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Part II

## Environmental Protection Agency

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40 CFR Parts 51, 52, 72 et al.

Federal Implementation Plans: Interstate Transport of Fine Particulate  
Matter and Ozone and Correction of SIP Approvals; Final Rule

## ENVIRONMENTAL PROTECTION AGENCY

### 40 CFR Parts 51, 52, 72, 78, and 97

[EPA-HQ-OAR-2009-0491; FRL-9436-8]

RIN 2060-AP50

### Federal Implementation Plans: Interstate Transport of Fine Particulate Matter and Ozone and Correction of SIP Approvals

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

**ACTION:** Final rule.

**SUMMARY:** In this action, EPA is limiting the interstate transport of emissions of nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) that contribute to harmful levels of fine particle matter (PM<sub>2.5</sub>) and ozone in downwind states. EPA is identifying emissions within 27 states in the eastern United States that significantly affect the ability of downwind states to attain and maintain compliance with the 1997 and 2006 fine particulate matter national ambient air quality standards (NAAQS) and the 1997 ozone NAAQS. Also, EPA is limiting these emissions through Federal Implementation Plans (FIPs) that regulate electric generating units (EGUs) in the 27 states. This action will substantially reduce adverse air quality impacts in downwind states from emissions transported across state lines. In conjunction with other federal and state actions, it will help assure that all but a handful of areas in the eastern part of the country achieve compliance with the current ozone and PM<sub>2.5</sub> NAAQS by the deadlines established in the Clean Air Act (CAA or Act). The FIPs may not fully eliminate the prohibited emissions from certain states with respect to the 1997 ozone NAAQS for two remaining downwind areas and EPA is committed to identifying any additional required upwind emission reductions and taking any necessary action in a future rulemaking. In this action, EPA is also modifying its prior approvals of certain State Implementation Plan (SIP) submissions to rescind any statements that the submissions in question satisfy the interstate transport requirements of the CAA or that EPA's approval of the SIPs affects our authority to issue interstate transport FIPs with respect to the 1997 fine particulate and 1997 ozone standards for 22 states. EPA is also issuing a supplemental proposal to request comment on its conclusion that six additional states significantly affect downwind states' ability to attain and maintain compliance with the 1997 ozone NAAQS.

**DATES:** This final rule is effective on October 7, 2011.

**ADDRESSES:** EPA has established a docket for this action under Docket ID No. EPA-HQ-OAR-2009-0491. All documents in the docket are listed on the <http://www.regulations.gov> Web site. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through <http://www.regulations.gov> or in hard copy at the EPA Docket Center, EPA West, Room B102, 1301 Constitution Avenue, NW., Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the Air Docket is (202) 566-1742.

**FOR FURTHER INFORMATION CONTACT:** For general questions concerning this action, please contact Ms. Meg Victor, Clean Air Markets Division, Office of Atmospheric Programs, Mail Code 6204J, Environmental Protection Agency, 1200 Pennsylvania Avenue, NW., Washington, DC 20460; telephone number: (202) 343-9193; fax number: (202) 343-2359; e-mail address: [victor.meg@epa.gov](mailto:victor.meg@epa.gov). For legal questions, please contact Ms. Sonja Rodman, U.S. EPA, Office of General Counsel, Mail Code 2344A, 1200 Pennsylvania Avenue, NW., Washington, DC 20460, telephone (202) 564-4079; e-mail address: [rodman.sonja@epa.gov](mailto:rodman.sonja@epa.gov).

#### SUPPLEMENTARY INFORMATION:

#### I. Preamble Glossary of Terms and Abbreviations

The following are abbreviations of terms used in the preamble.

AQAT Air Quality Assessment Tool  
 ARP Acid Rain Program  
 BART Best Available Retrofit Technology  
 BACT Best Available Control Technology  
 CAA or Act Clean Air Act  
 CAIR Clean Air Interstate Rule  
 CAMx Comprehensive Air Quality Model with Extensions  
 CBI Confidential Business Information  
 CCR Coal Combustion Residuals  
 CEM Continuous Emissions Monitoring  
 CENRAP Central Regional Air Planning Association  
 CFR Code of Federal Regulations  
 DEQ Department of Environmental Quality  
 DSI Dry Sorbent Injection  
 EGU Electric Generating Unit  
 FERC Federal Energy Regulatory Commission

FGD Flue Gas Desulfurization  
 FIP Federal Implementation Plan  
 FR Federal Register  
 EPA U.S. Environmental Protection Agency  
 GHG Greenhouse Gas  
 GW Gigawatts  
 Hg Mercury  
 ICR Information Collection Request  
 IPM Integrated Planning Model  
 km Kilometers  
 lb/mmBtu Pounds Per Million British Thermal Unit  
 LNB Low-NO<sub>x</sub> Burners  
 MACT Maximum Achievable Control Technology  
 MATS Modeled Attainment Test Software  
 µg/m<sup>3</sup> Micrograms Per Cubic Meter  
 MSAT Mobile Source Air Toxics  
 MOVES Motor Vehicle Emission Simulator  
 NAAQS National Ambient Air Quality Standards  
 NBP NO<sub>x</sub> Budget Trading Program  
 NEI National Emission Inventory  
 NESHAP National Emissions Standards for Hazardous Air Pollutants  
 NO<sub>x</sub> Nitrogen Oxides  
 NODA Notices of Data Availability  
 NSPS New Source Performance Standard  
 NSR New Source Review  
 OFA Overfire Air  
 OSAT Ozone Source Apportionment Technique  
 OTAG Ozone Transport Assessment Group  
 ppb Parts Per Billion  
 PM<sub>2.5</sub> Fine Particulate Matter, Less Than 2.5 Micrometers  
 PM<sub>10</sub> Fine and Coarse Particulate Matter, Less Than 10 Micrometers  
 PM Particulate Matter  
 ppm Parts Per Million  
 PUC Public Utility Commission  
 RIA Regulatory Impact Analysis  
 SCR Selective Catalytic Reduction  
 SIP State Implementation Plan  
 SMOKE Sparse Matrix Operator Kernel Emissions  
 SNCR Selective Non-catalytic Reduction  
 SO<sub>2</sub> Sulfur Dioxide  
 SO<sub>x</sub> Sulfur Oxides, Including Sulfur Dioxide (SO<sub>2</sub>) and Sulfur Trioxide (SO<sub>3</sub>)  
 TAF Terminal Area Forecast  
 TCEQ Texas Commission on Environmental Quality  
 TIP Tribal Implementation Plan  
 TLN3 Tangential Low NO<sub>x</sub>  
 TPY Tons Per Year  
 TSD Technical Support Document  
 WRAP Western Regional Air Partnership

#### II. General Information

##### A. Does this action apply to me?

This rule affects EGUs, and regulates the following groups:

Industry group	NAICS <sup>a</sup>
Utilities (electric, natural gas, other systems.) ...	2211, 2212, 2213

<sup>a</sup>North American Industry Classification System.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. This table lists

the types of entities that EPA is aware of that could potentially be regulated. Other types of entities not listed in the table could also be regulated. To determine whether your facility would be regulated by the proposed rule, you should carefully examine the applicability criteria in proposed §§ 97.404, 97.504, and 97.604.

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#### III. Executive Summary

The CAA section 110(a)(2)(D)(i)(I) requires states to prohibit emissions that contribute significantly to nonattainment in, or interfere with maintenance by, any other state with respect to any primary or secondary NAAQS. In this final rule, EPA finds that emissions of SO<sub>2</sub> and NO<sub>x</sub> in 27 eastern, midwestern, and southern states contribute significantly to nonattainment or interfere with maintenance in one or more downwind states with respect to one or more of three air quality standards—the annual PM<sub>2.5</sub> NAAQS promulgated in 1997, the 24-hour PM<sub>2.5</sub> NAAQS promulgated in 2006, and the ozone NAAQS promulgated in 1997 (EPA uses the term “states” to include the District of Columbia in this preamble).

These emissions are transported downwind either as SO<sub>2</sub> and NO<sub>x</sub> or, after transformation in the atmosphere, as fine particles or ozone. This final rule identifies emission reduction responsibilities of upwind states, and also promulgates enforceable FIPs to achieve the required emission reductions in each state through cost-effective and flexible requirements for power plants. Each state has the option of replacing these federal rules with state rules to achieve the required amount of emission reductions from sources selected by the state.

Section 110(a)(2)(D)(i)(I) of the CAA requires the elimination of upwind state emissions that significantly contribute to nonattainment or interfere with maintenance of a NAAQS in another state. Elimination of these upwind state emissions may not necessarily, in itself, fully resolve nonattainment or maintenance problems at downwind state receptors. Downwind states also have control responsibilities because, among other things, the Act requires each state to adopt enforceable plans to attain and maintain air quality standards. Indeed, states have put in place measures to reduce local emissions that contribute to nonattainment within their borders. Section 110(a)(2)(D)(i)(I) only requires the elimination of emissions that significantly contribute to nonattainment or interfere with maintenance of the NAAQS in other states; it does not shift to upwind states the responsibility for ensuring that all areas in other states attain the NAAQS.

