

Technical Support Document:

Chapter 29

Final Round 3 Area Designations for the 2010 1-Hour SO₂ Primary National Ambient Air Quality Standard for New York

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). Our Notice of Availability (NOA)¹ and our Technical Support Document² (TSD) 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 New York’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 New York addresses any change in New York’s recommended designations since we communicated our intended designations for areas in New York. 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 New York 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 New York, 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.

In our August 22, 2017, intended designations for New York the EPA requested that any additional information that the Agency should consider prior to finalizing the designation should be submitted by October 23, 2017. Additionally, on September 5, 2017, the EPA also published a

¹ 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)

² Intended Round 3 Area Designations for the 2010 1-Hour SO₂ 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>

notice of availability and public comment period in the *Federal Register*, inviting the public to review and provide input on our intended designations by October 5, 2017 (82 FR 10563).

On October 23, 2017, the New York State Department of Environmental Conservation (DEC) requested that EPA reconsider its intended unclassifiable designation for Monroe County. Although EPA has reassessed our intended designation for Monroe County, the EPA concludes that the additional information provided by the state does not resolve the issues regarding modeling of future permit limits that were not yet federally enforceable and effective that were identified in our 120-day TSD.

For the areas in New York that are part of the Round 3 designations process, Table 1 identifies EPA’s final designations and the counties or portions of counties to which they apply. It also lists New York’s current recommendations. EPA notes the additional information submitted by DEC on October 23, 2017 did not include changes to their designation recommendation. 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 New York

Area/County	New York’s Recommended Area Definition	New York’s Recommended Designation	EPA’s Intended Designation	EPA’s Final Area Definition	EPA’s Final Designation³
Monroe County Area	Monroe County	Attainment	Unclassifiable	Monroe County	Unclassifiable
Albany County Area	Albany County	Attainment	Unclassifiable/Attainment	Albany County	Attainment/Unclassifiable
New York County Area	New York County	Attainment	Unclassifiable/Attainment	New York County	Attainment/Unclassifiable
Queens County Area	Queens County	Attainment	Unclassifiable/Attainment	Queens County	Attainment/Unclassifiable

³ Refer to Chapter 1 of Technical Support Document: Final Round 3 Area Designations for the 2010 1-Hour SO₂ Primary National Ambient Air Quality Standard for definitions of the designation categories and the terminology change from Unclassifiable/Attainment to Attainment/Unclassifiable.

Bronx County Area	Bronx County	Attainment	Unclassifiable/Attainment	Bronx County	Attainment/ Unclassifiable
Kings County Area	Kings County	Attainment	Unclassifiable/Attainment	Kings County	Attainment/ Unclassifiable
Richmond County Area	Richmond County	Attainment	Unclassifiable/Attainment	Richmond County	Attainment/ Unclassifiable
Orange County Area	Orange County	Attainment	Unclassifiable/Attainment	Orange County	Attainment/ Unclassifiable
Suffolk County Area	Suffolk County	Attainment	Unclassifiable/Attainment	Suffolk County	Attainment/ Unclassifiable
*Remaining Undesignated Areas to Be Designated in this Action	Full County	Attainment	Unclassifiable/Attainment	Same as State's	Attainment/ Unclassifiable

* Except for areas that are associated with sources for which New York elected to install and timely began operation of a new SO₂ monitoring network meeting EPA specifications referenced in EPA's SO₂ DRR (see Table 2 below). These areas that we are designating as attainment/unclassifiable (those to which this row of this table is applicable) are identified more specifically in Section 8 of Chapter 29 (addressing New York) of the TSD for our intended designations.

Areas for which New York elected to install and began operation of a new, approved SO₂ 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 SO₂ emissions 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)

Area	Source(s)
St. Lawrence County	Alcoa
Tompkins County	Cayuga Generating Station
Seneca County	Cayuga Generating Station
Cayuga County ⁴	Cayuga Generating Station

⁴ The air monitors established to characterize air quality in the vicinity of the Cayuga Generating Station are located in Tompkins and Seneca Counties. Due to the close proximity of Cayuga County to the Cayuga Generating Station (i.e. approximately 2.5 km) and to the new air monitor in Tompkins County (approximately 1 kilometer), the EPA believes the Tompkins monitor will help determine any possible impacts in Cayuga County from the facility. The EPA will therefore designate Cayuga County in the next round of SO₂ designations (i.e., designating by December 31, 2020). The EPA notes that New York recommended that Cayuga County be designated as attainment.

