

# Technical Support Document:

## Chapter 30

### Final Round 3 Area Designations for the 2010 1-Hour SO<sub>2</sub> Primary National Ambient Air Quality Standard for North Carolina

#### 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 (SO<sub>2</sub>) primary national ambient air quality standard (NAAQS) (2010 SO<sub>2</sub> NAAQS). Our Notice of Availability (NOA)<sup>1</sup> and our Technical Support Document (TSD)<sup>2</sup> for our intended designations for the round of designations we are required to complete by December 31, 2017, provided background on the relevant CAA definitions and the history of the designations for this NAAQS. Chapter 1 of this TSD for the final designations explains the definitions we are applying in the final designations. The TSD for the intended Round 3 area designations also described North Carolina’s recommended designations, assessed the available relevant monitoring, modeling, and any other information, and provided our intended designations.

This TSD for the final Round 3 area designations for North Carolina addresses any change in North Carolina’s recommended designations since we communicated our intended designations for areas in North Carolina. It also provides our assessment of additional relevant information that was submitted too close to the signature of the NOA to have been considered in our intended designations, or that has been submitted by North Carolina or other parties since the publication of the NOA. This TSD does not repeat information contained in the TSD for our intended designations except as needed to explain our assessment of the newer information and to make clear the final action we are taking and its basis but that information is incorporated as part of our final designations. If our assessment of the information already considered in our TSD for our intended designations has changed based on new information and we are finalizing a designation based on such change in our assessment, this TSD also explains that change. For areas of North Carolina, not explicitly addressed in this chapter, we are finalizing the designations described in our 120-day letters and the TSD for the intended Round 3 area designations. All the final designations are listed in Table 1 below.

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<sup>1</sup> The EPA Responses to Certain State Designation Recommendations for the 2010 Sulfur Dioxide Primary National Ambient Air Quality Standard: Notification of Availability and Public Comment Period, September 5, 2017 (82 FR 41903)

<sup>2</sup> Intended Round 3 Area Designations for the 2010 1-Hour SO<sub>2</sub> Primary National Ambient Air Quality Standard Technical Support Document, August 2017. <https://www.epa.gov/sulfur-dioxide-designations/initial-technical-support-documents-area-designations-round-3>

In response to the EPA's intended designations in the 120-day letter, North Carolina submitted additional modeling on October 23, 2017. Specifically, North Carolina submitted a contribution assessment for the Person County area, in the vicinity of the Duke Energy Progress, LLC (Duke-Mayo), Duke-Roxboro and CPI-Roxboro facilities. As described in Table 1 and explained in the August 22, 2017 TSD for our intended designations, the EPA modified the State's recommendation for three townships within Person County. The EPA announced that it intended to designate a portion of Person County (based on townships) as unclassifiable because, based on available information, the EPA could not determine if sources within Holloway (location of the Duke-Mayo facility), Woodsdale, and Roxboro (location of the CPI-Roxboro facility) townships contribute or do not contribute to ambient air quality in a nearby area that may not meet the NAAQS, in particular the area around Duke-Roxboro in Cunningham Township, because monitoring data characterizing the area around Duke-Roxboro would not be available until 2020. In the new information submitted by the State, North Carolina submitted modeling for an expanded receptor grid over Roxboro, Woodsdale, and Cunningham townships.

For the areas in North Carolina that are part of the Round 3 designations process, Table 1 identifies the EPA's final designations and the counties or portions of counties to which they would apply. It also lists North Carolina's current recommendations, which have not changed from their recommended designations at the time of the 120-day letters. The EPA's final designations for these areas are based on an assessment and characterization of air quality through ambient air quality data, air dispersion modeling, other evidence and supporting information, or a combination of the above.