The reductions obtained through the Transport Rule will help all but a few downwind areas come into attainment with and maintain the 1997 annual PM<sub>2.5</sub> NAAQS, the 2006 24-hour PM<sub>2.5</sub> NAAQS, and the 1997 ozone NAAQS. With respect to the annual PM<sub>2.5</sub> NAAQS, this rule finds that 18 states have SO<sub>2</sub> and annual NO<sub>x</sub> emission reduction responsibilities, and this rule quantifies each state's full emission reduction responsibility under section 110(a)(2)(D)(i)(I). See Table III-1 for the list of these states. With these reductions, EPA projects that no areas will have nonattainment or maintenance concerns with respect to the annual PM<sub>2.5</sub> NAAQS.

With respect to the 24-hour PM<sub>2.5</sub> NAAQS, this rule finds that 21 states have SO<sub>2</sub> and annual NO<sub>x</sub> emission reduction responsibilities, and this rule quantifies each state's full emission reduction responsibility under 110(a)(2)(D)(i)(I). See Table III-1 for the list of these states. In all, this rule requires emission reductions related to interstate transport of fine particles in 23 states. With these reductions, as discussed in section VI.D of this preamble, only one area (Liberty-Clairton) is projected to remain in nonattainment, and three other areas (Chicago,<sup>1</sup> Detroit, and Lancaster) are projected to have remaining

<sup>1</sup> This area is not currently designated as nonattainment for the 24-hour PM<sub>2.5</sub> standard. EPA is portraying the receptors and counties in this area as a single 24-hour maintenance area based on the annual PM<sub>2.5</sub> nonattainment designation of Chicago-Gary-Lake County, IL-IN.

maintenance concerns for the 24-hour PM<sub>2.5</sub> NAAQS.

With respect to the 1997 ozone NAAQS, this rule finds that 20 states have ozone-season NO<sub>x</sub> emission reduction responsibilities. For 10 of these states this rule quantifies the state's full emission reduction responsibility under section 110(a)(2)(D)(i)(I).<sup>2</sup> For 10 additional states, EPA quantifies in this rule the ozone-season NO<sub>x</sub> emission reductions that are necessary but may not be sufficient to eliminate all significant contribution to nonattainment and interference with maintenance in other states.<sup>3</sup> See Table III-1 for the complete list of 20 states required to reduce ozone-season NO<sub>x</sub> emissions in this rule. With the Transport Rule reductions, only one area (Houston) is projected to remain in nonattainment, and one area (Baton Rouge) to have a remaining maintenance concern with respect to the 1997 ozone NAAQS. The 10 states upwind of either of these two areas are the states for which additional reductions may be necessary to fully eliminate each state's significant contribution to nonattainment and interference with maintenance, as discussed in section VI of this preamble.<sup>4</sup>

As discussed further below, EPA's analysis also demonstrates that six additional states should be required to reduce ozone-season NO<sub>x</sub> emissions. EPA is issuing a supplemental proposal to request comment on requiring ozone-season NO<sub>x</sub> reductions in these six states. For five of these six states, EPA's analysis identifies the state's full emission reduction responsibility under section 110(a)(2)(D)(i)(I), and for the remaining one state EPA's analysis identifies reductions that are necessary

<sup>2</sup> The 10 states for which this rule quantifies the state's full responsibility under section 110(a)(2)(D)(i)(I) with respect to the 1997 ozone NAAQS are Florida, Maryland, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Virginia, and West Virginia.

<sup>3</sup> The 10 states for which this rule quantifies reductions that are necessary but may not be sufficient to satisfy the requirements of 110(a)(2)(D)(i)(I) with respect to the 1997 ozone NAAQS are Alabama, Arkansas, Georgia, Illinois, Indiana, Kentucky, Louisiana, Mississippi, Tennessee, and Texas.

<sup>4</sup> This preamble uses the term "significant contribution" only in the context of the CAA section 110(a)(2)(D)(i)(I) requirement that states prohibit emissions that "contribute significantly to nonattainment" in any other state with respect to any primary or secondary NAAQS. Thus, a significant contribution, as used in this preamble, is one that is significant for purposes of CAA section 110(a)(2)(D)(i)(I) as coming from a particular state.

but may not be sufficient to satisfy the requirements of 110(a)(2)(D)(i)(I).<sup>5</sup>

On January 19, 2010, EPA proposed revisions to the 8-hour ozone NAAQS that the Agency had issued March 12, 2008 (75 FR 2938); the Agency intends to finalize its reconsideration in the summer of 2011. EPA intends to propose a rule to address transport with respect to the reconsidered 2008 ozone NAAQS as expeditiously as possible after reconsideration is completed. EPA intends to include in that proposed rule requirements to address any remaining significant contribution to nonattainment and interference with maintenance with respect to the 1997 ozone NAAQS for the states identified in this final rule, or the associated supplemental notice of proposed rulemaking, for which EPA was unable to fully quantify the emissions that must be prohibited to satisfy the requirements of 110(a)(2)(D)(i)(I) with respect to the 1997 ozone NAAQS.

The Act requires EPA to conduct periodic reviews of each of the NAAQS. When NAAQS are set or revised, the CAA requires revision of SIPs to ensure the standards are met expeditiously and within relevant timeframes in the Act. If more protective NAAQS are promulgated, in the case of pollutants for which interstate transport is important, additional emission reductions to address transported pollution may be required from the power sector, from other sectors, and from sources in additional states. EPA will act promptly to promulgate any future rules addressing transport with respect to revised NAAQS.

The Transport Rule requires substantial near-term emission reductions in every covered state to address each state's significant contribution to nonattainment and interference with maintenance downwind. This rule achieves these reductions through FIPs that regulate the power sector using air quality-assured trading programs whose assurance provisions ensure that necessary reductions will occur within every covered state. This remedy structure is substantially similar to the preferred trading remedy structure presented in the proposal. The Transport Rule's air quality-assured trading approach will assure

<sup>5</sup> The five states addressed in the supplemental proposal for which EPA's analysis identifies the state's full reduction responsibility under section 110(a)(2)(D)(i)(I) with respect to the 1997 ozone NAAQS are Iowa, Kansas, Michigan, Oklahoma, and Wisconsin. The one state addressed in the supplemental proposal for which EPA's analysis identifies reductions that are necessary but may not be sufficient to satisfy section 110(a)(2)(D)(i)(I) with respect to the 1997 ozone NAAQS is Missouri.

environmental results in each state while providing market-based flexibility to covered sources through interstate trading. The final rule includes four air quality-assured trading programs: An annual NO<sub>x</sub> trading program, an ozone-season NO<sub>x</sub> trading program, and two separate SO<sub>2</sub> trading programs (“SO<sub>2</sub> Group 1” and “SO<sub>2</sub> Group 2”), as discussed further in sections VI and VII, below.

The first phase of Transport Rule compliance commences January 1, 2012, for SO<sub>2</sub> and annual NO<sub>x</sub> reductions and May 1, 2012, for ozone-season NO<sub>x</sub> reductions. The second phase of Transport Rule reductions, which commences January 1, 2014, increases the stringency of SO<sub>2</sub> reductions in a number of states as discussed further below.

EPA projects that with the Transport Rule, covered EGU will substantially reduce SO<sub>2</sub>, annual NO<sub>x</sub> and ozone-season NO<sub>x</sub> emissions, as shown in Tables III–2 and III–3, below. This rule generally covers electric generating units that are fossil fuel-fired boilers and turbines producing electricity for sale, as detailed in section VII.B.

EPA is promulgating the Transport Rule in response to the remand of the Clean Air Interstate Rule (CAIR) by the U.S. Court of Appeals for the District of Columbia Circuit (“Court”) in 2008. CAIR, promulgated May 12, 2005 (70 FR 25162), required 29 states to adopt and submit revisions to their State Implementation Plans (SIPs) to eliminate SO<sub>2</sub> and NO<sub>x</sub> emissions that contribute significantly to downwind nonattainment of the PM<sub>2.5</sub> and ozone NAAQS promulgated in July 1997. CAIR covered a similar but not identical set of states as the Transport Rule. CAIR FIPs were promulgated April 26, 2006 (71 FR 25328) to regulate electric generating units in the covered states and achieve the emission reduction requirements established by CAIR until states could submit and obtain approval of SIPs to achieve the reductions.

