable	Entire county	Same as state's recommendation	Unclassifiable/ Attainment

Figure 8. The EPA's Intended Unclassifiable/Attainment Designations for Remaining Counties in Kansas



Areas that the EPA previously designated unclassifiable in Round 1 (*see* 78 FR 47191) and Round 2 (*see* 81 FR 45039 and 81 FR 89870) are not affected by the designations in Round 3 unless otherwise noted. As noted above, the EPA designated Wyandotte County and Shawnee County as unclassifiable and Linn County as unclassifiable/attainment in Round 2. In the January 12, 2017, submittal, Kansas requested that the EPA redesignate Wyandotte County and Shawnee County from unclassifiable to unclassifiable/attainment. The EPA will evaluate this request in a separate action, and is not addressing it here.

Our intended unclassifiable/attainment areas, bounded by the boundaries of each county listed in Table 11, will have clearly defined legal boundaries, and we intend to find these boundaries to be a suitable basis for defining our intended unclassifiable/attainment area.

10. Massachusetts

This section addresses designations for all areas in Massachusetts for the 2010 SO_2 NAAQS. In previous final actions, the EPA has issued designations for the 2010 SO_2 NAAQS for selected areas of the country.[28] No part of Massachusetts was designated in these previous final actions. The EPA is under a December 31, 2017, deadline to designate the areas addressed in this section as required by the U.S. District Court for the Northern District of California.[29] We are referring to the set of designations being finalized by the December 31, 2017, deadline as "Round 3" of the designations process for the 2010 SO_2 NAAQS. After the Round 3 designations are completed, the only remaining undesignated areas will be those where a state began operation of a new SO_2 monitoring network in meeting EPA specifications referenced in the EPA's SO_2 DRR. The EPA is required to designate those remaining undesignated areas by December 31, 2020. Massachusetts will not have any undesignated areas after Round 3.

Massachusetts submitted its first recommendation regarding designations for the 2010 1-hour SO_2 NAAQS on June 2, 2011. In our intended designations, we have fully considered the submission from the state.

Massachusetts does not have any sources of SO_2 emissions for which it is required under the EPA's SO_2 Data Requirements Rule (40 CFR 51.1203(c) or (d)) to characterize SO_2 air quality.

10.1. Air Quality Monitoring Data for All Massachusetts Counties

The following Air Quality System (AQS) monitors located in Massachusetts have sufficient valid data for 2014-2065 and these data indicate that there was no violation of the 2010 SO_2 NAAQS at these monitoring sites in that period. While these data were available to the EPA for consideration in the designation process, the EPA does not have information indicating that any of the existing monitors are located in an area of maximum concentration around specific SO_2 sources.

[28] A total of 94 areas throughout the U.S. were previously designated in actions published on August 5, 2013 (78 FR 47191), July 12, 2016 (81 FR 45039), and December 13, 2016 (81 FR 89870).
[29] *Sierra Club v. McCarthy*, No. 3-13-cv-3953 (SI) (N.D. Cal. Mar. 2, 2015).

- AQS monitor 25-005-1004. The Fall River monitor is located at 356 Globe Street, Fall River, Massachusetts, in Bristol County. Data collected at this monitor indicates that the monitored SO_2 design value for the period from 2014 to 2016 is 10 ppb.
- AQS monitor 25-015-4002. The Ware monitor is located at Quabbin Summit, Ware, Massachusetts, in Hampshire County. Data collected at this monitor indicates that the monitored SO_2 design value for the period from 2014 to 2016 is 4 ppb.
- AQS monitor 25-025-0002. The Kenmore Square monitor is located at Kenmore Square, Boston, Massachusetts, in Suffolk County. Data collected at this monitor indicates that the monitored SO_2 design value for the period from 2014 to 2016 is 6 ppb.
- AQS monitor 25-025-0042. The Boston – Harrison Avenue monitor is located at Harrison Avenue, Boston, Massachusetts, in Suffolk County. Data collected at this monitor indicates that the monitored SO_2 design value for the period from 2014 to 2016 is 9 ppb.
- AQS monitor 25-027-0023. The Worcester – Summer Street monitor is located at Summer Street, Worcester, Massachusetts, in Worcester County. Data collected at this monitor indicates that the monitored SO_2 design value for the period from 2014 to 2016 is 6 ppb.

The Springfield Liberty Street monitor (AQS monitor 25-013-0016) is located at Liberty Street, Springfield, Massachusetts, in Hampden County. Data collected at this monitor is not sufficient complete to provide a valid SO_2 design value for the period from 2014 to 2016. The invalid design value is 4 ppb. In the period 2013-2015, this monitor provided a valid design value of 8 ppb.

Air quality monitoring data discussed in this section can be found at https://www.epa.gov/air-trends/air-quality-design-values.

10.2. Other Information Relevant to the EPA's Intended Designations in Massachusetts

As part of our ongoing Risk and Exposure Assessment (REA) for the current SO_2 NAAQS Review, the EPA has conducted modeling of several areas using historical emissions data. The area around Fall River, Massachusetts, near the Brayton Point generating station was one of the areas selected for this analysis, and the EPA conducted modeling for this area for the 2011-2013 period. This modeling analysis indicated the presence of a possible violation of the 2010 1-hour SO_2 NAAQS during the 2011-2013 period due to emissions from Brayton Point. Additional information about the Brayton Point modeling will be provided in the REA document. SO_2 emissions from Brayton Point in 2011 were 18,648 tons, but declined to 7,606 by 2013. In 2013, Dominion Energy, which owns Brayton Point, entered into a consent decree with the EPA, and 2014 was the first year during which SO_2 controls were required to be continuously operated at the facility. SO_2 emissions dropped to 1,603 tons in 2014, 1,446 tons in 2015, and 875 tons in 2016. Because annual emissions from Brayton Point have been below 2,000 tons since 2014, and because the state planned to address emissions from Brayton Point in its SO_2 transport State

Implementation Plan, neither the state nor the EPA included the facility as an applicable source under the SO_2 DRR. Therefore, the state was not required to characterize SO_2 air quality for this area for the DRR.

As indicated previously, SO_2 monitoring data for this area do not indicate a current violation of the NAAQS, and show that ambient SO_2 levels have declined markedly with the continuous operation of the SO_2 controls. Because the facility's emissions characteristics changed dramatically since 2014, the EPA concludes that the modeling assessment for this area for 2011-2013 is not representative of current levels, and is therefore not relevant for designating the area. Instead, the EPA intends to designate the area around Brayton Point in a manner consistent with all other areas of the country with no DRR sources and for which there are no air quality monitoring data that currently indicate any violation of the 1-hour SO_2 NAAQS. Additionally, of relevance is the fact that as of June 1, 2017, the facility has ceased operations and terminated its agreements with the local ISO to generate electricity. This action is expected to become federally enforceable before the date the EPA issues our final designations through action by the Massachusetts Department of Environmental Protection to grant NOx credits to the owner of the facility for the shutdown.