**Table 1. Summary of the EPA’s Final Designations and the Designation Recommendations by North Carolina.**

<b>Area/ County</b>	<b>North Carolina’s Recommended Area Definition</b>	<b>North Carolina’s Recommended Designation</b>	<b>The EPA’s Intended Designation</b>	<b>The EPA’s Final Area Definition</b>	<b>The EPA’s Final Designation<sup>3</sup></b>
Stokes County Area	All townships located within the modeling domain for the Duke Energy Belews Creek Generating Station	Attainment	Unclassifiable/Attainment	Same as state’s	Attainment/ Unclassifiable
Catawba County Area	All townships located within the modeling domain of Duke Energy Marshall Steam Station	Attainment	Unclassifiable/Attainment	Same as state’s	Attainment/ Unclassifiable
Person County Area (partial)	All townships located within the modeling domain for the Duke Energy Progress Mayo Electric Generating Plant	Attainment	Unclassifiable/Attainment	Allensville Township (p) <sup>4</sup> in Person County; Oak Hill (p) and Walnut Grove (p) Townships in Granville County located within the modeling domain for Duke Energy Progress Mayo Electric Generating Plant	Attainment/ Unclassifiable
		Attainment	Unclassifiable	Holloway, Woodsdale (p), and Roxboro (p) Townships in Person County located within the modeling domain for the Duke Energy Progress Mayo Electric Generating Plant	Attainment/ Unclassifiable

<sup>3</sup> Refer to Chapter 1 of Technical Support Document: Final Round 3 Area Designations for the 2010 1-Hour SO<sub>2</sub> Primary National Ambient Air Quality Standard for definitions of the designation categories and the terminology change from Unclassifiable/Attainment to Attainment/Unclassifiable.

<sup>4</sup> A partial area designation is identified by (p).

Area/ County	North Carolina's Recommended Area Definition	North Carolina's Recommended Designation	The EPA's Intended Designation	The EPA's Final Area Definition	The EPA's Final Designation <sup>3</sup>
Gaston County Area	All townships located within the modeling domain of Duke Energy's Allen Steam Station (Cartesian grid extending 50 kilometers [km] in each direction of the facility)	Attainment	Unclassifiable/ Attainment	Same as state's	Attainment/ Unclassifiable
Beaufort County	All townships within Beaufort County	Attainment	Unclassifiable/ Attainment	Same as state's	Attainment/ Unclassifiable
Remaining Undesignated Areas to Be Designated in this Action*	All remaining townships outside the modeled and monitored areas	Attainment	Unclassifiable/ Attainment	Same as state's	Attainment/ Unclassifiable

\* Except for areas that are associated with sources for which North Carolina elected to install and timely began operation of a new SO<sub>2</sub> monitoring network meeting EPA specifications referenced in EPA's SO<sub>2</sub> DRR (*see* Table 2 below), These areas that we intend to designate as attainment/unclassifiable (those to which this row of this table is applicable) are identified more specifically in Section 8 of Chapter 30 (addressing North Carolina) of the TSD for our intended designations.

Areas for which North Carolina elected to install and began operation of a new, approved SO<sub>2</sub> monitoring network are listed in Table 2. The EPA is required to designate these areas, pursuant to a court ordered schedule, by December 31, 2020. Table 2 also lists the SO<sub>2</sub> emission sources around which each new, approved monitoring network has been established.

**Table 2 – Undesignated Areas Which the EPA Is Not Addressing in this Round of Designations (and Associated Source or Sources)**

Township (County)	Source(s)
Beaverdam (Haywood County)	Evergreen Packaging – Canton Mill
Limestone (Buncombe County)	Duke Energy – Asheville Steam Electric Plant
Cunningham (Person County)	Duke Energy – Roxboro Plant

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. For North Carolina, the only previously designated area is Brunswick

County which was designated “unclassifiable” in Round 2 of designations.<sup>5</sup> The EPA is taking no action on this designated area at this time.

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<sup>5</sup> All townships in Brunswick County were designated unclassifiable in Round 2 due to the EPA’s determination that the air dispersion analysis did not indicate whether the area around the CPI Southport facility meets or did not meet the 1-hour SO<sub>2</sub> NAAQS. However, CPI is also subject to the DRR, and the State chose to characterize the area around CPI through air quality monitoring. Since the area has already been designated, the EPA is not taking any action on this designated area at this time.