2. Technical Analysis of New Information for the Monroe County Area

2.1. Introduction

The EPA must designate the Monroe County area by December 31, 2017, because the area has not been previously designated and New York has not installed and begun timely operation of a new, approved SO₂ monitoring network to characterize air quality in the vicinity of any source in Monroe County. The area includes Eastman Business Park (Recycled Energy Development [RED]-Rochester). In its January 4, 2017 submission, New York recommended attainment for Monroe County and the area around the RED based in part on a modeling assessment using future allowable emissions. The EPA's August 22, 2017 intended designations modified New York's designation recommendation for the Monroe County, NY area to unclassifiable, because the modeling was based on future permit limits that are not yet federally enforceable and effective. As such, the modeling submitted by the State does not inform the characterization of current air quality for the Monroe area, but informs the status of the air quality at the time of RED's future operating scenario.

The EPA received additional information from the New York State Department of Environmental Conservation on October 23, 2017 for the Monroe County area in response to the air dispersion modeling issues EPA identified in the 120-day intended designations. New York's new information included an update of RED's conversion to natural gas from coal.

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

In the 120-day letter notification to the governor of New York, and further explained in Chapter 29 of the TSD for the intended Round 3 area designations, EPA proposed a designation of unclassifiable based on all available information, including modeling information and all relevant monitoring information.

The following Table 3 identifies all the modeling assessments evaluated for the 120-day 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 29.

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

Organization Submitting Assessment	Date of the Assessment	Identifier used in the TSD for the Intended Round 3 Area Designations, Chapter 29	Distinguishing or Otherwise Key Features
DEC	January 4, 2017	RED	Met data 2011-2015

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

This factor considers the SO₂ air quality monitoring data in the area of Monroe County. Our TSD for the intended area designations considered available data through 2016 for one monitor (AQS ID 36-055-1007) in the Monroe County area. We do not have certified data for any additional complete calendar years 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 Monroe County Area Addressing RED

New York has requested that the EPA reconsider its intended unclassifiable designation for Monroe County. The EPA’s intended designation and associated boundaries were based on air dispersion modeling issues the EPA identified in the 120-day designations, including the use of future permit limits that are not yet federally enforceable and effective. 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 New York, Chapter 29.

New York’s October 23, 2017 submittal provided a response to the EPA’s comments about the use of future permitted emissions in the air dispersion modeling. New York requested that the EPA reconsider the intended unclassifiable designation for Monroe County based on the following reasons: (1) the SO₂ monitor design values in and near Monroe County continue to remain well below the NAAQS, (2) the modeling demonstration of the federally enforceable permit conditions at RED clearly demonstrates that the facility’s impacts, when added to background levels for the area, are well below the NAAQS, and (3) significant progress has been made at RED with respect to the conversion to natural gas. New York did not submit a revised modeling analysis for this area.

The responses provided by New York did not resolve any of the outstanding issues the EPA identified in the 120-day intended designation. The EPA is unable to determine if the area is attaining the standard because the Monroe County air monitor (AQS ID 36-055-1007) was not sited to characterize the maximum 1-hour SO₂ concentrations near the RED facility. Furthermore, the air modeling is still based on future permit limits that have not yet been fully implemented and are not currently federally enforceable and effective.