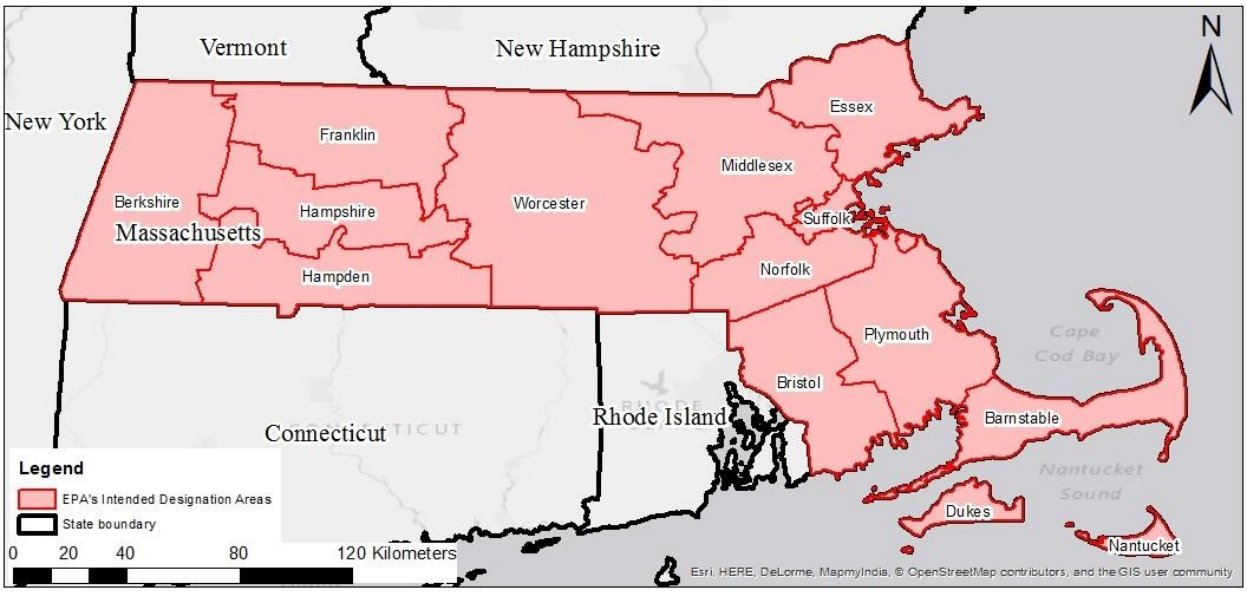
10.3. Summary of Our Intended Designations for Massachusetts

For the areas in Massachusetts that are part of the Round 3 designations process, Table 12 and Figure 9 identify the EPA's intended designations and the counties or portions of counties to which they would apply. It also lists Massachusetts's current recommendations. The state has not installed and begun timely operation of a new, approved SO_2 monitoring network meeting EPA specifications referenced in the EPA's DRR for any sources of SO_2 emissions in the counties identified in Table 12. Accordingly, the EPA must designate these counties by December 31, 2017. At this time, there are no air quality modeling results available to the EPA for these counties. In addition, there is no air quality monitoring data that indicate any violation of the 1-hour SO_2 NAAQS. The EPA is designating the counties in Table 12 in the state as "unclassifiable/ attainment" since these counties were not required to be characterized under 40 CFR 51.1203(c) or (d) and the EPA does not have available information including (but not limited to) appropriate modeling analyses and/or monitoring data that suggests that the areas may (i) not be meeting the NAAQS, or (ii) contribute to ambient air quality in a nearby area that does not meet the NAAQS.

Table 12. Summary of the EPA's Intended Designation and the Designation Recommendation by Massachusetts

County	Massachusetts's Recommended Area Definition	Massachusetts's Recommended Designation	EPA's Intended Area Definition	EPA's Intended Designation
Barnstable County	All of Massachusetts	Unclassifiable	Barnstable County	Unclassifiable/ Attainment
Berkshire County			Berkshire County	Unclassifiable/ Attainment
Bristol County			Bristol County	Unclassifiable/ Attainment
Dukes County			Dukes County	Unclassifiable/ Attainment
Essex County			Essex County	Unclassifiable/ Attainment
Franklin County			Franklin County	Unclassifiable/ Attainment
Hampden County			Hampden County	Unclassifiable/ Attainment
Hampshire County			Hampshire County	Unclassifiable/ Attainment
Middlesex County			Middlesex County	Unclassifiable/ Attainment
Nantucket County			Nantucket County	Unclassifiable/ Attainment
Norfolk County			Norfolk County	Unclassifiable/ Attainment
Plymouth County			Plymouth County	Unclassifiable/ Attainment
Suffolk County			Suffolk County	Unclassifiable/ Attainment
Worcester County			Worcester County	Unclassifiable/ Attainment

Figure 9. The EPA's Intended Unclassifiable/Attainment Designations for All Massachusetts Counties



The source of this map image is Esri, used by the EPA with Esri's permission.

The EPA intends to designate each Massachusetts county as a separate unclassifiable/attainment area for the 2010 SO_2 NAAQS. Specifically, the boundaries are comprised of the jurisdictional boundaries of Barnstable, Berkshire, Bristol, Dukes, Essex, Franklin, Hampden, Hampshire, Middlesex, Nantucket, Norfolk, Plymouth, Suffolk, and Worcester Counties, Massachusetts.

Figure 9 above shows the location of these areas within Massachusetts. For all counties in Massachusetts, the boundary of the unclassifiable/attainment area is the county boundary.

11. New Jersey

This section addresses designations for all areas in New Jersey for the 2010 SO_2 NAAQS. In previous final actions, the EPA has issued designations for the 2010 SO_2 NAAQS for selected areas of the country.[30] No part of New Jersey was designated in these previous final actions. The EPA is under a December 31, 2017, deadline to designate the areas addressed in this section as required by the U.S. District Court for the Northern District of California.[31] We are referring to the set of designations being finalized by the December 31, 2017, deadline as "Round 3" of the designations process for the 2010 SO_2 NAAQS. After the Round 3 designations are completed, the only remaining undesignated areas will be those where a state began operation of a new SO_2 monitoring network in meeting EPA specifications referenced in the EPA's SO_2 DRR. The EPA is required to designate those remaining undesignated areas by December 31, 2020. New Jersey will not have any undesignated areas after Round 3.

No areas in New Jersey have been designated. On June 23, 2011, New Jersey submitted its first recommendation regarding designations for the 2010 1-hour SO_2 NAAQS. This recommendation was that Warren County and certain indicated portions of Hunterdon, Morris, and Sussex counties be designated nonattainment and that the remainder of the state be designated unclassifiable. On January 9, 2017, the State updated its analysis of emissions and ambient monitoring data and its designation recommendations. The new recommendations were that the entire state be designated a single attainment area. On March 23, 2017, New Jersey provided supplemental information concerning the continued operation of a facility, one not subject to DRR requirements, that has been expected to shut down during 2017. In our intended designations, we have considered all the submissions from the state, except where a recommendation in a later submission regarding a particular area indicates that it replaces an earlier recommendation for that area we have considered the recommendation in the later submission.

New Jersey does not have any sources of SO_2 emissions for which it is required under the EPA's SO_2 Data Requirements Rule (40 CFR 51.1203(c) or (d)) to characterize SO_2 air quality.

11.1. Air Quality Monitoring Data for New Jersey

SO_2 data collected between 2014 and 2016 for the monitors listed in Table 13 below are available in the EPA's Air Quality System (AQS) database,[32] are certified, and meet data completeness requirements outlined in 40 CFR 50 Appendix T. Design values for this period at these sites were below the NAAQS, as shown in Table 13. While these data were available to EPA for consideration in the designation process, EPA does not have information indicating that any of the existing monitors are located in an area of maximum concentration around specific

[30] A total of 94 areas throughout the U.S. were previously designated in actions published on August 5, 2013 (78 FR 47191), July 12, 2016 (81 FR 45039), and December 13, 2016 (81 FR 89870).
[31] *Sierra Club v. McCarthy*, No. 3-13-cv-3953 (SI) (N.D. Cal. Mar. 2, 2015).

[32] https://www.epa.gov/aqs.

SO_2 sources. Air quality monitoring data discussed in this section can be found at https://www.epa.gov/air-trends/air-quality-design-values.

Table 13. Air Quality Data for New Jersey

County	Monitor Name	Monitor Location	AQS ID	2014- 2016 SO_2 Design Value (ppb)
Atlantic	Brigantine	Edwin B. Forsythe National Wildlife Refuge Visitor Center, Great Creek Road, Oceanville, NJ	340010006	6
Camden	Camden Spruce Street	266 Spruce Street, Camden, NJ	340070002	12
Essex	Newark Firehouse	360 Clinton Avenue, Newark, NJ	340130003	6
Hudson	Jersey City	2828 Kennedy Boulevard, Jersey City, NJ	340171002	6
Morris	Chester	50 North Rd, Building #1, Department of Public Works (DPW) off Route 513, Chester, NJ	340273001	8
Union	Elizabeth	7 Broad Street, Elizabeth, NJ	340390003	5
Union	Elizabeth Lab	Interchange 13, New Jersey Turnpike, Elizabeth, NJ	340390004	12
Warren	Columbia	Columbia Wildlife Management Area, 106 Delaware Ave, Knowlton Township, NJ	340410007	30

11.2. Other Information Relevant to the EPA's Intended Designations in New Jersey

The state of New York submitted a modeling analysis for the area around five power plants in the New York City area. The receptor grid for the modeling included a portion of New Jersey. The modeling did not predict any SO_2 NAAQS violations, and the EPA considers this modeling result to be reliable. *See* Chapter 29 of this TSD for additional details on this modeling by New York.