## 2. Technical Analysis of New Information for the Person County Area

### 2.1. Introduction

The EPA must designate a portion of the Person County area by December 31, 2017, because the area has not been previously designated and North Carolina has not installed and begun timely operation of a new, approved SO<sub>2</sub> monitoring network to characterize air quality in the vicinity of any source, with the exception of Cunningham Township. As part of the initial submissions for the 3<sup>rd</sup> round of designations, North Carolina provided air quality modeling to characterize the air quality surrounding the Duke-Mayo facility in Person County, which is one of the two Data Requirements Rule (DRR) sources in the county.<sup>6</sup> To characterize the area surrounding the second DRR source in Person County, the Duke-Roxboro facility, North Carolina elected to deploy a new, approved SO<sub>2</sub> monitor in Cunningham. Therefore, the air quality modeling captured a portion of Person County and a portion of neighboring Granville County. In response to our 120-day letter, North Carolina provided additional air quality modeling information to determine whether the Duke-Mayo facility contributes to an area that may be violating the SO<sub>2</sub> NAAQS, specifically Cunningham Township containing the Duke-Roxboro facility, which will be designated as part of the Round 4 area designations.

### 2.2. Summary of Information Reviewed in the TSD for the Intended Round 3 Area Designations

In the intended designation letter notification to the governor of North Carolina, and further explained in Chapter 30 of the TSD for the intended Round 3 area designations, EPA proposed a designation of unclassifiable for a portion of Person County, which included the Holloway, Roxboro, and Woodsdale Townships, and a designation of unclassifiable/attainment for the Allensville, Oak Hill, and Walnut Grove Townships, based on all available information, including modeling information and all relevant monitoring information at the time. North Carolina's attainment recommendation for the portion of Person County area around Duke-Mayo was based on a combined modeling assessment using AERMOD Model Version 15181 (default setting) and characterization of air quality impacts from the one DRR source and two nearby sources Duke-Roxboro and CPI Roxboro. The modeling considered actual emissions for Duke Mayo and CPI Roxboro and background concentration data from a monitor in Durham, North Carolina (AQS Site: 37-063-0015). The State's modeling results indicated that the maximum impact from the Duke-Mayo facility, including the nearby sources and background concentrations, resulted in a maximum 1-hour average of 188 µg/m<sup>3</sup> or 71.8 parts per billion(ppb), which is below the level of the 2010 SO<sub>2</sub> NAAQS.

The EPA's intended designation and associated boundaries were based on air dispersion modeling issues the EPA identified in the intended designations including no documentation to

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<sup>6</sup> Although the initial modelling did not characterize the area surrounding the Duke-Roxboro facility, emissions from Duke-Roxboro were included in the modeling in order to capture any contributions from this facility in the area surrounding the Duke-Mayo facility.

support the AERMET inputs used to generate the surface and upper air meteorology files and a discrepancy between modeled emission values for Prattville Mill and those in the EPA’s EIS Gateway emissions database for the years that were modeled. Additional, detailed rationale, analyses, and other information supporting our intended designation for this area can be found in the TSD for the Intended Round 3 Area Designations for North Carolina Chapter 30.

The EPA considered all available information for the Person County area, including the modeling assessment provided by the State on January 13, 2017, and all supporting information. In the 120-day letter, the EPA proposed to designate a portion of Person County (bounded by Holloway, Woodsdale and Roxboro Townships) based on the Duke-Mayo modeling domain as unclassifiable for the 2010 SO<sub>2</sub> NAAQS because information was not available to determine if these townships contribute or do not contribute to ambient air quality in a nearby area that may not meet the NAAQS, in particular the area around Duke-Roxboro in Cunningham Township. North Carolina’s initial (January 2017) modeling results indicated that the maximum impact from the Duke-Mayo facility, including nearby sources and background concentrations, resulted in a maximum 1-hour average of 71.8 ppb, which is lower than the 75 ppb 2010 SO<sub>2</sub> NAAQS. The EPA proposed to designate the remaining townships included in North Carolina’s modeling domain for the Duke-Mayo facility, Allensville (in Person County) and Oak Hill and Walnut Grove (in Granville County), as unclassifiable/attainment for the 2010 1-hour SO<sub>2</sub> NAAQS.

The following Table 5 identifies all the modeling assessments evaluated for the intended designation letters and discussed in the TSD for the intended Round 3 area designations. Additional details can be found in the TSD for the Intended Round 3 Area Designations, Chapter 30.

**Table 3 –Modeling Assessments Evaluated in the TSD for the Intended Designation for the Person County Area**

<b>Organization Submitting Assessment</b>	<b>Date of the Assessment</b>	<b>Identifier used in the TSD for the Intended Round 3 Area Designations, Chapter 30</b>	<b>Distinguishing or Otherwise Key Features</b>
North Carolina	January 13, 2017	Duke-Mayo Modeling Report	Initial Modeling

### 2.3. Assessment of New Air Quality Monitoring Data for the Person County Area

Our TSD for the intended area designations did not consider data from any monitoring sites, with the exception of background monitors. We do not have certified data for any complete calendar year at any site, and we have no new monitoring information of any other type that warrants revising our prior analysis of available monitoring data.

