

Technical Support Document:

Intended Round 3 Area Designations for the 2010 1-Hour SO₂ Primary National Ambient Air Quality Standard for the Southern Ute Indian Tribe

1. Summary

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 (SO₂) primary national ambient air quality standard (NAAQS) (2010 SO₂ 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 SO₂ 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 attainment/unclassifiable 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 SO₂ 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 NAAQS¹. An unclassifiable area is defined by 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 SO₂ 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 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 all areas on the Southern Ute Indian Reservation for the 2010 SO₂ NAAQS. In previous final actions, the EPA has issued designations for the 2010 SO₂ NAAQS for selected areas of the country.² The EPA did not designate any areas of the Southern Ute Indian Reservation in previous designations. The EPA is under a deadline of December 31, 2017, 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 this deadline as “Round 3” of the designations process for the 2010 SO₂ 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 SO₂ monitoring network meeting EPA specifications referenced in the EPA’s SO₂ Data Requirements Rule (DRR) (80 FR 51052). The EPA is required to designate those remaining undesignated areas by December 31, 2020.

The Southern Ute Indian Tribe submitted a recommendation regarding designations for the 2010 SO₂ NAAQS on March 18, 2011. The Tribe submitted a designation recommendation of unclassifiable for the exterior boundaries of the Reservation based on a lack of available SO₂ monitoring data, while noting that there are no large sources of SO₂ on the Tribe’s lands. In our intended designation, we have considered all submissions from the Southern Ute Indian Tribe.

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. No areas within the Southern Ute Indian Reservation were designated in Rounds 1 or 2.

2. General Approach and Schedule

Updated designations guidance documents were issued by the EPA through a memorandum dated July 22, 2016, and a memorandum dated March 20, 2015, 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 SO₂ 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 SO₂ NAAQS. The documents also contain the factors that the EPA intends to evaluate in determining the boundaries for designated areas. 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.

To assist states, tribes, and other interested parties in their efforts to characterize air quality through air dispersion modeling for sources that emit SO₂, the EPA released its most recent

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).

version of a draft document titled, “SO₂ NAAQS Designations Modeling Technical Assistance Document” (Modeling TAD) in August 2016.⁴

Readers of this chapter of this TSD should refer to the additional general information for the EPA’s Round 3 area designations in Chapter 1 (Background and History of the Intended Round 3 Area Designations for the 2010 1-Hour SO₂ Primary National Ambient Air Quality Standard) and Chapter 2 (Intended Round 3 Area Designations for the 2010 1-Hour SO₂ Primary National Ambient Air Quality Standard for States with Sources Not Required to be Characterized).

As specified by the court order dated March 2, 2015, the EPA is required to designate by December 31, 2017, all “remaining undesignated areas in which, by January 1, 2017, states and tribes have not installed and begun operating a new SO₂ monitoring network meeting EPA specifications referenced in EPA’s” SO₂ DRR. The EPA will therefore designate by December 31, 2017, areas of the country that are not, pursuant to the DRR, timely operating EPA-approved and valid monitoring networks. The areas to be designated by December 31, 2017, include all portions of the Southern Ute Indian Reservation, none of which are specifically required to be characterized by the tribe under the DRR.

The EPA does not plan to revise this TSD after consideration of state, tribal, and public comment on our intended designation. A separate TSD will be prepared as necessary to document how we have addressed such comments in the final designations.

The following are definitions of important terms used in this document:

- 1) 2010 SO₂ NAAQS – The primary NAAQS for SO₂ 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 SO₂ NAAQS, or (2) contributes to ambient air quality in a nearby area that does not meet the NAAQS.
- 4) Designated Attainment/Unclassifiable 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 SO₂ 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

² <https://www.epa.gov/sites/production/files/2016-06/documents/so2modelingtad.pdf>. In addition to this TAD on modeling, the EPA also has released a technical assistance document addressing SO₂ monitoring network design, to advise states that have elected to install and begin operation of a new SO₂ monitoring network. *See* Draft SO₂ NAAQS Designations Source-Oriented Monitoring Technical Assistance Document, February 2016, <https://www.epa.gov/sites/production/files/2016-06/documents/so2monitoringtad.pdf>.