The state of Pennsylvania submitted a modeling analysis for a cluster of DRR-subject sources in Lehigh County and Northampton County, Pennsylvania. The receptor grids for these modeling analyses included portions of New Jersey. The modeling did not predict any SO_2 NAAQS violations. However, the EPA finds that the collective modeling analysis that Pennsylvania performed for the Lehigh and Northampton source cluster is not sufficient to determine whether the area in Pennsylvania near the sources is attaining or not attaining the 2010 1-hour SO_2 NAAQS or whether the area is contributing or not contributing to any nearby nonattainment areas due to several deficiencies. While the receptor grid for this analysis included portions of New Jersey, the EPA does not consider those portions of New Jersey to be areas required to be

characterized under the DRR, and thus a designation of unclassifiable/attainment is appropriate provided there is no information to suggest that these portions of New Jersey violate the NAAQS or contribute to air quality in a nearby area that violates the NAAQS. The EPA does not have any such information. *See* Chapter 35 of this TSD for additional details on this modeling by Pennsylvania.

The state of Pennsylvania submitted a modeling analysis for a cluster of sources in Delaware County-Philadelphia County, Pennsylvania. The modeling did not predict any SO_2 NAAQS violations, and the EPA considers this modeling result to be reliable. *See* Chapter 35 of this TSD for additional details on this modeling by Pennsylvania.

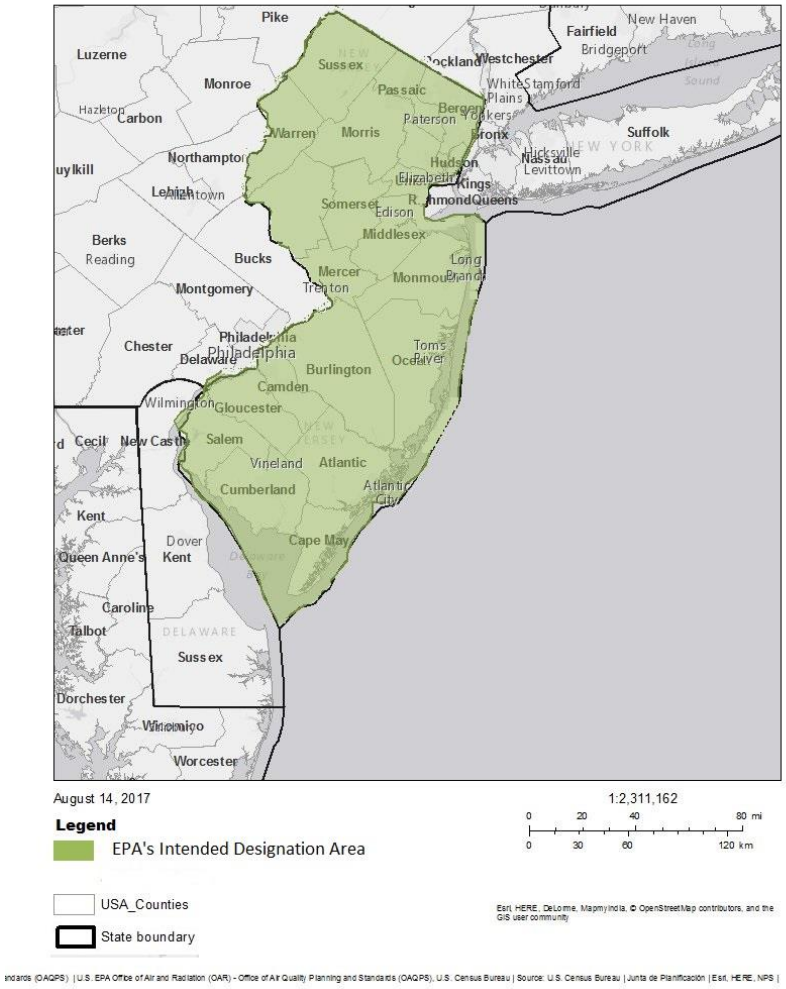
11.3. Summary of Our Intended Designations for New Jersey

For the areas in New Jersey that are being designated in Round 3, Table 14 and Figure 10 identify the EPA's intended designation of the entire state of New Jersey as a single unclassifiable/attainment area. It also lists New Jersey's current recommendation. The state has not installed and begun timely operation of a new, approved SO_2 monitoring network meeting EPA specifications referenced in the EPA's DRR for any sources of SO_2 emissions in the state. Accordingly, the EPA must designate all of the state by December 31, 2017. At this time, there are no air quality modeling results showing NAAQS violations available to the EPA for any area in New Jersey. In addition, there are no air quality monitoring data that currently indicate any violation of the 1-hour SO_2 NAAQS. The EPA is designating all of the state as "unclassifiable/ attainment" since no portion of the state was required to be characterized under 40 CFR 51.1203(c) or (d) and the EPA does not have available information including (but not limited to) appropriate modeling analyses and/or monitoring data that suggests that any area in the state may (i) not be meeting the NAAQS, or (ii) contribute to ambient air quality in a nearby area that does not meet the NAAQS.

Table 14. Summary of the EPA's Intended Designation and the Designation Recommendations by New Jersey

New Jersey's Recommended Area Definition	New Jersey's Recommended Designation	EPA's Intended Area Definition	EPA's Intended Designation
Entire State	Attainment	Entire State (All counties)	Unclassifiable/ Attainment

Figure 10. The EPA's Intended Unclassifiable/Attainment Designation for New Jersey



Our intended single unclassifiable/attainment area, bounded by the boundaries of New Jersey as shown in Figure 10, will have clearly defined legal boundaries, and we intend to find these boundaries to be a suitable basis for defining our intended unclassifiable/attainment area.

12. Rhode Island

This section addresses designations for all areas in Rhode Island for the 2010 SO_2 NAAQS. In previous final actions, the EPA has issued designations for the 2010 SO_2 NAAQS for selected areas of the country.[33] No part of Rhode Island was designated in these previous final actions. The EPA is under a December 31, 2017, deadline to designate the areas addressed in this section as required by the U.S. District Court for the Northern District of California.[34] We are referring to the set of designations being finalized by the December 31, 2017, deadline as "Round 3" of the designations process for the 2010 SO_2 NAAQS. After the Round 3 designations are completed, the only remaining undesignated areas will be those where a state began operation of a new SO_2 monitoring network in meeting EPA specifications referenced in the EPA's SO_2 DRR. The EPA is required to designate those remaining undesignated areas by December 31, 2020. Rhode Island will not have any undesignated areas after Round 3.

Rhode Island submitted its recommendation recommending a statewide unclassifiable designation for the 2010 1-hour SO_2 NAAQS on May 18, 2011. In our intended designations, we have fully considered the submission from the state.

Rhode Island does not have any sources of SO_2 emissions for which it is required under the EPA's SO_2 Data Requirements Rule (40 CFR 51.1203(c) or (d)) to characterize SO_2 air quality.

12.1. Air Quality Monitoring Data for the State of Rhode Island

The following Air Quality System (AQS) monitors located in Rhode Island have sufficient valid data for 2014-2016 and these data indicate that there was no violation of the 2010 SO_2 NAAQS at these monitoring sites in that period. While these data were available to the EPA for consideration in the designation process, the EPA does not have information indicating that any of the existing monitors are located in an area of maximum concentration around specific SO_2 sources.