## 2.4. Assessment of New Technical Information for the Person County Area Addressing the Duke-Mayo facility.

On October 23, 2017, North Carolina submitted new modeling analyzing potential contributions from the Duke Mayo and CPI Roxboro facilities to ambient air quality in the area surrounding the Duke-Roxboro facility. The EPA expressed an intent to designate a portion of the area as unclassifiable and another portion as unclassifiable/attainment, whereas North Carolina's new analysis supports a designation of attainment/unclassifiable for the entirety of Person County, excluding Cunningham Township.

After careful review of North Carolina's new assessment, supporting documentation, and all available data, the EPA is designating the area as attainment/unclassifiable. Our reasoning for this conclusion is explained after all the available information is presented.

In the intended designations, the EPA announced its intention to designate a portion of Person County, bounded by the Holloway, Roxboro, and Woodsdale townships, as unclassifiable because information was unavailable to determine if these townships contribute or do not contribute to ambient air quality in a nearby area that may not meet the NAAQS, in particular the area around the Duke-Roxboro facility in Cunningham Township. In response to this intended designation, North Carolina submitted additional modeling information in October 2017 regarding these three sources to demonstrate that the Duke-Mayo and CPI facilities do not contribute to ambient air quality which may not meet the NAAQS in the area surrounding the Duke-Roxboro facility. The AERMOD modeling input parameters for the Person County area of analysis for the October 2017 additional modeling are mostly the same as the initial January 2017 modeling and are summarized in Table 8, with the differences related to model version and receptors noted.

In order to analyze source contributions to areas that may violate the NAAQS in the vicinity of the Duke Roxboro facility, North Carolina used the AERMOD option called MAXDCONT, which outputs source group contributions to high ranked values. As part of this new analysis, the State partitioned the highest modeled concentrations into contributions from the modeled sources. This partition was carried out by the State for all values and specifically for those that were at or above 90 percent of the NAAQS, which would be equivalent to values equal to or above  $175 \mu\text{g}/\text{m}^3$  or 66.8 ppb. Tables 4, 5, and 6 from North Carolina's additional modeling submittal show predicted contributions using actual emissions from Duke Mayo, and using both actual and allowable emissions from the CPI-Roxboro facility<sup>7</sup>.

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<sup>7</sup> As discussed in Section 2.4.2.6 of this TSD Chapter 30, North Carolina evaluated allowable emissions from the CPI Roxboro facility to address uncertainty caused by the actual emissions from CPI increasing in 2016 to a level higher than the emissions in 2013, 2014, or 2015.

**Table 4. Contribution of Duke-Mayo to Total Air Concentrations in Additional October 2017 Modeling.**

Sub-set of Receptors	Range of Values	Maximum Contribution		Average Contribution	
		$\mu\text{g}/\text{m}^3$	Ppb	$\mu\text{g}/\text{m}^3$	ppb
All Values	All	78	30	5.6	2.1
$\geq 90\%$ of the NAAQS	$\geq 175 \mu\text{g}/\text{m}^3$	1.3	0.50	0.14	0.05

**Table 5. Contribution of CPI-Roxboro to Total Air Concentrations in Additional October 2017 Modeling Using Actual Emissions.**

Sub-set of Receptors	Range of Values	Maximum Contribution		Average Contribution	
		$\mu\text{g}/\text{m}^3$	Ppb	$\mu\text{g}/\text{m}^3$	ppb
All Values	All	11	4.2	0.92	0.35
$\geq 90\%$ of the NAAQS	$\geq 175 \mu\text{g}/\text{m}^3$	0.21	0.08	0.03	0.01

**Table 6. Contribution of CPI-Roxboro to Total Air Concentrations in Additional October 2017 Modeling Using Permit Limit Emissions.**

Sub-set of Receptors	Range of Values	Maximum Contribution		Average Contribution	
		$\mu\text{g}/\text{m}^3$	Ppb	$\mu\text{g}/\text{m}^3$	ppb
All Values	All	56	21	2.1	0.80
$\geq 90\%$ of the NAAQS	$> 175 \mu\text{g}/\text{m}^3$	0.50	0.19	0.11	0.04