In July 2008, the Court found CAIR and the CAIR FIPs unlawful. *North Carolina v. EPA*, 531 F.3d 896 (D.C. Cir. 2008), modified on rehearing, *North Carolina v. EPA*, 550 F.3d 1176, 1178 (D.C. Cir. 2008). The Court’s original decision vacated CAIR. *North Carolina*, 531 F.3d at 929–30. However, the Court subsequently remanded CAIR to EPA without vacatur because it found that “allowing CAIR to remain in effect until it is replaced by a rule consistent with our opinion would at least temporarily preserve the environmental values covered by CAIR.” *North Carolina*, 550 F.3d at 1178. The CAIR requirements have remained in place while EPA has

developed the Transport Rule to replace them.

EPA’s approach in the Transport Rule to measure and address each state’s significant contribution to downwind nonattainment and interference with maintenance is guided by and consistent with the Court’s opinion in *North Carolina* and addresses the flaws in CAIR identified by the Court therein. This final rule also responds to extensive public comments and stakeholder input received during the public comment periods in response to the proposal and subsequent Notices of Data Availability (NODAs).

In this action, EPA both identifies and addresses emissions within states that significantly contribute to nonattainment or interfere with maintenance in other downwind states. In developing this rule, EPA used a state-specific methodology to identify emission reductions that must be made in covered states to address the CAA section 110(a)(2)(D)(i)(I) prohibition on emissions that significantly contribute to nonattainment or interfere with maintenance in a downwind state. EPA believes this methodology addresses the Court’s concern that the approach used in CAIR was insufficiently state-specific. EPA used detailed air quality analysis to determine whether a state’s contribution to downwind air quality problems is at or above specific thresholds. A state is covered by the Transport Rule if its contribution meets or exceeds one of those air quality thresholds and the Agency identifies, using a multi-factor analysis that takes into account both air quality and cost considerations, emissions within the state that constitute the state’s significant contribution to nonattainment and interference with maintenance with respect to the 1997 ozone or the 1997 annual or 2006 24-hour PM<sub>2.5</sub> NAAQS. Section 110(a)(2)(D)(i)(I) requires states to eliminate the emissions that constitute this “significant contribution” and “interference with maintenance.”<sup>6</sup>

In this final rule, EPA determined the emission reductions required from all upwind states to eliminate significant contribution to nonattainment and interference with maintenance with respect to the 1997 ozone, 1997 annual PM<sub>2.5</sub>, and 2006 24-hour PM<sub>2.5</sub> NAAQS, using, in part, an assessment of modeled air quality in 2012 and 2014. EPA first

<sup>6</sup> In this preamble, EPA uses the terms “significant contribution” and “interference with maintenance” to refer to the emissions that must be prohibited pursuant to section 110(a)(2)(D)(i)(I) because they significantly contribute to nonattainment or interfere with maintenance of the NAAQS in another state.

identified the following two sets of downwind receptors: (1) Receptors that EPA projects will have nonattainment problems; and, (2) receptors that EPA projects may have difficulty maintaining the NAAQS based on historic variation in air quality. To identify areas that may have problems attaining or maintaining these air quality standards, EPA projected a suite of future air quality design values, based on measured data during the period 2003 through 2007. EPA used the average of these future design values to assess whether an area will be in nonattainment. EPA used the maximum projected future design value to assess whether an area may have difficulty maintaining the relevant NAAQS (*i.e.*, whether an area has a reasonable possibility of being in nonattainment under adverse emission and weather conditions). Section V.C of this preamble details the Transport Rule’s approach to identify downwind nonattainment and maintenance areas.

After identifying downwind nonattainment and/or maintenance areas, EPA next used air quality modeling to determine which upwind states are projected to contribute at or above threshold levels to the air quality problems in those areas. Section V.D details the choice of air quality thresholds and the approach to determine how much each upwind state contributes. States whose contributions meet or exceed the threshold levels were analyzed further, as detailed in section VI, to determine whether they significantly contribute to nonattainment or interfere with maintenance of a relevant NAAQS, and if so, the quantity of emissions that constitute their significant contribution and interference with maintenance.

When EPA proposed this air-quality and cost-based multi-factor approach to identify emissions that constitute significant contribution to nonattainment and interference with maintenance from upwind states with respect to the 1997 ozone, annual PM<sub>2.5</sub>, and 2006 24-hour PM<sub>2.5</sub> NAAQS, the Agency indicated that the approach was designed to be applicable to both current and potential future ozone and PM<sub>2.5</sub> NAAQS (75 FR 45214). EPA believes that the Transport Rule’s approach of using air-quality thresholds to determine upwind-to-downwind-state linkages and using the air-quality and cost-based multi-factor approach to determine the quantity of emissions that each upwind state must eliminate, *i.e.*, the state’s significant contribution to nonattainment and interference with maintenance, could serve as a precedent for quantifying upwind state emission reduction responsibilities with respect

to potential future NAAQS, as discussed further in section VI.A of this preamble. The Agency further believes that the final Transport Rule demonstrates the strong value of this approach for addressing the role of interstate transport of air pollution in communities' ability to comply with current and future NAAQS.

EPA thus identified specific emission reduction responsibilities for each upwind state found to significantly contribute to nonattainment or interfere with maintenance in other states. Using that information, EPA developed individual state budgets for emissions from covered units under the Transport Rule. The Transport Rule emission budgets are based on EPA's state-by-state analysis of each upwind state's significant contribution to nonattainment and interference with maintenance. Because each state's budget is directly linked to this state-specific analysis of the state's obligations pursuant to section 110(a)(2)(D)(i)(I), this approach addresses the Court's concerns about the development of CAIR budgets.

In this rule, EPA is finalizing SO<sub>2</sub> and annual NO<sub>x</sub> budgets for each state covered for the 24-hour and/or annual PM<sub>2.5</sub> NAAQS and an ozone-season NO<sub>x</sub> budget for each state covered for the ozone NAAQS. A state's emission budget is the quantity of emissions that will remain from covered units under the Transport Rule after elimination of significant contribution to nonattainment and interference with maintenance in an average year (*i.e.*, before accounting for the inherent variability in power system operations).<sup>7</sup>

Baseline power sector emissions from a state can be affected by changing weather patterns, demand growth, or disruptions in electricity supply from other units or from the transmission grid. As a consequence, emissions could vary from year to year even in a state where covered sources have installed all controls and taken all measures necessary to eliminate the state's significant contribution to nonattainment and interference with maintenance. As described in detail in

sections VI and VII of this preamble, the Transport Rule accounts for the inherent variability in power system operations through "assurance provisions" based on state-specific variability limits which extend above the state budgets to form each state's "assurance level." The state assurance levels take into account the inherent variability in baseline emissions from year to year. The final Transport Rule FIPs will implement assurance provisions starting in 2012 as discussed in section VII, below.

The emission reduction requirements (*i.e.*, the "remedy") EPA is promulgating in this rule respond to the Court's concerns that in CAIR, EPA had not shown that the emission reduction requirements would get all necessary reductions within the state as required by section 110(a)(2)(D)(i)(I). The Transport Rule FIPs include assurance provisions specifically designed to ensure that no state's emissions are allowed to exceed that specific state's budget plus the variability limit (*i.e.*, the state's assurance level).

Each state's Transport Rule SO<sub>2</sub>, annual NO<sub>x</sub>, or ozone-season NO<sub>x</sub> emission budget is composed of a number of emission allowances ("allowances") equivalent to the tonnage of that specific state budget. Under the Transport Rule FIPs, EPA is distributing ("allocating") allowances under each state's budget to covered units in that state. In this rule, EPA analyzed each individual state's significant contribution to nonattainment and interference with maintenance and calculated budgets that represent each state's emissions after the elimination of those prohibited emissions in an average year. The methodology used to allocate allowances to individual units in a particular state has no impact on that state's budget or on the requirement that the state's emissions not exceed that budget plus the variability limit; the allocation methodology therefore has no impact on the rule's ability to satisfy the statutory mandate of CAA section 110(a)(2)(D)(i)(I).

The Transport Rule's approach to allocate emission allowances to existing units is based on historic heat-input data, as detailed in section VII.D of this preamble. The Transport Rule SO<sub>2</sub>, annual NO<sub>x</sub>, and ozone-season NO<sub>x</sub> emission allowances each authorize the emission of one ton of SO<sub>2</sub>, annual NO<sub>x</sub>, or ozone-season NO<sub>x</sub> emissions, respectively, during a Transport Rule

control period, and are the currency in the Transport Rule's air quality-assured trading programs. As discussed in section IX.A.2 below, EPA is creating these Transport Rule allowances as distinct compliance instruments with no relation to allowances from the CAIR trading programs. EPA agrees with the general principle that it is desirable, where possible, to provide continuity under successive regulatory trading programs, for example through the carryover of allowances from one program into a subsequent one. However, EPA is promulgating the Transport Rule as a court-ordered replacement for (not a successor to) CAIR's trading programs. In light of the specific circumstances of this case, including legal and technical issues discussed in Section IX.A.2 below, the final rule will not allow any carryover of banked SO<sub>2</sub> or NO<sub>x</sub> allowances from the Title IV or CAIR trading programs. EPA will strongly consider administrative continuity of this rule's trading programs under any future actions designed to address related problems of interstate transport of air pollution. A state may submit a SIP revision under which the state (rather than EPA) would determine allocations for one or more of the Transport Rule trading programs beginning with vintage year 2013 or later allowances.<sup>8</sup> Section X of this preamble discusses the final rule's provisions for SIP submissions in detail.