NAAQS, or (ii) contribute to ambient air quality in a nearby area that does not meet the NAAQS.⁵

- 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 SO₂ 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 SO₂ 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 attainment/unclassifiable area – an area that a state, territory, or tribe has recommended that the EPA designate as attainment/unclassifiable.
- 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.

3. Technical Analysis for the Southern Ute Indian Reservation

3.1. Introduction

⁵ 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.

The Southern Ute Indian Tribe has not timely installed and begun operation of a new, approved SO₂ monitoring network meeting EPA specifications referenced in the EPA’s SO₂ DRR for any sources of SO₂ emissions in the Southern Ute Indian Reservation. Accordingly, the EPA must designate this area by December 31, 2017. At this time, there are no SO₂ air quality modeling results available to the EPA for this area. In addition, there is no air quality monitoring data that indicate any violation of the 2010 SO₂ NAAQS. The EPA is designating the Southern Ute Indian Reservation as “attainment/unclassifiable” because 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 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 1. Remaining Portion of the Southern Ute Indian Reservation that the EPA Intends to Designate Attainment/Unclassifiable

Southern Ute Indian Tribe	Southern Ute Indian Tribe’s Recommended Area Definition	Southern Ute Indian Tribe’s Recommended Designation	EPA’s Intended Area Definition*	EPA’s Intended Designation
Southern Ute Indian Reservation	The lands within the exterior boundaries of the Southern Ute Indian Reservation	Unclassifiable	Southern Ute Indian Reservation	Attainment/Unclassifiable

*EPA is not determining the boundaries of any area of Indian country in this document, including any area of Indian country located in the larger designation area. This document is not a determination related to regulatory authority under the Clean Air Act for such area of Indian country.

As reflected in Table 1, the Southern Ute Indian Tribe recommended an unclassifiable designation for the entirety of the reservation. As noted, the Tribe based this recommended designation on a lack of available SO₂ monitoring data, while noting that there are no large sources of SO₂ on the Tribe’s lands.⁶ The Southern Ute Indian Reservation spans portions of three counties in Southwestern Colorado.

3.2. Jurisdictional Boundaries in the Southern Ute Indian Reservation

⁶ There are no emissions sources on the Southern Ute Indian Reservation that emit more than 1.4 tons/year of SO₂.

Existing jurisdictional boundaries are considered for the purposes of informing the EPA's designation action. Our goal is to base designations on clearly defined legal boundaries, and to have these boundaries align with existing administrative boundaries when reasonable.

The Southern Ute Indian Tribe is a sovereign federally-recognized Indian tribe. Lands of the Southern Ute Indian Tribe span portions of three counties in southwestern Colorado. The Southern Ute Indian Tribe Environmental Programs Division has delegation to administer the major source air permitting program in its areas of Indian country.

3.3. Other Information Relevant to the Designations for the Rest of the Southern Ute Indian Reservation

In 2011, the EPA issued a memorandum outlining the EPA's approach for designating areas of Indian country. If the EPA either does not receive an initial designation recommendation from a tribe, or receives a recommendation that does not specify designation of a separate area, the EPA intends to designate the relevant tribe's area of Indian country as part of the surrounding area, and to the extent possible, to ensure that a single tribe's areas of Indian country are not inadvertently split based on the use of other jurisdictional boundaries (*e.g.*, county boundaries) when designating the surrounding state areas.⁷

The Southern Ute Indian Tribe has been designated as a separate area for the 2008 Ozone NAAQS. For all other NAAQS, the Tribe has been designated with the areas of Colorado in which the lands of the Southern Ute Indian Tribe are located (*e.g.*, 1997 and 2012 Annual PM_{2.5}, 1997 and 2006 24-hour PM_{2.5}, 1997 and 2010 NO₂, 2008 lead NAAQS).⁸