- AQS monitor 44-007-0012. The Brown University monitor is located at 10 Prospect Street, Providence, Rhode Island, in Providence County. Data collected at this monitor indicate that the monitored SO_2 design value for the period from 2014 to 2016 is 7 ppb.
- AQS monitor 44-007-1010. The Francis School monitor is located at 64 Bourne Avenue, East Providence, Rhode Island, in Providence County. Data collected at this monitor indicate that the monitored SO_2 design value for the period from 2013 to 2015 is 7 ppb. Air quality monitoring data discussed in this section can be found at https://www.epa.gov/air-trends/air-quality-design-values.

[33] A total of 94 areas throughout the U.S. were previously designated in actions published on August 5, 2013 (78 FR 47191), July 12, 2016 (81 FR 45039), and December 13, 2016 (81 FR 89870).
[34] *Sierra Club v. McCarthy*, No. 3-13-cv-3953 (SI) (N.D. Cal. Mar. 2, 2015).

12.2. Summary of Our Intended Designations for Rhode Island

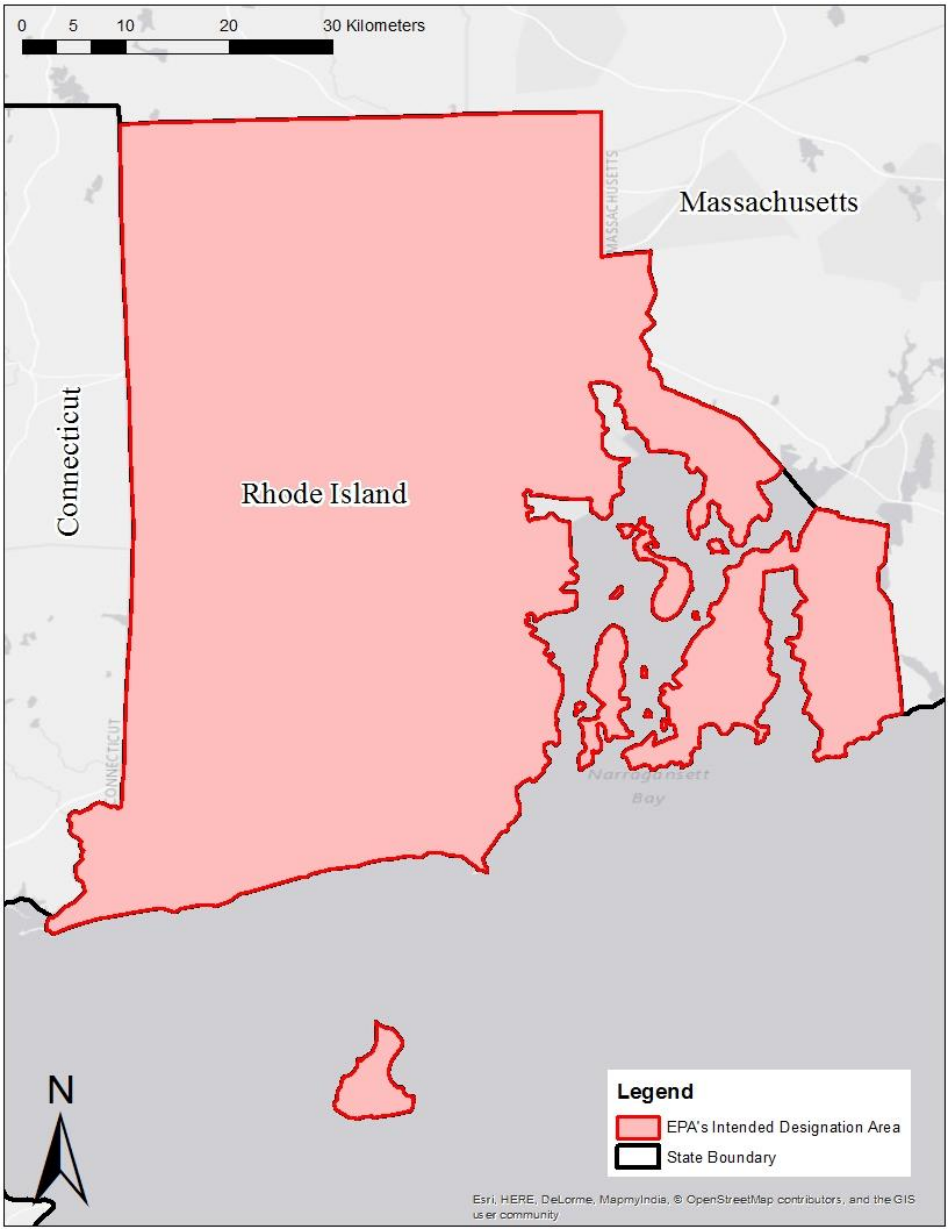
For the areas in Rhode Island that are being designated in Round 3, Table 15 and Figure 11 identify the EPA's intended designation of the entire state as a single unclassifiable/attainment area. It also lists Rhode Island's current recommendation. The state has not installed and begun timely operation of a new, approved SO_2 monitoring network meeting EPA specifications referenced in the EPA's DRR for any sources of SO_2 emissions in the state. Accordingly, the EPA must designate all of the state by December 31, 2017. At this time, there are no air quality modeling results available to the EPA for any area in Rhode Island. In addition, there are no air quality monitoring data that currently indicate any violation of the 1-hour SO_2 NAAQS. The EPA is designating the entire state as "unclassifiable/attainment" since no portion of the state was required to be characterized under 40 CFR 51.1203(c) or (d) and the EPA does not have available information including (but not limited to) appropriate modeling analyses and/or monitoring data that suggests that any area in the state may (i) not be meeting the NAAQS, or (ii) contribute to ambient air quality in a nearby area that does not meet the NAAQS.

Table 15. Summary of the EPA's Intended Designation and the Designation Recommendation by Rhode Island

County/Area	Rhode Island's Recommended Area Definition	Rhode Island's Recommended Designation	EPA's Intended Area Definition	EPA's Intended Designation
Entire state of Rhode Island	Entire state of Rhode Island	Unclassifiable	Same as State's Recommendation	Unclassifiable/ Attainment

Table 15 also summarizes Rhode Island's recommendation. Specifically, the state recommended that the entire state of Rhode Island be designated as unclassifiable based on a lack of monitoring and modeling data to characterize areas around the state.

Figure 11. The EPA's Intended Unclassifiable/Attainment Designation for the State of Rhode Island



The source of this map image is Esri, used by the EPA with Esri's permission.

The EPA intends to designate all of Rhode Island as a single unclassifiable/attainment area for the 2010 SO_2 NAAQS. Our intended unclassifiable/attainment area, bounded by the jurisdictional boundary of the entire state of Rhode Island, will have a clearly defined legal boundary, and we intend to find this boundary to be a suitable basis for defining our intended unclassifiable/attainment area.

Figure 11 above shows the boundaries for the Rhode Island area.

13. South Dakota

This section addresses designations for all areas in South Dakota for the 2010 SO_2 NAAQS. In previous final actions, the EPA has issued designations for the 2010 SO_2 NAAQS for selected areas of the country.[35] Grant County in South Dakota was designated unclassifiable/attainment in Round 2. The EPA is under a December 31, 2017, deadline to designate the areas addressed in this section as required by the U.S. District Court for the Northern District of California.[36] We are referring to the set of designations being finalized by the December 31, 2017, deadline as "Round 3" of the designations process for the 2010 SO_2 NAAQS. After the Round 3 designations are completed, the only remaining undesignated areas will be those where a state began operation of a new SO_2 monitoring network in meeting EPA specifications referenced in the EPA's SO_2 DRR. The EPA is required to designate those remaining undesignated areas by December 31, 2020. South Dakota will not have any undesignated areas after Round 3.

South Dakota submitted its first recommendation regarding designations for the 2010 1-hour SO_2 NAAQS on June 2, 2011, in which the State recommended that the EPA designate every county in South Dakota as attainment based on all available monitoring data in the State. The state submitted updated air quality analysis and updated recommendations on September 16, 2015, in which the State again recommended attainment for all counties based on more updated available monitoring data. In our intended designations, we have considered all the submissions from the state, except where a recommendation in a later submission regarding a particular area indicates that it completely replaces an earlier recommendation for that area we have considered the recommendation in the later submission.