Table 4 above indicates that Duke Mayo contributes a maximum of  $1.3 \mu\text{g}/\text{m}^3$  (0.5 ppb) to areas that may violate the NAAQS in the vicinity of Duke Roxboro. Tables 5 and 6 indicate that CPI contributes a maximum of  $0.5 \mu\text{g}/\text{m}^3$  (0.19 ppb) to areas that may violate the NAAQS in the vicinity of Duke Roxboro whether actual or allowable emissions are modeled for CPI. The first row in each Table show that the maximum modeled contribution from the Duke Mayo and CPI Roxboro facilities provided by the MAXDCONT model output may be higher in areas of Cunningham Township that are more distant from the Duke Roxboro facility. However, in all of these areas, the combined modeled design values from the Duke Mayo, CPI Roxboro and Duke Roxboro facilities are less than 90% of the NAAQS ( $< 175 \mu\text{g}/\text{m}^3$ ).

## 2.5. Jurisdictional Boundaries in the Person County Area

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

In its January 2017 recommendation letter, the State recommended the area surrounding the Duke-Mayo facility, specifically the townships bounded by the modeling domain be designated as attainment based in part on an assessment and characterization of air quality impacts from the Duke-Mayo and two nearby sources, Duke-Roxboro in Cunningham Township and CPI-Roxboro in Roxboro Township. North Carolina chose to characterize the Duke-Roxboro DRR source in Cunningham Township through a new air quality monitor and therefore the area will be designated by December 31, 2020. Duke-Roxboro is located approximately 17 km southwest of the Duke-Mayo facility. In its submission of additional information in October 2017, North Carolina did not change its recommended designation for the Person County area (see Table 1) and restated its recommendation of attainment for the townships bounded by the modeling domain of the Duke-Mayo facility.<sup>8</sup>

The EPA considered all the information available to determine the correct boundaries for the designation. More detail is given about the final designation for the Person County area in sections 2.8 and 2.9.

## 2.6. Other Additional Information Relevant to the Designations for the Person County Area

No other relevant information is available for the Person County area.

## 2.7. The EPA's Assessment of the Available Information for the Person County Area

After evaluating the additional technical information from the state, the EPA is modifying its intended designation and is designating Roxboro, Woodsdale, and Holloway townships as attainment/unclassifiable for the 2010 1-hour SO<sub>2</sub> NAAQS. In its January 2017 submission, North Carolina recommended attainment for the Person County area, bounded by all townships within the modeling domain of Duke-Mayo (Woodsdale, Holloway, Roxboro, Allensville in

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<sup>8</sup> On page 8 of North Carolina's October 2017 submission, the State writes, "Thus, they intended to designate four townships (Cunningham, Holloway, Roxboro, and Woodsdale) as unclassifiable." This statement is inaccurate. In the TSD for our intended designations, the EPA did not intend to designate Cunningham Township as unclassifiable. For the Duke-Roxboro facility in Cunningham Township, the State elected to install and began operation of a new, approved SO<sub>2</sub> monitoring network. Under the court-ordered schedule, the EPA is not required to designate Cunningham Township until December 31, 2020, after the air monitor collects the three years of monitoring data required for a valid design value.

Person County and Oak Hill and Walnut Grove, in Granville County) based in part on a modeling assessment and characterization of air quality impacts from Duke-Mayo, two nearby sources, Duke-Roxboro and CPI-Roxboro, and background concentration data from a nearby monitor in Durham, North Carolina (AQS Site: 37-063-0015). The State's initial modeling results indicated that the maximum impact from the Duke-Mayo facility, including these nearby sources and background concentrations, resulted in a maximum 1-hour average of 71.8 ppb, which demonstrates attainment of the 75 ppb 2010 SO<sub>2</sub> NAAQS in the modeled area, but information was unavailable to determine if these townships contribute or do not contribute to ambient air quality in a nearby area that may not meet the NAAQS, in particular the area around Duke-Roxboro in Cunningham Township. For this reason, the EPA intended to designate a portion of the Person County area, specifically the Roxboro, Woodsdale, and Holloway townships, as unclassifiable for the 2010 SO<sub>2</sub> NAAQS.