Table III-1 lists states covered by the Transport Rule for PM<sub>2.5</sub> and ozone. It also, with respect to PM<sub>2.5</sub>, identifies whether EPA determined the state was significantly contributing to nonattainment or interfering with maintenance of the 1997 annual PM<sub>2.5</sub> NAAQS, the 2006 24-hour PM<sub>2.5</sub> NAAQS, or both. As discussed below, the Transport Rule sorts the states required to reduce SO<sub>2</sub> emissions due to their contribution to PM<sub>2.5</sub> downwind into two groups of varying reduction stringency, with "Group 1" states subject to greater SO<sub>2</sub> reduction stringency than "Group 2" states starting in 2014. Table III-1 also lists which SO<sub>2</sub> Group each of the states is in.

<sup>7</sup> For the states discussed above for which EPA has quantified the minimum amount of emission reductions needed to make measurable progress toward satisfying the state's section 110(a)(2)(D)(i)(I) responsibility, the emission budget is the quantity of emissions that will remain from covered units after removal of those emissions.

<sup>8</sup> This final rule allows states to make 2013 allowance allocations through the use of a SIP revision that is narrower in scope than the other SIP revisions states can use to replace the FIPs and/or to make allocation decisions for 2014 and beyond, as discussed in section X.

TABLE III-1—STATES THAT SIGNIFICANTLY CONTRIBUTE TO NONATTAINMENT OR INTERFERE WITH MAINTENANCE OF A NAAQS DOWNWIND IN THE FINAL TRANSPORT RULE

State	1997 Ozone NAAQS	1997 Annual PM <sub>2.5</sub> NAAQS	2006 24-Hour PM <sub>2.5</sub> NAAQS	SO <sub>2</sub> group
Alabama	X	X	X	2
Arkansas	X			
Florida	X			
Georgia	X	X	X	2
Illinois	X	X	X	1
Indiana	X	X	X	1
Iowa		X	X	1
Kansas			X	2
Kentucky	X	X	X	1
Louisiana	X			
Maryland	X	X	X	1
Michigan		X	X	1
Minnesota			X	2
Mississippi	X			
Missouri		X	X	1
Nebraska			X	2
New Jersey	X		X	1
New York	X	X	X	1
North Carolina	X	X	X	1
Ohio	X	X	X	1
Pennsylvania	X	X	X	1
South Carolina	X	X		2
Tennessee	X	X	X	1
Texas	X	X		2
Virginia	X		X	1
West Virginia	X	X	X	1
Wisconsin		X	X	1
Number of States	20	18	21	

As explained in this preamble, EPA has improved and updated both steps of its significant contribution analysis. It updated and improved the modeling platforms and modeling inputs used to identify states with contributions to certain downwind receptors that meet or exceed specified thresholds. It also updated and improved its analysis for identifying any emissions within such states that constitute the state's significant contribution to nonattainment or interference with maintenance. Therefore, the results of the analysis conducted for the final rule differ somewhat from the results of the analysis conducted for the proposal.<sup>9</sup>

With respect to the 1997 ozone NAAQS, the analysis EPA conducted for the proposal did not identify Wisconsin, Iowa and Missouri as states that significantly contribute to nonattainment or interfere with maintenance of the ozone NAAQS in another state. However, the analysis conducted for the final rule shows that emissions from these states do significantly contribute to nonattainment or interfere with maintenance of the ozone NAAQS in

another state. EPA is not issuing FIPs with respect to the 1997 ozone NAAQS or finalizing ozone season NO<sub>x</sub> budgets for these states in this rule. EPA is publishing a supplemental notice of proposed rulemaking that will provide an opportunity for public comment on our conclusion that these states significantly contribute to nonattainment or interfere with maintenance of the 1997 ozone NAAQS.

In the other direction, the analysis conducted for the proposal supported EPA's conclusion at the time that Connecticut, Delaware, and the District of Columbia significantly contributed to nonattainment or interfered with maintenance with respect to the 1997 ozone NAAQS, whereas the modeling for the final rule no longer supports that conclusion for those states.

Additionally, the modeling conducted for the final rule identified two ozone maintenance receptors that were not identified in the modeling conducted for the proposal—Allegan County (MI) and Harford County (MD). Five states that EPA identified as significantly contributing to maintenance problems at the Allegan and/or Harford County receptors in the modeling for the final rule uniquely contribute to these receptors, *i.e.*, absent these receptors the states would not be covered by the Transport Rule ozone-season program.

The five states that uniquely contribute to these receptors are Iowa, Kansas, Michigan, Oklahoma, and Wisconsin. EPA is not issuing FIPs with respect to the 1997 ozone NAAQS or finalizing ozone-season NO<sub>x</sub> budgets for these states in this rule. EPA is publishing a supplemental notice of proposed rulemaking that will provide an opportunity for public comment on our conclusion that these states significantly contribute to nonattainment or interfere with maintenance of the 1997 ozone NAAQS.

EPA did not change its methodology between the proposed Transport Rule and the final Transport Rule for identifying upwind states that significantly contribute to nonattainment or interfere with maintenance in other states; nor did EPA change its methodology for identifying receptors of concern with respect to maintenance of the 1997 ozone NAAQS. The final rule's air quality modeling identifies the new states and new receptors described above based on updated input information (including emission inventories), much of which was provided to EPA through public comment on the proposal and subsequent NODAs. Section V of this preamble details the approach EPA used

<sup>9</sup> EPA updated its modeling platforms and modeling inputs in response to public comments received on the proposed Transport Rule and subsequent NODAs and performed other standard updates.

to identify contributing states and receptors of concern.

With respect to the annual PM<sub>2.5</sub> NAAQS, the analysis EPA conducted for the proposal supported EPA's conclusion that the states of Delaware, the District of Columbia, Florida, Louisiana, Minnesota, New Jersey, and Virginia were significantly contributing to nonattainment and interfering with maintenance of the annual PM<sub>2.5</sub> NAAQS while the final rule's analysis does not. Also, with respect to the 24-hour PM<sub>2.5</sub> NAAQS, the analysis conducted for the proposal supported EPA's conclusion that the states of Connecticut, Delaware, the District of Columbia, and Massachusetts were significantly contributing to nonattainment or interfering with maintenance in other states while the analysis conducted for the final rule did not.

In the proposal EPA also requested comment on whether Texas should be included in the Transport Rule for annual PM<sub>2.5</sub>. EPA's analysis for the proposal showed that emissions in Texas would significantly contribute to nonattainment or interfere with maintenance of the annual PM<sub>2.5</sub> NAAQS if Texas were not included in the rule for PM<sub>2.5</sub>. The proposal did not include an illustrative budget for Texas or illustrative allowance allocations. However, the budgets and allowance allocations provided for other states in the proposal were included solely to illustrate the result of applying EPA's proposed methodology for quantifying significant contribution to the data EPA proposed to use. EPA provided an ample opportunity for comment on this methodology and on the data, including data regarding emissions from Texas sources, used in the significant contribution analysis. EPA received numerous comments on and corrections to Texas-specific data. The modeling conducted for the final rule demonstrates that Texas significantly contributes to nonattainment or interferes with maintenance of the annual PM<sub>2.5</sub> NAAQS in another state. EPA provided a full opportunity for comment on whether Texas should be included in the rule for annual PM<sub>2.5</sub>, as well as on the methodology and data

used for the significant contribution analysis for the final rule. EPA therefore believes its determination that Texas must be included in the rule for annual PM<sub>2.5</sub> is a logical outgrowth of its proposal.

With respect to the 24-hour PM<sub>2.5</sub> NAAQS, the analysis EPA conducted for the proposal did not identify Texas as a state that significantly contributes to nonattainment or interferes with maintenance of 24-hour PM<sub>2.5</sub> in another state. However, the analysis conducted for the final rule shows that emissions from Texas do significantly contribute to nonattainment of the 24-hour PM<sub>2.5</sub> NAAQS in another state. EPA is not issuing a FIP for Texas with respect to the 24-hour PM<sub>2.5</sub> NAAQS in this rule. However, EPA believes that the FIP for Texas with respect to the 1997 annual PM<sub>2.5</sub> NAAQS also addresses the emissions in Texas that significantly contribute to nonattainment and interference with maintenance of the 2006 24-hour PM<sub>2.5</sub> NAAQS in another state.