South Dakota does not have any sources of SO_2 emissions for which it is required under the EPA's SO_2 Data Requirements Rule (40 CFR 51.1203(c) or (d)) to characterize SO_2 air quality.

13.1. Air Quality Monitoring Data in the Rest of South Dakota Areas Not Yet Designated

AQS monitors located in Jackson (AQS ID 460710001), Minnehaha (AQS ID 460990008), Pennington (AQS ID 461030020) and Union (AQS ID 461270001) Counties in South Dakota have sufficient valid data for the 2014-2016 design value period, and these data indicate that there was no violation of the 2010 SO_2 NAAQS at the monitoring sites (nor a design value exceeding 6 ppb) in that period.[37] While these data were available to the EPA for consideration in the designation process, the EPA does not have information indicating that any of the existing monitors are located in an area of maximum concentration around specific SO_2 sources. Air quality monitoring data discussed in this section can be found at https://www.epa.gov/air-trends/air-quality-design-values.

[35] A total of 94 areas throughout the U.S. were previously designated in actions published on August 5, 2013 (78 FR 47191), July 12, 2016 (81 FR 45039), and December 13, 2016 (81 FR 89870).
[36] *Sierra Club v. McCarthy*, No. 3-13-cv-3953 (SI) (N.D. Cal. Mar. 2, 2015).

[37] https://www.epa.gov/air-trends/air-quality-design-values.

13.2. Summary of Our Intended Designations for South Dakota

For the areas in South Dakota that are part of the Round 3 designations process, Table 16 and Figure 12 identify the EPA's intended designations and the counties or portions of counties to which they would apply. These intended designations are based on South Dakota's current recommendations, which are that the EPA designate each individual county in the state of South Dakota as attainment. The state has not installed and begun timely operation of a new, approved SO_2 monitoring network meeting EPA specifications referenced in the EPA's DRR for any sources of SO_2 emissions in the counties identified in Table 16. Accordingly, the EPA must designate these counties by December 31, 2017. At this time, there are no air quality modeling results available to the EPA for these counties. In addition, there is no air quality monitoring data that indicate any violation of the 1-hour SO_2 NAAQS. The EPA is designating the counties in Table 16 in the state as "unclassifiable/ attainment" since these counties were not required to be characterized under 40 CFR 51.1203(c) or (d) and the EPA does not have available information including (but not limited to) appropriate modeling analyses and/or monitoring data that suggests that the areas may (i) not be meeting the NAAQS, or (ii) contribute to ambient air quality in a nearby area that does not meet the NAAQS.

Table 16. Counties in South Dakota that the EPA Intends to Designate Unclassifiable/Attainment

County	South Dakota's Recommended Area Definition	South Dakota's Recommended Designation	EPA's Intended Area Definition	EPA's Intended Designation
Aurora	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Beadle	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Bennett	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Bon Homme	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Brookings	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Brown	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Brule	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Buffalo	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment

County	South Dakota's Recommended Area Definition	South Dakota's Recommended Designation	EPA's Intended Area Definition	EPA's Intended Designation
Butte	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Campbell	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Charles Mix	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Clark	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Clay	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Codington	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Corson	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Custer	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Davison	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Day	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Deuel	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Dewey	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Douglas	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Edmunds	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Fall River	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Faulk	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Gregory	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment

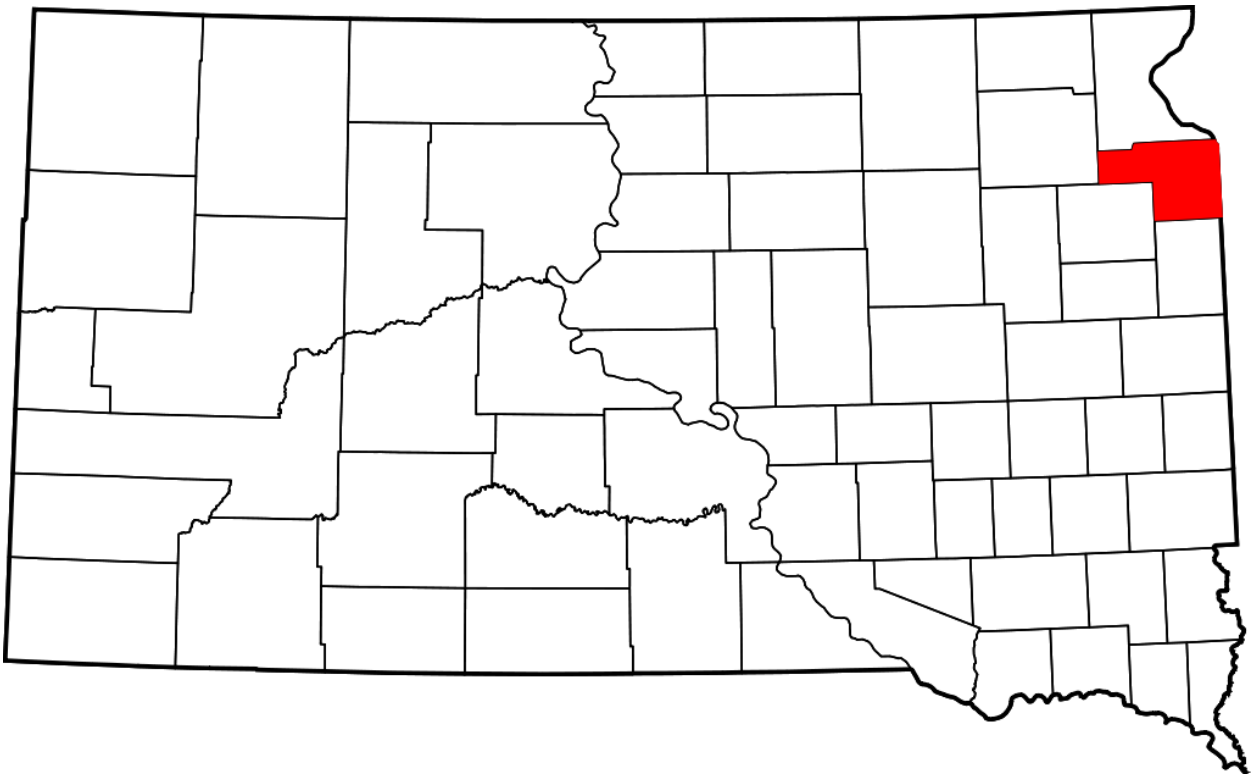
County	South Dakota's Recommended Area Definition	South Dakota's Recommended Designation	EPA's Intended Area Definition	EPA's Intended Designation
Haakon	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Hamlin	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Hand	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Hanson	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Harding	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Hughes	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Hutchinson	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Hyde	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Jackson	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Jerauld	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Jones	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Kingsbury	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Lake	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Lawrence	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Lincoln	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Lyman	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
McCook	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment

County	South Dakota's Recommended Area Definition	South Dakota's Recommended Designation	EPA's Intended Area Definition	EPA's Intended Designation
McPherson	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Marshall	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Meade	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Mellette	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Miner	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Minnehaha	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Moody	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Pennington	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Perkins	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Potter	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Roberts	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Sanborn	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Shannon	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Spink	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Stanley	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Sully	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Todd	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment

County	South Dakota's Recommended Area Definition	South Dakota's Recommended Designation	EPA's Intended Area Definition	EPA's Intended Designation
Tripp	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Turner	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Union	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Walworth	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Yankton	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment
Ziebach	Full County	Attainment	Same as State's Recommendation	Unclassifiable/Attainment

Table 16 also summarizes South Dakota's recommendations for these areas. Specifically, the State recommended that every county in South Dakota be designated as attainment based on all SO_2 monitoring demonstrating that the 1-hr SO_2 standard is being attained. After careful review of the state's assessment, supporting documentation, and all available data, the EPA intends to designate the areas as unclassifiable/attainment. Figure 12 shows the locations of these areas within South Dakota, which are shown below in white. The county in red is Grant County, which was designated unclassifiable/attainment in Round 2 (*see* 81 *Federal Register* 45039) and will remain unchanged.