In North Carolina's January 2017 modeling, maximum impact from the Duke-Mayo facility, including nearby sources and background concentrations, did not show a violation of the 2010 SO<sub>2</sub> NAAQS in the modeled area's receptor grid, which included the Roxboro, Woodsdale, and Holloway Townships. The EPA's justification for designating these townships as unclassifiable during our intended designations is no longer suitable in light of the EPA's final definition of attainment/unclassifiable (see Chapter 1), which provides that an area shown to be attaining the NAAQS will be designated as attainment/unclassifiable if available information does not indicate that the area is contributing to a nearby area that does not meet the NAAQS. For the Duke-Roxboro facility in Cunningham Township, the State selected the monitoring pathway under the DRR to characterize the air quality surrounding the facility. Monitoring data indicating whether the area around the Duke-Roxboro facility violates or meets the NAAQS will not be available until 2020. Therefore, the results of North Carolina's January 2017 modeling of Duke-Mayo facility combined with the absence of a violating SO<sub>2</sub> monitor at the Duke-Roxboro facility supports a designation of attainment/unclassifiable for Roxboro, Woodsdale, and Holloway townships, as these areas are shown to be meeting the NAAQS and available information does not indicate that they are contributing to any nearby NAAQS violations. North Carolina's contribution assessment, which was submitted in response to EPA's intended unclassifiable designations of Roxboro, Woodsdale, and Holloway townships in Person County, cannot predict contribution to a potential violation around Duke-Roxboro because there will not be a valid design value to characterize the area until 2020, per North Carolina's selected monitoring pathway.

After careful evaluation of the information provided by the state in response to our 120-day letter as well as a reevaluation of our approach outlined in the TSD for our intended designations, the EPA is modifying its intended designations for Roxboro, Woodsdale, and Holloway Townships in Person County. North Carolina's January 2017 modeling of these townships demonstrated that there are no violations of the NAAQS in those portions of Person County. Furthermore, information in the January 2017 modeling report did not indicate that these townships contribute to ambient air quality in a nearby area that does not meet the NAAQS. The EPA believes that our final attainment/unclassifiable area, bounded by the townships of Roxboro, Woodsdale, and

Holloway have clearly defined legal boundaries, and we find these boundaries to be a suitable basis for defining our final attainment/unclassifiable area. The EPA intends in a separate action to evaluate and designate the remaining portion of Person County, specifically Cunningham Township, by December 31, 2020.