The final rule, however, does not cover the states of Connecticut, Delaware, the District of Columbia, Florida, Louisiana, or Massachusetts for annual or 24-hour PM<sub>2.5</sub> as the analysis for the final rule does not support their inclusion.

The Transport Rule FIPs require the 23 states covered for purposes of the 24-hour and/or annual PM<sub>2.5</sub> NAAQS to reduce SO<sub>2</sub> and annual NO<sub>x</sub> emissions by specified amounts. The FIPs require the 20 states covered for purposes of the ozone NAAQS to reduce ozone-season NO<sub>x</sub> emissions by specified amounts. As discussed in detail in section VI, below, the 23 states covered for the 24-hour and/or annual PM<sub>2.5</sub> NAAQS are grouped in two tiers reflecting the stringency of SO<sub>2</sub> reductions required to eliminate that state's significant contribution to nonattainment and interference with maintenance downwind. The more-stringent SO<sub>2</sub> tier ("Group 1") is comprised of the 16 states indicated in Table III-1, above, and the less-stringent SO<sub>2</sub> tier ("Group 2") is comprised of the 7 states identified in the table. The two SO<sub>2</sub> trading programs are exclusive, *i.e.*, a covered source in a Group 1 state may

use only a Group 1 allowance for compliance, and likewise a source in a Group 2 state may use only a Group 2 allowance for compliance. In Group 1 states, the SO<sub>2</sub> reduction requirements become more stringent in the second phase, which starts in 2014.

In response to the Court's opinion in *North Carolina*, EPA has coordinated the Transport Rule's compliance deadlines with the NAAQS attainment deadlines that apply to the downwind nonattainment and maintenance areas. The Transport Rule requires that all significant contribution to nonattainment and interference with maintenance identified in this action with respect to the 1997 annual PM<sub>2.5</sub> NAAQS and the 2006 24-hour PM<sub>2.5</sub> NAAQS be eliminated by no later than 2014, with an initial phase of reductions starting in 2012 to ensure that reductions are made as expeditiously as practicable and, consistent with the Court's remand, to "preserve the environmental values covered by CAIR." Sources must comply by January 1, 2012 and January 1, 2014 for the first and second phases, respectively.

With respect to the 1997 ozone NAAQS, the Transport Rule requires NO<sub>x</sub> reductions starting in 2012 to ensure that reductions are made as expeditiously as practicable to assist downwind state attainment and maintenance of the standard. Sources must comply by May 1, 2012. The Transport Rule's compliance schedule and alignment with downwind NAAQS attainment deadlines are discussed in detail in section VII below.

Table III-2 shows projected Transport Rule emissions compared to projected base case emissions, and Table III-3 shows projected Transport Rule emissions compared to historical emissions (*i.e.*, 2005 emissions), for the power sector in all Transport Rule states. The ozone-season NO<sub>x</sub> results shown in Tables III-2 and III-3 are based on analysis of the group of 26 states that would be covered for the ozone-season program if EPA finalizes the supplemental proposal regarding ozone-season requirements for Iowa, Kansas, Michigan, Missouri, Oklahoma, and Wisconsin.

TABLE III-2—PROJECTED SO<sub>2</sub> AND NO<sub>x</sub> ELECTRIC GENERATING UNIT EMISSION REDUCTIONS IN COVERED STATES WITH THE TRANSPORT RULE COMPARED TO BASE CASE WITHOUT TRANSPORT RULE OR CAIR \*\*

[Million tons]

	2012 Base case emissions	2012 Transport rule emissions	2012 Emission reductions	2014 Base case emissions	2014 Transport rule emissions	2014 Emission reductions
SO <sub>2</sub> .....	7.0	3.0	4.0	6.2	2.4	3.9
Annual NO <sub>x</sub> .....	1.4	1.3	0.1	1.4	1.2	0.2



TABLE III-2—PROJECTED SO<sub>2</sub> AND NO<sub>x</sub> ELECTRIC GENERATING UNIT EMISSION REDUCTIONS IN COVERED STATES WITH THE TRANSPORT RULE COMPARED TO BASE CASE WITHOUT TRANSPORT RULE OR CAIR \*\*—Continued

[Million tons]

	2012 Base case emissions	2012 Transport rule emissions	2012 Emission reductions	2014 Base case emissions	2014 Transport rule emissions	2014 Emission reductions
Ozone-Season NO <sub>x</sub> .....	0.7	0.6	0.1	0.7	0.6	0.1

\* Note that numbers may not sum exactly due to rounding.

\*\* As explained in section V.B, EPA's base case projections for the Transport Rule assume that CAIR is not in place.

**Notes:** The SO<sub>2</sub> and annual NO<sub>x</sub> emissions in this table reflect EGUs in the 23 states covered by this rule for purposes of the 24-hour and/or annual PM<sub>2.5</sub> NAAQS (Alabama, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Michigan, Minnesota, Missouri, Nebraska, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South

Carolina, Tennessee, Texas, Virginia, West Virginia, and Wisconsin). The ozone-season NO<sub>x</sub> emissions reflect EGUs in the 20 states covered by this rule for purposes of the ozone NAAQS (Alabama, Arkansas, Florida, Georgia, Illinois, Indiana, Kentucky, Louisiana, Maryland, Mississippi, New Jersey, New York, North Carolina, Ohio,

Pennsylvania, South Carolina, Tennessee, Texas, Virginia, and West Virginia) and the six states that would be covered for the ozone NAAQS if EPA finalizes its supplemental proposal (Iowa, Kansas, Michigan, Missouri, Oklahoma, and Wisconsin).

TABLE III-3—PROJECTED SO<sub>2</sub> AND NO<sub>x</sub> ELECTRIC GENERATING UNIT EMISSION REDUCTIONS IN COVERED STATES WITH THE TRANSPORT RULE COMPARED TO 2005 ACTUAL EMISSIONS

[Million tons]

	2005 Actual emissions	2012 Transport rule emissions	2012 Emission reductions from 2005	2014 Transport rule emissions	2014 Emission reductions from 2005
SO <sub>2</sub> .....	8.8	3.0	5.8	2.4	6.4
Annual NO <sub>x</sub> .....	2.6	1.3	1.3	1.2	1.4
Ozone-Season NO <sub>x</sub> .....	0.9	0.6	0.3	0.6	0.3

**Notes:** The SO<sub>2</sub> and annual NO<sub>x</sub> emissions in this table reflect EGUs in the 23 states covered by this rule for purposes of the 24-hour and/or annual PM<sub>2.5</sub> NAAQS (Alabama, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Michigan, Minnesota, Missouri, Nebraska, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, West Virginia, and Wisconsin). The ozone-season NO<sub>x</sub> emissions reflect EGUs in the 20 states covered by this rule for purposes of the ozone NAAQS (Alabama, Arkansas, Florida, Georgia, Illinois, Indiana, Kentucky, Louisiana, Maryland, Mississippi, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, and West Virginia) and the six states that would be covered for the ozone NAAQS if EPA finalizes its supplemental proposal (Iowa, Kansas, Michigan, Missouri, Oklahoma, and Wisconsin).

substantial benefits of the Transport Rule, as described in section VIII in this preamble. EPA used air quality modeling to quantify the improvements in PM<sub>2.5</sub> and ozone concentrations that are expected to result from the Transport Rule emission reductions in 2014. The Agency used the results of this modeling to calculate the average and peak reduction in annual PM<sub>2.5</sub>, 24-hour PM<sub>2.5</sub>, and 8-hour ozone concentrations for monitoring sites in the Transport Rule covered states (including the six states for which EPA issued a supplemental proposal for ozone-season NO<sub>x</sub> requirements) in 2014.

For annual PM<sub>2.5</sub>, the average reduction across all monitoring sites in covered states in 2014 is 1.41 microgram per meter cubed (µg/m<sup>3</sup>) and the greatest reduction at a single site is 3.60 µg/m<sup>3</sup>.

For 24-hour PM<sub>2.5</sub>, the average reduction across all monitoring sites in covered states in 2014 is 4.3 µg/m<sup>3</sup> and the greatest reduction at a single site is 11.6 µg/m<sup>3</sup>. And finally, for 8-hour ozone, the average reduction across all monitoring sites in covered states in 2014 is 0.3 parts per billion (ppb) and the greatest is 3.9 ppb. See section VIII for further information on air quality improvements.

EPA estimated the Transport Rule's costs and benefits, including effects on sensitive and vulnerable and environmental justice communities. Table III-4, below, summarizes some of these results. Further discussion of the results is provided in preamble section VIII, below, and in the Regulatory Impact Analysis (RIA). Estimates here are subject to uncertainties discussed further in the RIA.