Figure 12. The EPA's Intended Unclassifiable/Attainment Designations for Counties in South Dakota



After careful evaluation of the State's recommendation and supporting information, as well as all available relevant information, the EPA intends to designate the areas in the above Table 16 as unclassifiable/attainment for the 2010 SO_2 NAAQS.

Our intended unclassifiable/attainment areas, bounded by the county borders shown in Figure 12, will have clearly defined legal boundaries, and we intend to find these boundaries to be a suitable basis for defining our intended unclassifiable area. There will be no remaining undesignated areas in the State for this NAAQS following the finalization of the intended designations described in this document.

After careful evaluation of the State's recommendation and supporting information, as well as all available relevant information, the EPA intends to designate all undesignated counties in South Dakota as unclassifiable for the 2010 SO_2 NAAQS. Specifically, the boundaries are comprised of each county's boundary as shown in Figure 12.

14. Vermont

This section addresses designations for all areas in Vermont for the 2010 SO_2 NAAQS. In previous final actions, the EPA has issued designations for the 2010 SO_2 NAAQS for selected areas of the country.[38] No part of Vermont was designated in these previous final actions. The EPA is under a December 31, 2017, deadline to designate the areas addressed in this section as required by the U.S. District Court for the Northern District of California.[39] We are referring to the set of designations being finalized by the December 31, 2017, deadline as "Round 3" of the designations process for the 2010 SO_2 NAAQS. After the Round 3 designations are completed, the only remaining undesignated areas will be those where a state began operation of a new SO_2 monitoring network in meeting EPA specifications referenced in the EPA's SO_2 DRR. The EPA is required to designate those remaining undesignated areas by December 31, 2020. Vermont will not have any undesignated areas after Round 3.

Vermont submitted its recommendation for a statewide designation of unclassifiable/attainment for the 2010 1-hour SO_2 NAAQS on April 21, 2017. In our intended designations, we have fully considered the submission from the state.

Vermont does not have any sources of SO_2 emissions for which it is required under the EPA's SO_2 Data Requirements Rule (40 CFR 51.1203(c) or (d)) to characterize SO_2 air quality.

14.1. Air Quality Monitoring Data for All Vermont Counties

The following Air Quality System (AQS) monitor located in Vermont has sufficient valid data for 2014-2016 and these data indicate that there was no violation of the 2010 SO_2 NAAQS at these monitoring sites in that period. While these data were available to the EPA for consideration in the designation process, the EPA does not have information indicating that any of the existing monitors are located in an area of maximum concentration around specific SO_2 sources.

- AQS monitor 50-021-0002. The Rutland monitor is located adjacent to 9 Merchant's Row, Rutland, Vermont, in Rutland County. Data collected at this monitor indicates that the monitored SO_2 design value for the period from 2014 to 2016 is 2 ppb.

Air quality monitoring data discussed in this section can be found at https://www.epa.gov/air-trends/air-quality-design-values.

14.2. Summary of Our Intended Designations for Vermont

For the areas in Vermont that are being designated in Round 3, Table 17 and Figure 13 identify the EPA's intended designations and the counties or portions of counties to which they would apply. It also lists Vermont's current recommendations. The state has not installed and begun

[38] A total of 94 areas throughout the U.S. were previously designated in actions published on August 5, 2013 (78 FR 47191), July 12, 2016 (81 FR 45039), and December 13, 2016 (81 FR 89870).
[39] *Sierra Club v. McCarthy*, No. 3-13-cv-3953 (SI) (N.D. Cal. Mar. 2, 2015).

timely operation of a new, approved SO_2 monitoring network meeting EPA specifications referenced in the EPA's DRR for any sources of SO_2 emissions in the counties identified in Table 17. Accordingly, the EPA must designate these counties by December 31, 2017. At this time, there are no air quality modeling results available to the EPA for these counties. In addition, there are no air quality monitoring data that currently indicate any violation of the 1-hour SO_2 NAAQS. The EPA is designating the counties in Table 17 in the state as "unclassifiable/attainment" since these counties were not required to be characterized under 40 CFR 51.1203(c) or (d) and the EPA does not have available information including (but not limited to) appropriate modeling analyses and/or monitoring data that suggests that the area may (i) not be meeting the NAAQS, or (ii) contribute to ambient air quality in a nearby area that does not meet the NAAQS.

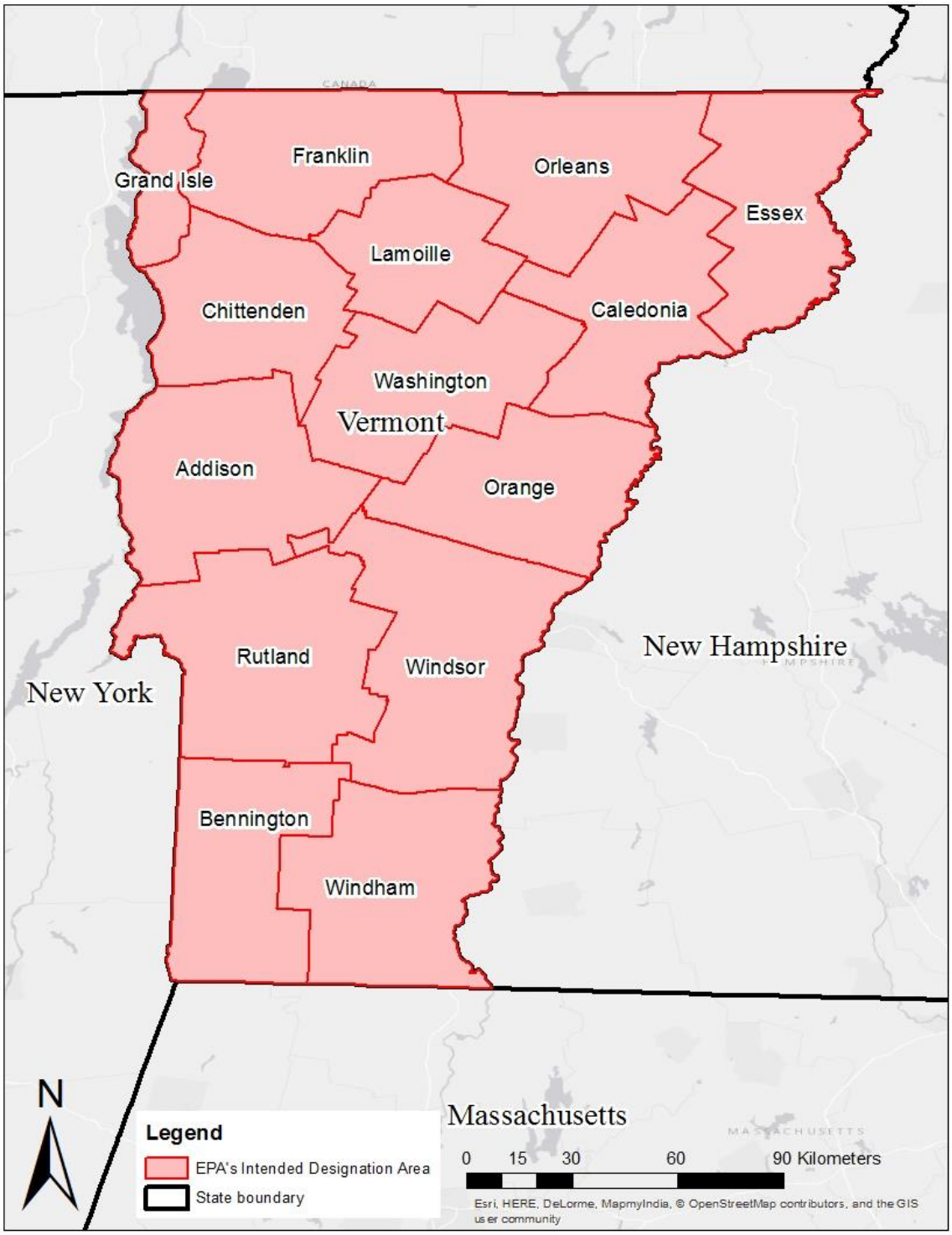
Table 17. Counties that the EPA Intends to Designate Unclassifiable/Attainment