## 2.8. Summary of Our Final Designation for the Person County Area

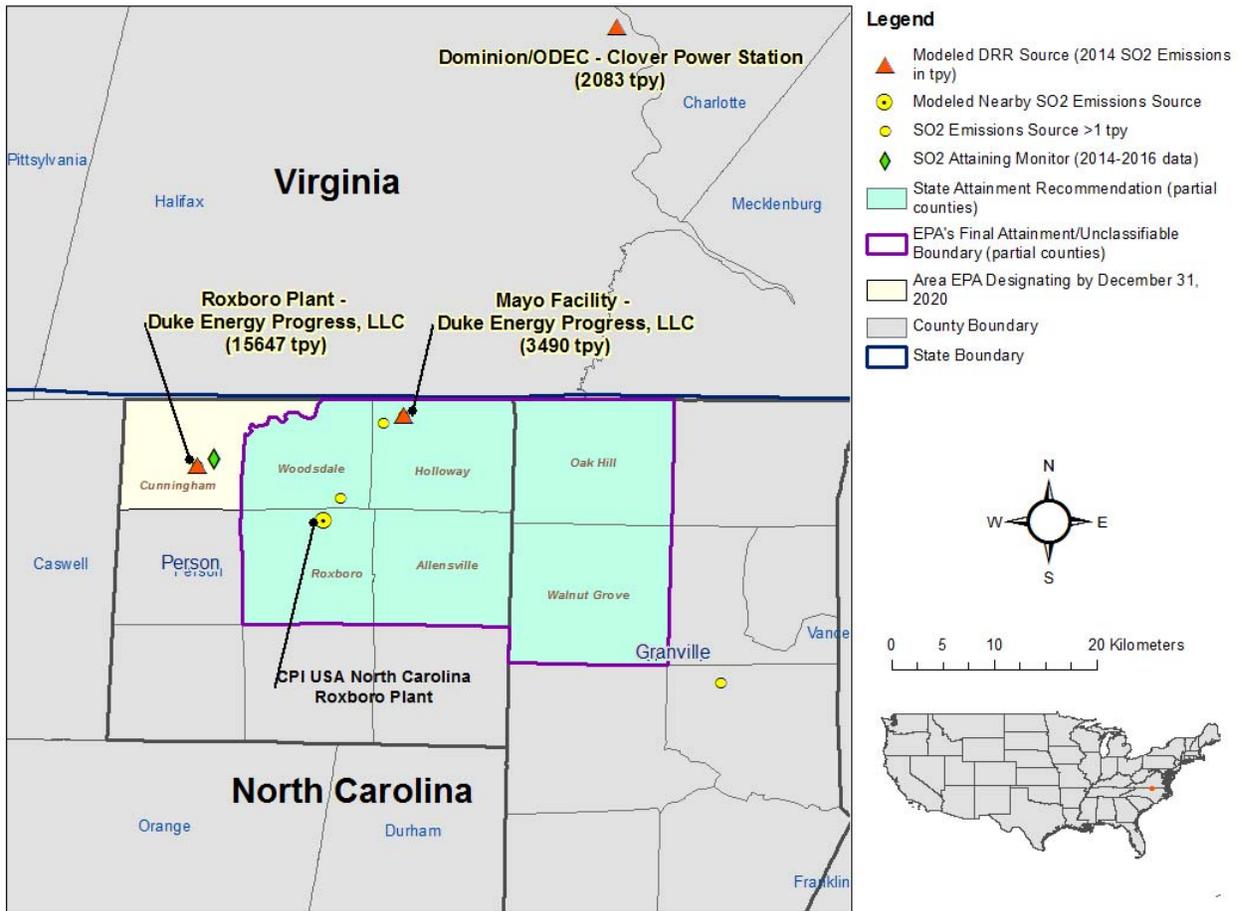
As noted in our 120-day letter to North Carolina, the EPA intended to designate Roxboro, Woodsdale, and Holloway townships as unclassifiable. However, after the EPA revisited our earlier analysis and evaluated the additional information provided by the state in response to our 120-day letter, the EPA is now modifying its intended designations for Roxboro, Woodsdale, and Holloway Townships in Person County to, attainment/unclassifiable for the 2010 SO<sub>2</sub> NAAQS. All available modeling demonstrates that Roxboro, Woodsdale, and Holloway townships meet the NAAQS. North Carolina selected the monitoring pathway to characterize the air quality surrounding the Duke-Roxboro facility. As EPA has not determined that there is an current violation around the Round 4 Duke-Mayo facility, available information does not indicate that these townships contribute to ambient air quality in an area that does not meet the NAAQS..

Specifically, the boundary of the attainment/unclassifiable area discussed in this final TSD is comprised of the Roxboro, Woodsdale, and Holloway townships. The boundary of this final designated area is shown in Figure 7. Table 13 lists all of EPA’s final designations regarding the Person County area including the Allensville township in Person County as well as the Oak Hill and Walnut Grove townships in Granville County. Refer to the TSD for our intended designations for our complete analysis.

**Table 7. The EPA’s Final Designations in the Person County Area Regarding the Duke-Mayo Modeling Domain.**

<b>Township</b>	<b>County of Township</b>	<b>North Carolina’s Recommended Designation</b>	<b>The EPA’s Intended Designation</b>	<b>The EPA’s Final Designation</b>
Oak Hill	Granville (partial)	Attainment	Unclassifiable/Attainment	Attainment/Unclassifiable
Walnut Grove		Attainment	Unclassifiable/Attainment	Attainment/Unclassifiable
Allensville	Person (partial)	Attainment	Unclassifiable/Attainment	Attainment/Unclassifiable
Holloway		Attainment	Unclassifiable	Attainment/Unclassifiable
Roxboro		Attainment	Unclassifiable	Attainment/Unclassifiable
Woodsdale		Attainment	Unclassifiable	Attainment/Unclassifiable

**Figure 7. Boundary of the Final Person County Attainment/Unclassifiable Area**



At this time, our final designations for the state only apply to this area and the other areas presented in this chapter. The EPA intends in a separate action to evaluate and designate all remaining undesignated areas in North Carolina, specifically those presented in Table 2 by December 31, 2020.