In addition to the emission reductions shown above, EPA projects other

TABLE III-4.—SUMMARY OF ANNUAL BENEFITS, COSTS, AND NET BENEFITS OF THE FINAL TRANSPORT RULE IN 2014 [Billions of 2007\$]<sup>a</sup>

Description	Transport rule remedy (billions of 2007 \$)	
	3% discount rate	7% discount rate
Social costs .....	\$0.81 .....	\$0.81.
Total monetized benefits <sup>b</sup> .....	\$120 to \$280 .....	\$110 to \$250.
Net benefits (benefits-costs) .....	\$120 to \$280 .....	\$110 to \$250.

<sup>a</sup> All estimates are for 2014, and are rounded to two significant figures.

<sup>b</sup> The total monetized benefits reflect the human health benefits associated with reducing exposure to PM<sub>2.5</sub> and ozone and the welfare benefits associated with improved visibility in Class I areas. The reduction in premature mortalities account for over 90 percent of total monetized PM<sub>2.5</sub> and ozone benefits.

As a result of updated analyses and in response to public comments, the final Transport Rule differs from the proposal in a number of ways. The differences between proposal and final rule are discussed throughout this preamble. Some key changes between proposal and final rule are that EPA:

- Updated emission inventories (resulting in generally lower base case emissions). *See* section V.C.
- Updated modeling and analysis tools (including improved alignment between air quality estimates and air quality modeling results). *See* sections V and VI.
- Updated conclusions regarding which states significantly contribute to nonattainment or interfere with maintenance of the NAAQS in other states. *See* Table III–1 and sections V.D and VI.
- Recalculated state budgets and variability limits, *i.e.*, state assurance levels, based on updated modeling. *See* section VI.
- Simplified variability limits for one-year application only. *See* section VI.E.
- Revised allocation methodology for existing and new units and revised new unit set-asides for new units in Transport Rule states and new units potentially locating in Indian country. *See* section VII.D.
- Changed start of assurance provisions to 2012 and increased assurance provision penalties. *See* section VII.E.
- Removed opt-in provisions. *See* section VII.B
- Added provisions for full and abbreviated Transport Rule SIP revisions. *See* section X.

EPA conducted substantial stakeholder outreach in developing the Transport Rule, starting with a series of “listening sessions” in the spring of 2009 with states, nongovernmental organizations, and industry. EPA docketed stakeholder-related materials in the Transport Rule docket (Docket ID No. EPA–HQ–OAR–2009–0491). The Agency conducted general teleconferences on the rule with tribal environmental professionals, conducted consultation with tribal governments, and hosted a webinar for communities and tribal governments. EPA continued to provide updates to regulatory partners and stakeholders through several conference calls with states as well as at conferences where EPA officials often made presentations. The Agency conducted additional

stakeholder outreach during the public comment period. EPA responded to extensive public comments received during the public comment periods on the proposed rule and associated NODAs.

This Transport Rule is one of a series of regulatory actions to reduce the adverse health and environmental impacts of the power sector. EPA is developing these rules to address judicial review of previous rulemakings and to issue rules required by environmental laws. Finalizing these rules will effectuate health and environmental protection mandated by Congress while substantially reducing uncertainty over the future regulatory obligations of power plants, which will assist the power sector in planning for compliance more cost effectively. The Agency is providing full opportunity for notice and comment for each rule.

As discussed above, rules to address transport under revised NAAQS, including the reconsidered 2008 ozone NAAQS, may result in additional emission reduction requirements for the power sector. In addition, existing Clean Air Act rules establishing best available retrofit technology (BART) requirements and other requirements for addressing visibility and regional haze may also result in future state requirements for certain power plant emission reductions where needed.

On May 3, 2011 (76 FR 24976), EPA proposed national emission standards for hazardous air pollutants from coal- and oil-fired electric utility steam generating units under CAA section 112(d), also called Mercury and Air Toxics Standards (MATS), and proposed revised new source performance standards for fossil fuel-fired EGUs under section 111(b). As discussed in the EPA-led public listening sessions during February and March 2011, EPA is preparing to propose innovative, cost-effective and flexible greenhouse gas (GHG) emissions performance standards under section 111 for steam electric generating units, the largest U.S. source of greenhouse gas emissions. On April 20, 2011 (76 FR 22174), EPA proposed requirements under section 316(b) of the Clean Water Act for existing power generating facilities, manufacturing and industrial facilities that withdraw more than two million gallons per day of water from waters of the U.S. and use at least twenty-five percent of that water exclusively for cooling purposes. On

June 21, 2010 (75 FR 35128), the Agency proposed to regulate coal combustion residuals (CCRs) under the Resource Conservation and Recovery Act to address the risks from the disposal of CCRs generated from the combustion of coal at electric utilities and independent power producers.

EPA will coordinate utility-related air pollution rules with each other and with other actions affecting the power sector including these rules from EPA’s Office of Water and its Office of Resource Conservation and Recovery to the extent consistent with legal authority in order to provide timely information needed to support regulated sources in making informed decisions. Use of a small number of air pollution control technologies, widely deployed, can assist with compliance for multiple rules. EPA also notes that the flexibility inherent in the allowance-trading mechanism included in the Transport Rule affords utilities themselves a degree of latitude to determine how best to integrate compliance with the emission reduction requirements of this rule and those of the other rules. EPA will pursue energy efficiency improvements in the use of electricity throughout the economy, along with other federal agencies, states and other groups, which will contribute to additional environmental and public health improvements while lowering the costs of realizing those improvements.

#### IV. Legal Authority, Environmental Basis, and Correction of CAIR SIP Approvals

##### A. EPA’s Authority for Transport Rule

The statutory authority for this action is provided by the CAA, as amended, 42 U.S.C. 7401 *et seq.* Section 110(a)(2)(D) of the CAA, often referred to as the “good neighbor” provision of the Act, and requires states to prohibit certain emissions because of their impact on air quality in downwind states. Specifically, it requires all states, within 3 years of promulgation of a new or revised NAAQS, to submit SIPs that prohibit certain emissions of air pollutants because of the impact they would have on air quality in other states. 42 U.S.C. 7410(a)(2)(D). This action addresses the requirement in section 110(a)(2)(D)(i)(I) regarding the prohibition of emissions within a state that will significantly contribute to nonattainment or interfere with maintenance of the NAAQS in any other

state. EPA has previously issued two rules interpreting and clarifying the requirements of section 110(a)(2)(D)(i)(I). The NO<sub>x</sub> SIP Call, promulgated in 1998, was largely upheld by the U.S. Court of Appeals for the DC Circuit in *Michigan*, 213 F.3d 663. CAIR, promulgated in 2005, was remanded by the DC Circuit in *North Carolina*, 531 F.3d 896, *modified on reh'g*, 550 F.3d. 1176. These decisions provide additional guidance regarding the requirements of section 110(a)(2)(D)(i)(I) and are discussed later in this notice.

Section 301(a)(1) of the CAA also gives the Administrator of EPA general authority to prescribe such regulations as are necessary to carry out her functions under the Act. 42 U.S.C. 7601(a)(1). Pursuant to this section, EPA has authority to clarify the applicability of CAA requirements. In this action, among other things, EPA is clarifying the applicability of section 110(a)(2)(D)(i)(I) by identifying SO<sub>2</sub> and NO<sub>x</sub> emissions that must be prohibited pursuant to this section with respect to the PM<sub>2.5</sub> NAAQS promulgated in 1997 and 2006 and the 8-hour ozone NAAQS promulgated in 1997.

Section 110(c)(1) requires the Administrator to promulgate a FIP at any time within 2 years after the Administrator finds that a state has failed to make a required SIP submission, finds a SIP submission to be incomplete or disapproves a SIP submission unless the state corrects the deficiency, and the Administrator approves the SIP revision, before the Administrator promulgates a FIP. 42 U.S.C. 7410(c)(1).

Tribes are not required to submit state implementation plans. However, as explained in EPA's regulations outlining Tribal Clean Air Act authority, EPA is authorized to promulgate FIPs for Indian country as necessary or appropriate to protect air quality if a tribe does not submit and get EPA approval of an implementation plan. See 40 CFR 49.11(a); see also 42 U.S.C. section 7601(d)(4).

Section 110(k)(6) of the CAA gives the Administrator authority, without any further submission from a state, to revise certain prior actions, including actions to approve SIPs, upon determining that those actions were in error.