County	Vermont's Recommended Area Definition	Vermont's Recommended Designation	EPA's Intended Area Definition	EPA's Intended Designation
Addison	Entire county	Unclassifiable/ Attainment	Entire county	Unclassifiable/ Attainment
Bennington	Entire county	Unclassifiable/ Attainment	Entire county	Unclassifiable/ Attainment
Caledonia	Entire county	Unclassifiable/ Attainment	Entire county	Unclassifiable/ Attainment
Chittenden	Entire county	Unclassifiable/ Attainment	Entire county	Unclassifiable/ Attainment
Essex	Entire county	Unclassifiable/ Attainment	Entire county	Unclassifiable/ Attainment
Franklin	Entire county	Unclassifiable/ Attainment	Entire county	Unclassifiable/ Attainment
Grand Isle	Entire county	Unclassifiable/ Attainment	Entire county	Unclassifiable/ Attainment
Lamoille	Entire county	Unclassifiable/ Attainment	Entire county	Unclassifiable/ Attainment
Orange	Entire county	Unclassifiable/ Attainment	Entire county	Unclassifiable/ Attainment
Orleans	Entire county	Unclassifiable/ Attainment	Entire county	Unclassifiable/ Attainment
Rutland	Entire county	Unclassifiable/ Attainment	Entire county	Unclassifiable/ Attainment
Washington	Entire county	Unclassifiable/ Attainment	Entire county	Unclassifiable/ Attainment
Windham	Entire county	Unclassifiable/ Attainment	Entire county	Unclassifiable/ Attainment
Windsor	Entire county	Unclassifiable/ Attainment	Entire county	Unclassifiable/ Attainment

Table 17 also summarizes Vermont's recommendations for these areas. Specifically, the state recommended that the entire state of Vermont be designated on a county-by-county basis as

unclassifiable/attainment based on a lack of monitoring and modeling data showing violation of the NAAQS. After careful review of the state's assessment, supporting documentation, and all available data, the EPA agrees with the state's recommendation for these areas, and intends to designate the areas as unclassifiable/attainment. Figure 13 shows the locations of these areas within Vermont.

Figure 13. The EPA's Intended Unclassifiable/Attainment Designations for All Vermont Counties



The source of this map image is Esri, used by the EPA with Esri's permission.

The EPA intends to designate each Vermont county as unclassifiable/attainment for the 2010 SO_2 NAAQS. Specifically, the boundaries are comprised of the jurisdictional boundaries of

Addison, Bennington, Caledonia, Chittenden, Essex, Franklin, Grand Isle, Lamoille, Orange, Orleans, Rutland, Washington, Windham, and Windsor Counties, Vermont. Our unclassifiable/attainment areas will have clearly defined legal boundaries, and we intend to find these boundaries to be a suitable basis for defining our intended unclassifiable/attainment areas.

Figure 13 above shows the location of these areas within Vermont. For all counties in Vermont, the boundary of the unclassifiable/attainment area is the county boundary.

15. Virgin Islands

This section addresses designations for all areas in Virgin Islands for the 2010 SO_2 NAAQS. In previous final actions, the EPA has issued designations for the 2010 SO_2 NAAQS for selected areas of the country.[40] No part of the Virgin Islands was designated in these previous final actions. The EPA is under a December 31, 2017, deadline to designate the areas addressed in this section as required by the U.S. District Court for the Northern District of California.[41] We are referring to the set of designations being finalized by the December 31, 2017, deadline as "Round 3" of the designations process for the 2010 SO_2 NAAQS. After the Round 3 designations are completed, the only remaining undesignated areas will be those where a state began operation of a new SO_2 monitoring network in meeting EPA specifications referenced in the EPA's SO_2 DRR. The EPA is required to designate those remaining undesignated areas by December 31, 2020. The Virgin Islands will not have any undesignated areas after Round 3.

On May 20, 2011, the Virgin Islands submitted its first recommendation regarding designations for the 2010 1-hour SO_2 NAAQS. This recommendation was that that the islands of St. Thomas, St. John, and Water Island be designated as an attainment area, and that the island of St. Croix be designated as a nonattainment area. On December 23, 2011, the territory updated its analysis of available air quality monitoring data, noted that the monitor that had previously indicated a violation was no longer violating the NAAQS, and indicated that a revised recommendation would be submitted. The territory also referred to expected SO_2 emission reductions as a result of a Consent Decree for Hovensa LLC in St. Croix, which had been filed on January 26, 2011 (Case: 1:11-cv-00006). On March 15, 2012, the territory provided updated information on air quality data and a revised designation recommendation that St. Croix be designated unclassifiable. In our intended designations, we have considered all the submissions from the territory, except where a recommendation in a later submission regarding a particular area indicates that it replaces an earlier recommendation for that area we have considered the recommendation in the later submission.

Virgin Islands does not have any sources of SO_2 emissions for which it is required under the EPA's SO_2 Data Requirements Rule (40 CFR 51.1203(c) or (d)) to characterize SO_2 air quality.

15.1. Air Quality Monitoring Data for the Virgin Islands

There are currently no regulatory ambient SO_2 monitors in the Virgin Islands. Regulatory ambient SO_2 monitoring was previously operated by HOVENSA L.L.C (Hovensa) in St. Croix. The EPA notes that the most recent valid design values for the St. Croix monitors was for 2010-2012 and that these design values all were below the NAAQS. Monitoring was discontinued when the Hovensa refinery discontinued operations. The Virgin Islands based their recommendation primarily on 2008-2010 and 2009-2011 St. Croix air monitoring data, which

[40] A total of 94 areas throughout the U.S. were previously designated in actions published on August 5, 2013 (78 FR 47191), July 12, 2016 (81 FR 45039), and December 13, 2016 (81 FR 89870).
[41] *Sierra Club v. McCarthy*, No. 3-13-cv-3953 (SI) (N.D. Cal. Mar. 2, 2015).

showed attainment of the SO_2 NAAQS. Air quality monitoring data discussed in this section can be found at https://www.epa.gov/air-trends/air-quality-design-values.[42]

15.2. Other Information Relevant to the Designations for the Virgin Islands

Previous designations for the Virgin Islands have either designated all of the Virgin Islands as "Statewide," "Whole State," or "State of Virgin Islands" without designating individual islands (e.g., Carbon Monoxide, Ozone (1-Hour), 2010 NO_2, 1997 8-Hour Ozone, and 2008 Lead NAAQS). Other previous designations have listed designations by the three larger islands (e.g., St. Croix, St. John, and St. Thomas) as separate areas (*e.g.*, the 1997 and 2012 Annual $PM_{2.5}$ NAAQS, and the 1997 and 2006 24-hour $PM_{2.5}$ NAAQS).[43] The EPA has not previously provided a separate designation for Water Island.

15.3. Summary of Our Intended Designations for the Virgin Islands

Table 18 and Figure 14 identify the EPA's intended designation for the Virgin Islands. It also lists the Virgin Islands' current recommendations. Specifically, the Virgin Islands recommended that the islands of St. Thomas, St. John, Water Island be designated as attainment, and the island of St. Croix be designated as unclassifiable based on past air monitoring data.

The territory has not installed and begun timely operation of a new, approved SO_2 monitoring network meeting EPA specifications referenced in the EPA's DRR for any sources of SO_2 emissions in the areas identified in Table 18. Accordingly, the EPA must designate these areas by December 31, 2017. At this time, there are no air quality modeling results available to the EPA for these areas. In addition, there are no air quality monitoring data that currently indicate any violation of the 1-hour SO_2 NAAQS. The EPA is designating the areas in Table 18 in the territory as "unclassifiable/ attainment" since these areas were not required to be characterized under 40 CFR 51.1203(c) or (d) and the EPA does not have available information including (but not limited to) appropriate modeling analyses and/or monitoring data that suggests that the areas may (i) not be meeting the NAAQS, or (ii) contribute to ambient air quality in a nearby area that does not meet the NAAQS.