3.4. The EPA's Assessment of the Available Information for the Southern Ute Indian Reservation

No portions of the Southern Ute Indian Reservation were 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. The entire Southern Ute Indian Reservation meets the definition of an "attainment/unclassifiable" area. Therefore, the EPA intends to designate the Southern Ute Indian Reservation as attainment/unclassifiable. Jurisdictional considerations combined with the EPA's tribal designations policy suggests that a single designation for all of the remaining portions of the Southern Ute Indian Reservation is appropriate.

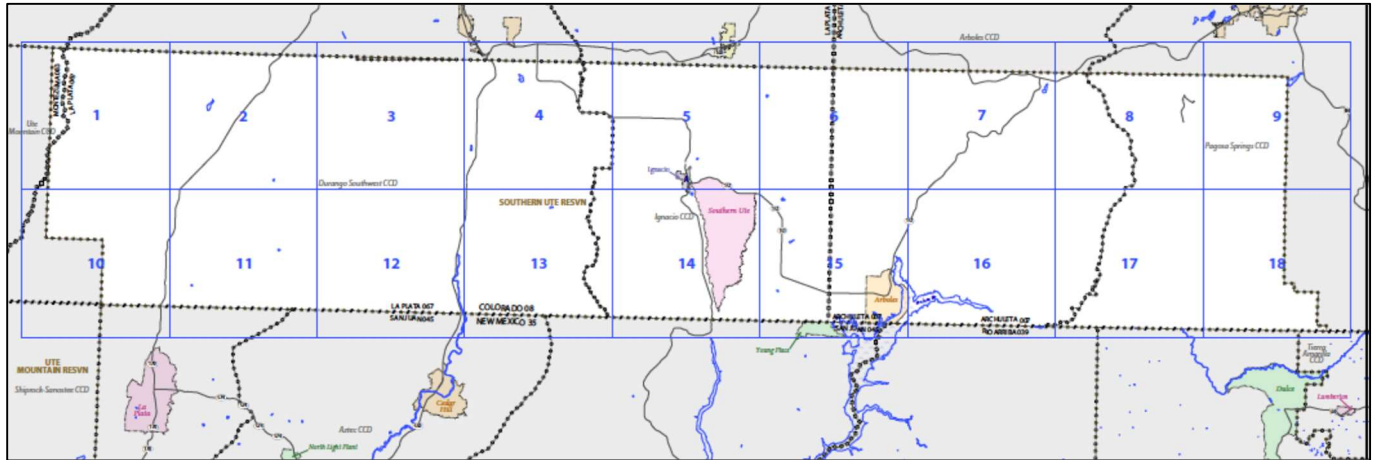
3.5. Summary of Our Intended Designation for the Rest of the Southern Ute Indian Reservation

⁷ Memorandum from Stephen D. Page, Director, Office of Air Quality Planning and Standards, to Regional Air Directions, Regions I-X, dated December 20, 2011.

⁸ 40 CFR 81.306 – Colorado.

As shown in Figure 1, the EPA intends to designate all of the Southern Ute Indian Reservation as attainment/unclassifiable. The Southern Ute Reservation includes all areas shown in white below, including areas in color within the outer boundaries of the reservation. Following completion of the Round 3 designations for the Southern Ute Indian Tribe, there will be no remaining undesignated areas on the Southern Ute Indian Reservation.

Figure 1. Summary of Intended Designations for the Southern Ute Indian Reservation



* The EPA makes no claims regarding the accuracy, precision, or use of this data. Questions concerning the data should be referred to the source agency, the U.S. Census Bureau. This map is intended only to represent the relative locations of Indian country, it does not represent the EPA's position on the jurisdictional status of any Indian country boundaries.