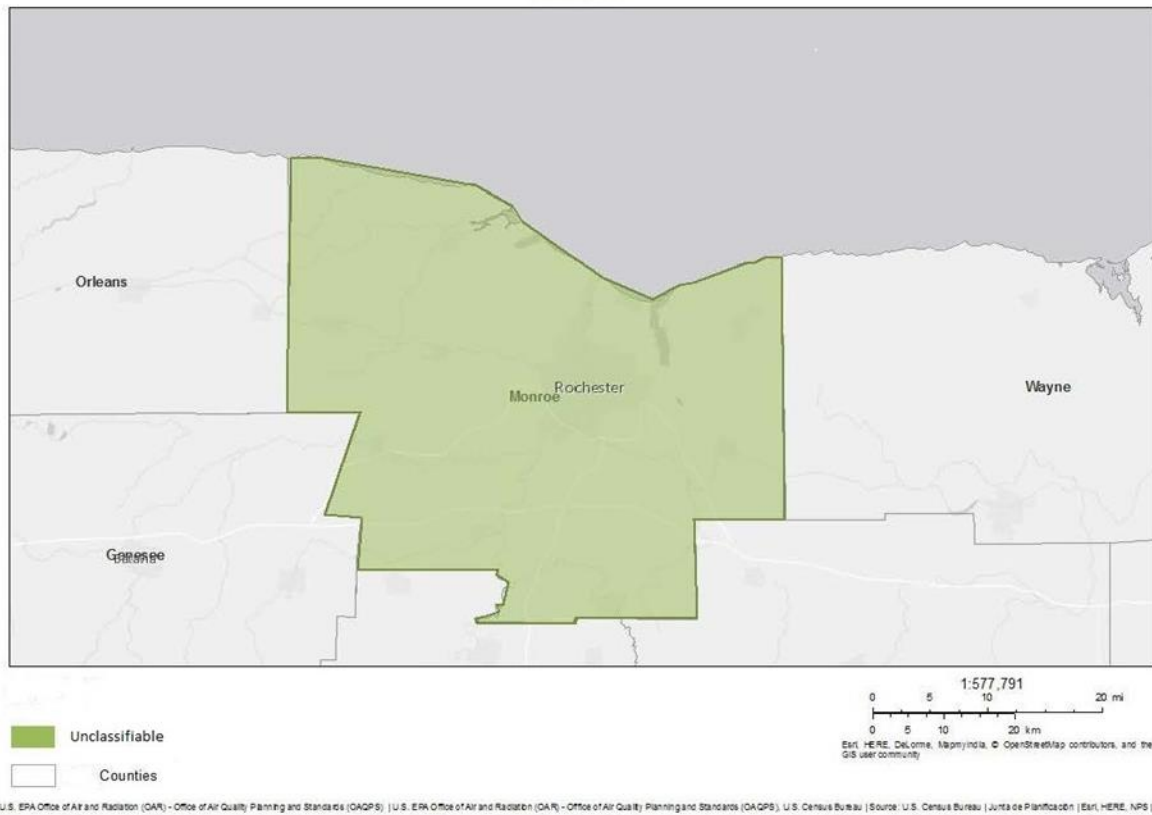
New York's letter states that the conversion to natural gas of Unit 44 is complete which, in turn, allows for reduced operation of Units 42 and 43 while the replacement units are being installed. New York anticipates that the new units will be installed and operational sometime in mid-to-late December which would facilitate the shutdown of Units 42 and 43 by the end of 2017.

The EPA recognizes the conversion of RED units 42 and 43 might be completed in the near future. However, as of the time of the Administrator's signature of these final designations, the EPA has not yet received any documentation from New York confirming that the conversion of the RED Units 42 and 43 has been completed and that the new limits are now enforceable against the source. Based on New York's anticipation of completing the conversion of these units to natural gas in the near future, the EPA notes the process outlined in Section VI of the *Federal Register* notice for this final action: if any state submits complete, quality-assured, certified 2017 data or related information about 2017 air quality to the EPA by February 28, 2018, supporting a change of the designation status for any area within that state, and the EPA agrees that a change of designation status is appropriate, then we will withdraw the designation announced in this action for such area before it becomes effective and issue another designation that reflects the inclusion and analysis of such information.

2.5. Summary of Our Final Designation for the Monroe County Area

After careful evaluation of the State's recommendation and supporting information, as well as all available relevant information, the EPA is designating, in its entirety, Monroe County as unclassifiable for the 2010 SO₂ NAAQS because although available information does not indicate that the area contributes to a nearby area that does not meet the NAAQS, it cannot be determined whether the area itself meets the NAAQS. Specifically, the boundaries are comprised of the entirety of Monroe County. Figure 1 shows the boundary of this final designated area.

Figure 1. Boundary of the Final Monroe County Unclassifiable Area



The EPA intends in a separate action to evaluate and designate all remaining undesignated areas in New York by December 31, 2020.