Table 18. Summary of the EPA's Intended Designations and the Designation Recommendations by the Virgin Islands

Virgin Islands Recommended Area Definition	Virgin Islands Recommended Designation	EPA's Intended Area Definition	EPA's Intended Designation
St. Thomas Island	Attainment	All of the Virgin Islands	Unclassifiable/ Attainment

[42] *See* the sheet titled "Table 6a. Monitoring Site Design Value History Site level for Sulfur Dioxide Annual NAAQS for 2007 through 2016." The Virgin Islands monitors have AQS IDs starting with "78" and appear at the end of this sheet.
[43] 40 CFR 81.356 – Virgin Islands.

Virgin Islands Recommended Area Definition	Virgin Islands Recommended Designation	EPA's Intended Area Definition	EPA's Intended Designation
St. John Island	Attainment	All of the Virgin Islands	Unclassifiable/ Attainment
Water Island	Attainment	All of the Virgin Islands	Unclassifiable/ Attainment
St. Croix Island	Unclassifiable	All of the Virgin Islands	Unclassifiable/ Attainment
Remaining areas	No recommendation	All of the Virgin Islands	Unclassifiable/ Attainment

Figure 14. The EPA's Intended Unclassifiable/Attainment Designation(s) for Virgin Islands Counties Based on Absence of Information

After careful evaluation of all available relevant information, the EPA intends to designate all of Virgin Islands as a single unclassifiable/attainment area for the 2010 SO_2 NAAQS. Our intended unclassifiable/attainment area has clearly defined legal boundaries, and we intend to find these boundaries to be a suitable basis for defining our intended unclassifiable/attainment area.

Figure 14 above shows the boundaries of the intended Virgin Islands unclassifiable/attainment area.

16. Emission Limits and Shutdowns for Sources on the Data Requirements Rule Source List

The SO_2 Data Requirements Rule directed state air agencies to provide data to characterize current air quality in areas with sources of SO_2 emissions with certain characteristics, to identify maximum 1-hour SO_2 concentrations in ambient air. (*See* 40 CFR Part 51 Subpart BB.) The final rule also established the characteristics for identifying the affected emissions sources and thus the associated areas for which air agencies are required to characterize SO_2 air quality. States could select from two options for this characterization, based on their preference, namely the use of monitoring or modeling. The DRR also provided a third option, under which state air agencies could establish a federally enforceable emissions limitation, effective by January 13, 2017, that limit emissions of a listed source to less than 2,000 tpy or provide documentation that the source has permanently shut down. This type of emissions limitation may be established in lieu of conducting monitoring or modeling to characterize air quality in the vicinity of a source.

Table 19 lists the 55 facilities for which states elected to establish federally enforceable emissions limitations of less than 2,000 tpy or provide documentation of source shutdown. Because the states were not required to characterize air quality around the sources listed in Table 19, the EPA is evaluating designations for these areas in the same manner as the remaining or "rest of state" areas. These evaluations appear in each respective state's chapter or in this chapter.

Table 19: Sources for which States Established an Emissions Limit of less than 2,000 tpy or Provided Documentation of Shutdown Under the SO_2 Data Requirements Rule

State	Facility	County/ Parish	State Pathway
Alabama	Tennessee Valley Authority- Colbert Fossil Plant	Colbert	Limit
Alabama	Alabama Power - Gadsden Electric Generating Plant	Etowah	Limit
Alabama	Alabama Power - Greene County Electric Generating Plant	Greene	Limit
Alabama	Tennessee Valley Authority - Widows Creek Fossil Plant	Jackson	Shutdown
Colorado	Colorado Springs Utilities (CSU) - Martin Drake Power Plant	El Paso	Limit
Colorado	CSU - Ray D Nixon	El Paso	Limit
Colorado	Colorado Energy Nations Company (CENC) – Golden	Jefferson	Limit
Florida	Gulf Power Company - Lansing Smith Generating Plant	Bay	Limit
Georgia	Georgia Power Company - Plant Kraft	Chatham	Shutdown
Georgia	Georgia Power Company - Plant Yates	Coweta	Limit
Georgia	Georgia Power Company - Plant Branch	Putnam	Shutdown

State	Facility	County/ Parish	State Pathway
Illinois	DTE Tuscola LLC	Douglas	Limit
Illinois	Midwest Generation LLC- Joliet	Will	Limit
Iowa	IPL - Lansing Generating Station	Allamakee	Limit
Iowa	IPL - ML Kapp Generating Station	Clinton	Limit
Iowa	MidAmerican - Riverside Station	Scott	Limit
Kansas	Westar Energy - Tecumseh	Shawnee	Limit
Kentucky	Louisville Gas & Electric Co. - Cane Run Generating Station	Jefferson	Limit
Kentucky	Big Sandy Power Plant - Kentucky Power Company	Lawrence	Limit
Kentucky	Green River Station - Kentucky Utilities Company	Muhlenberg	Shutdown
Kentucky	Cooper Power Station - East Kentucky Power Cooperative	Pulaski	Limit
Louisiana	AA Sulfuric Corp - Sulfuric Acid Plant	Ascension	Limit
Michigan	B.C. Cobb Generating Station	Muskegon	Shut Down
Mississippi	Plant Jack Watson - Mississippi Power Company	Harrison	Limit
Mississippi	The Chemours Company FC, LLC (Formerly DuPont-Delisle)	Harrison	Limit
Mississippi	Thomasville Gas Plant - Pursue Energy Corporation	Rankin	Shut Down
Missouri	University of Missouri - Columbia Power Plant	Boone	Limit
Missouri	Independence Power & Light - Blue Valley Station	Jackson	Limit
Missouri	BASF Corporation - Hannibal Plant	Marion	Limit
Missouri	Anheuser Busch Inc. - St. Louis	St. Louis City	Limit
Missouri	Mississippi Lime Company - Ste. Genevieve	Ste. Genevieve	Limit
Ohio	The Medical Center	Cuyahoga	Limit
Ohio	P.H. Glatfelter	Ross	Limit
Ohio	City of Orrville DPU	Wayne	Limit
Ohio	Morton Salt Inc.	Wayne	Limit
Oklahoma	Holcim - ADA Plant	Pontotoc	Limit
Pennsylvania	Team Ten/Tyrone Paper Mill	Blair	Limit
Pennsylvania	NRG Rema LLC/Shawville Gen Sta	Clearfield	Limit[44]

[44]Pennsylvania listed Shawville Generating Station and New Castle Power Plant as establishing an emission limit under 2,000 tpy as a DRR pathway. Pennsylvania modeled both sources to determine an emission limit, however, the limits were not under 2,000 tpy. Therefore, these sources were evaluated as modeled sources (see Pennsylvania's Chapter 35 of the TSD).

State	Facility	County/ Parish	State Pathway
Pennsylvania	NRG Power Midwest Lp/New Castle Power Plant	Lawrence	Limit[45]
Pennsylvania	Genon Rema LLC/Portland Generating Sta	Northampton	Shutdown
South Carolina	W.S. Lee Steam Station - Duke Energy Carolinas, LLC	Anderson	Limit
South Carolina	WestRock CP (Formerly RockTenn CP LLC)	Florence	Limit
South Carolina	McMeekin Station - South Carolina Electric & Gas(SCE&G)	Lexington	Limit
Tennessee	Cargill Corn Milling, Inc.	Shelby	Limit
Utah	PacifiCorp - Carbon Power Plant	Carbon	Shut Down
Virginia	Dominion - Chesapeake Energy Center	Chesapeake City	Limit
Virginia	Celanese Acetate LLC	Giles	Limit
Virginia	Radford Army Ammunition Plant	Montgomery	Limit
Virginia	American Electric Power-Clinch River Plant	Russell	Limit
West Virginia	Appalachian Power Company - Kanawha River Plant	Kanawha	Shutdown
West Virginia	American Bituminous Power-Grant Town Plant	Marion	Limit
West Virginia	Appalachian Power Co.-Philip Sporn Plant	Mason	Shutdown
Wisconsin	Georgia-Pacific Consumer Products LP	Brown	Limit
Wisconsin	WPL - Nelson Dewey Generating Station	Grant	Limit
Wisconsin	Catalyst Paper - Biron Mill	Wood	Limit

[45] *See* the immediately previous footnote.