### B. Rulemaking History

The Transport Rule FIPs will limit the interstate transport of emissions of NO<sub>x</sub> and SO<sub>2</sub> within 27 states in the eastern, midwestern, and southern United States that affect the ability of downwind states to attain and maintain compliance

with the 1997 and 2006 PM<sub>2.5</sub> NAAQS and the 1997 ozone NAAQS.<sup>10</sup> Prior to this Transport Rule, CAIR was EPA's most recent regulatory action in a longstanding series of regulatory initiatives to address interstate transport of air pollution. The proposed Transport Rule preamble provides more information on EPA actions prior to CAIR (75 FR 45221–45225).

CAIR, promulgated May 12, 2005 (70 FR 25162), required 29 states to adopt and submit revisions to their SIPs to eliminate SO<sub>2</sub> and NO<sub>x</sub> emissions that contribute significantly to downwind nonattainment of the PM<sub>2.5</sub> and ozone NAAQS promulgated in 1997. The states covered by CAIR were similar but not identical to the states covered by the Transport Rule. The CAIR FIPs, promulgated April 26, 2006 (71 FR 25328), regulated electric generating units in the covered states and achieved CAIR's emission reduction requirements unless or until states had approved SIPs to achieve the required reductions.

In July 2008, the DC Circuit Court found CAIR and the CAIR FIPs unlawful and vacated CAIR. *North Carolina*, 531 F.3d at 929–30. However, the Court subsequently remanded CAIR to EPA without vacatur in order to “at least temporarily preserve the environmental values covered by CAIR.” *North Carolina*, 550 F.3d at 1178. CAIR requirements have remained in place and CAIR's emission trading programs have operated while EPA developed replacement rules in response to the remand.

By promulgating the Transport Rule FIPs, EPA is responding to the Court's remand of CAIR and the CAIR FIPs and replacing those rules. The approaches EPA used in the Transport Rule to measure and address each state's significant contribution to downwind nonattainment and interference with maintenance are guided by and consistent with the Court's opinion in *North Carolina* and address the flaws in CAIR identified by the Court therein.

By notice of proposed rulemaking (Federal Implementation Plans To Reduce Interstate Transport of Fine Particulate Matter and Ozone, 75 FR 45210; August 2, 2010), EPA proposed the Transport Rule to identify and limit NO<sub>x</sub> and SO<sub>2</sub> emissions within 32 states in the eastern, midwestern, and southern United States that affect the ability of downwind states to attain and maintain compliance with the 1997 and 2006 PM<sub>2.5</sub> NAAQS and the 1997 ozone

NAAQS. EPA proposed to achieve the emission reductions under FIPs, which states may choose to replace by submitting SIPs for EPA approval. EPA proposed to limit emissions by regulating electric generating units in the 32 states with interstate emission trading programs and assurance provisions to ensure the required reductions occur in each covered state. EPA also requested comment on two alternative FIP remedies.

EPA supplemented the Transport Rule record with additional information relevant to the rulemaking in three NODAs for which EPA requested comments:

- Notice of Data Availability Supporting Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone (75 FR 53613; September 1, 2010). This NODA provided an updated database of unit-level characteristics of EGUs included in EPA modeling, an updated version of the power sector modeling platform EPA used to support the final rule, and other input assumptions and data EPA provided for public review and comment.

- Notice of Data Availability Supporting Federal Implementation Plans To Reduce Interstate Transport of Fine Particulate Matter and Ozone: Revisions to Emission Inventories (75 FR 66055; October 27, 2010). This NODA provided additional information relevant to the rulemaking, including updated emission inventory data for 2005, 2012 and 2014 for several stationary and mobile source inventory components.

- Notice of Data Availability for Federal Implementation Plans To Reduce Interstate Transport of Fine Particulate Matter and Ozone: Request for Comment on Alternative Allocations, Calculation of Assurance Provision Allowance Surrender Requirements, New-Unit Allocations in Indian Country, and Allocations by States (76 FR 1109; January 7, 2011). This NODA provided additional information relevant to the rulemaking, including emissions allowance allocations for existing units calculated using two alternative methodologies, data supporting those calculations, information about an alternative approach to calculation of assurance provision allowance surrender requirements, allocations for new units locating in Indian country in Transport Rule states in the future, and provisions for states to submit SIPs providing for state allocation of allowances in the Transport Rule trading programs.

<sup>10</sup> As discussed in section III of this preamble, EPA is proposing to apply ozone-season NO<sub>x</sub> requirements to additional states. If EPA finalizes that action as proposed, the total number of states covered by the Transport Rule FIPs would be 28.

### C. Air Quality Problems and NAAQS Addressed

#### 1. Air Quality Problems and NAAQS Addressed

##### a. Fine Particles

Fine particles are associated with a number of serious health effects including premature mortality, aggravation of respiratory and cardiovascular disease (as indicated by increased hospital admissions, emergency room visits, health-related absences from school or work, and restricted activity days), lung disease, decreased lung function, asthma attacks, and certain cardiovascular problems. In addition to effects on public health, fine particles are linked to a number of public welfare effects, including (1) Reduced visibility (haze) in scenic areas, (2) effects caused by particles settling on ground or water, such as: making lakes and streams acidic, changing the nutrient balance in coastal waters and large river basins, depleting the nutrients in soil, damaging sensitive forests and farm crops, and affecting the diversity of ecosystems, and (3) staining and damaging of stone and other materials, including culturally important objects such as statues and monuments.

In 1997, EPA revised the NAAQS for PM to add new annual and 24-hour standards for fine particles, using PM<sub>2.5</sub> as the indicator (62 FR 38652). These revisions established an annual standard of 15 µg/m<sup>3</sup> and a 24-hour standard of 65 µg/m<sup>3</sup>. During 2006, EPA revised the air quality standards for PM<sub>2.5</sub>. The 2006 standards decreased the level of the 24-hour fine particle standard from 65 µg/m<sup>3</sup> to 35 µg/m<sup>3</sup>, and retained the annual fine particle standard at 15 µg/m<sup>3</sup>.

##### b. Ozone

Short-term (1- to 3-hour) and prolonged (6- to 8-hour) exposures to ambient ozone have been linked to a number of adverse health effects. At sufficient concentrations, short-term exposure to ozone can irritate the respiratory system, causing coughing, throat irritation, and chest pain. Ozone can reduce lung function and make it more difficult to breathe deeply. Breathing may become more rapid and shallow than normal, thereby limiting a person's normal activity. Ozone also can aggravate asthma, leading to more asthma attacks that may require a doctor's attention and the use of additional medication. Increased hospital admissions and emergency room visits for respiratory problems have been associated with ambient

ozone exposures. Longer-term ozone exposure can inflame and damage the lining of the lungs, which may lead to permanent changes in lung tissue and irreversible reductions in lung function. A lower quality of life may result if the inflammation occurs repeatedly over a long time period (such as months, years, or a lifetime). There is also epidemiological evidence indicating a correlation between short-term ozone exposure and premature mortality.

In addition to causing adverse health effects, ozone affects vegetation and ecosystems, leading to reductions in agricultural crop and commercial forest yields; reduced growth and survivability of tree seedlings; and increased plant susceptibility to disease, pests, and other environmental stresses (e.g., harsh weather). In long-lived species, these effects may become evident only after several years or even decades and have the potential for long-term adverse impacts on forest ecosystems. Ozone damage to the foliage of trees and other plants can also decrease the aesthetic value of ornamental species used in residential landscaping, as well as the natural beauty of our national parks and recreation areas. In 1997, at the same time we revised the PM<sub>2.5</sub> standards, EPA issued its final action to revise the NAAQS for ozone (62 FR 38856) to establish new 8-hour standards. In this action published on July 18, 1997, we promulgated identical revised primary and secondary ozone standards that specified an 8-hour ozone standard of 0.08 parts per million (ppm).

Specifically, the standards require that the 3-year average of the fourth highest 24-hour maximum 8-hour average ozone concentration may not exceed 0.08 ppm. In general, the 8-hour standards are more protective of public health and the environment and more stringent than the pre-existing 1-hour ozone standards.

On March 12, 2008, EPA published a revision to the 8-hour ozone standard, lowering the level from 0.08 ppm to 0.075 ppm. On September 16, 2009, EPA announced it would reconsider these 2008 ozone standards. The purpose of the reconsideration is to ensure that the ozone standards are clearly grounded in science, protect public health with an adequate margin of safety, and are sufficient to protect the environment. EPA proposed revisions to the standards on January 19, 2010 (75 FR 2938) and anticipates issuing final standards soon.

##### c. Which NAAQS does this rule address?

This action addresses the requirements of CAA section 110(a)(2)(D)(i)(I) as they relate to:

(1) The 1997 annual PM<sub>2.5</sub> standard,  
(2) The 2006 24-hour PM<sub>2.5</sub> standard,  
and

(3) The 1997 ozone standard.

The original CAIR and CAIR FIP rules, which pre-dated the 2006 PM<sub>2.5</sub> standards, addressed the 1997 ozone and 1997 PM<sub>2.5</sub> standards only.

In this action, EPA fully addresses, for the states covered by this rule, the requirements of CAA section 110(a)(2)(D)(i)(I) for the annual PM<sub>2.5</sub> standard of 15 µg/m<sup>3</sup> and the 24-hour standard of 35 µg/m<sup>3</sup>. For the 1997 8-hour ozone standard of 0.08 ppm, EPA fully addresses the CAA section 110(a)(2)(D)(i)(I) requirements for some states covered by this rule, but for the remaining states EPA is conducting further analysis to determine whether further requirements are needed, as discussed in section III of this preamble.

This action does not address the CAA section 110(a)(2)(D)(i)(I) requirements for the revised ozone standards promulgated in 2008. These standards are currently under reconsideration. We are, however, actively conducting the technical analyses and other work needed to address interstate transport for the reconsidered ozone standard as soon as possible. We intend to issue as soon as possible a proposal to address the transport requirements with respect to the reconsidered standard.

This action addresses these CAA transport requirements through reductions in annual emissions of SO<sub>2</sub> and NO<sub>x</sub>, and through reductions in ozone-season NO<sub>x</sub>. The rationale for these reductions is discussed in detail later in the preamble.

##### d. Public Comments

EPA received comments on two issues related to the NAAQS regulated under the proposed FIPs.

A number of commenters believed that EPA's approach to ozone was inadequate, and that EPA should not have based the proposed requirements on the 1997 ozone NAAQS. These commenters cited EPA's 2008 revision to the standard which lowered the standard to 75 ppb, and noted that EPA's January 2010 proposal for reconsidered ozone NAAQS would, if finalized, further lower the primary NAAQS from 75 ppb to a value between 60 and 70 ppb. Accordingly, many of the commenters believed that EPA should have considered the 75 ppb level to be the maximum possible value moving forward, and that EPA should have used a value no greater than 75 ppb in its analysis.

EPA agrees with commenters that EPA and states should address interstate transport with respect to the tighter

ozone NAAQS as quickly as possible. EPA, as commenters noted, intends to propose a second rule to address interstate transport of ozone that will be appropriately configured for the revised level of the ozone NAAQS after reconsideration of the 2008 standard is finalized. EPA is mindful of the need for SIPs to provide for continuing ozone progress to meet the 75 ppb level of the 2008 NAAQS, or possibly lower levels based on the reconsideration. EPA believes that the ozone-season NO<sub>x</sub> requirements of this rule will provide important initial assistance to states in this regard.

Some commenters questioned whether EPA had given states the opportunity to provide SIPs addressing transport under the 2006 PM<sub>2.5</sub> NAAQS, and thus questioned the appropriateness of the issuance of FIPs addressing those NAAQS. Those comments, and EPA's response, are discussed in detail in section IV.C.2.

## 2. FIP Authority for Each State and NAAQS Covered

The CAA requires and authorizes EPA to promulgate each of the Federal Implementation Plans in this final rule. Section 110(c)(1) of the CAA requires the Administrator to promulgate a FIP at any time within 2 years after the Administrator takes one of three distinct actions: (1) She finds that a state has failed to make a required SIP submission; (2) she finds a SIP submission to be incomplete; or (3) she disapproves a SIP submission. Once the Administrator has taken one of these actions with respect to a specific state's 110(a)(2)(D)(i)(I) obligation for a specific NAAQS, she has a legal obligation to promulgate a FIP to correct the SIP deficiency within 2 years. EPA is relieved of the obligation to promulgate a FIP only if two events occur before the FIP is promulgated: (1) The state submits a SIP correcting the deficiency; and (2) the Administrator approves the SIP revision. 42 U.S.C. 7410(c)(1).<sup>11</sup>

<sup>11</sup> The CAA provides that EPA is not relieved of its obligation to promulgate FIPs unless the state submits a SIP that corrects the deficiency and EPA approves the SIP. Nonetheless, in the preamble to the proposed rule, EPA indicated that for states not covered by CAIR which had 110(a)(2)(D)(i)(I) SIPs pending at the time of proposal, EPA would finalize the FIP only if EPA determined the submission was incomplete or disapproved the SIP submission. The only two states covered by this rule but not covered by CAIR are Kansas and Nebraska. Both Kansas and Nebraska are covered by this rule based only on their significant contribution to nonattainment or interference with maintenance of the 2006 PM<sub>2.5</sub> NAAQS. EPA has not received a 110(a)(2)(D)(i)(I) submission from Nebraska with respect to the requirements of the 2006 PM<sub>2.5</sub> NAAQS. EPA disapproved a SIP submission from Kansas with respect to the requirements of 110(a)(2)(D)(i)(I) for the 2006 PM<sub>2.5</sub> NAAQS.

For each FIP in this rule,<sup>12</sup> EPA either has found that the state has failed to make a required 110(a)(2)(D)(i)(I) SIP submission, or has disapproved a SIP submission.<sup>13</sup> In addition, EPA has determined, in each case, that there has been no approval by the Administrator of a SIP submission correcting the deficiency prior to promulgation of the FIP. EPA's obligation to promulgate a FIP arose when the finding of failure to submit or disapproval was made, and in no case has it been relieved of that obligation.

Some commenters argued that EPA was relieved of its obligation to promulgate FIPs when it approved the CAIR SIPs for certain states. As an initial matter, EPA notes that this argument applies only to EPA's authority to promulgate FIPs with respect to the 1997 PM<sub>2.5</sub> and/or 1997 ozone NAAQS for a subset of states covered by the CAIR. It does not apply to EPA's authority to promulgate FIPs for the 2006 PM<sub>2.5</sub> NAAQS which was not addressed in CAIR. It also does not apply to EPA's authority to promulgate FIPs for the 1997 ozone and 1997 PM<sub>2.5</sub> NAAQS for states that remain subject to the CAIR FIPs, including the states that received EPA approval of abbreviated CAIR SIPs which allowed the states to allocate allowances while remaining subject to the CAIR FIPs.<sup>14</sup>

Further, the CAIR SIP approvals do not eliminate EPA's obligation and authority to promulgate a FIP to address the requirements of 110(a)(2)(D)(i)(I) because the Court in *North Carolina v. EPA*, 531 F.3d 896 (D.C. Cir. 2008) found that compliance with CAIR does not satisfy the requirement that each state prohibit all emissions within the state that significantly contribute to nonattainment or interfere with maintenance in another state. The Court's finding that CAIR was unlawful because it did not make measurable progress towards the statutory mandate of section 110(a)(2)(D)(i)(I) meant that the CAIR SIPs were not adequate to satisfy that mandate. The CAIR SIPs thus do not correct the SIP deficiencies identified in the 2005 findings of failure

<sup>12</sup> In this action, EPA is issuing 59 FIPs. EPA is issuing 20 FIPs to remedy SIP deficiencies relating to the 110(a)(2)(D)(i)(I) requirements for the 1997 ozone NAAQS. EPA is also issuing 18 FIPs to remedy SIP deficiencies relating to the 1997 PM<sub>2.5</sub> NAAQS. Finally, EPA is issuing 21 FIPs to remedy SIP deficiencies relating to the 2006 PM<sub>2.5</sub> NAAQS.

<sup>13</sup> The specific findings made and actions taken by EPA are described in greater detail in the TSD entitled "Status of CAA 110(a)(2)(D)(i)(I) SIPs."

<sup>14</sup> States may also have received approval to expand the applicability of the CAIR NO<sub>x</sub> ozone season program to include all units subject to the NO<sub>x</sub> Budget Program, allow opt-ins, or provide for distribution of a Compliance Supplement Pool under the CAIR NO<sub>x</sub> (annual) program.

to submit. The SIPs remained in force for the limited purpose allowed by the Court—that is, to achieve interim reductions until EPA promulgated a rule to replace CAIR. Given the flaws the court identified with CAIR, EPA's approval of a CAIR SIP does not relieve it of the obligation to promulgate FIPs created under section 110(c)(1) of the CAA.

Further, to avoid any confusion, EPA has decided to correct, in this notice, the full CAIR SIP approvals for states covered by this rule and the CAA 110(a)(2)(D)(i) SIP approvals for states covered by CAIR to rescind any statements suggesting that the SIP submissions satisfied or relieved states of the obligation to submit SIPs to satisfy the requirements of section 110(a)(2)(D)(i)(I) or that EPA was relieved of its obligation and authority to promulgate FIPs under 110(a)(2)(D)(i)(I).

Some commenters further argued that states should be given additional time, following promulgation of the Transport Rule, to submit a SIP to meet the requirements of section 110(a)(2)(D)(i)(I) and that CAIR should remain in place in the meantime. Some commenters specifically suggested that EPA restart the "FIP clock"<sup>15</sup> to give states this additional time. EPA does not interpret the CAA as giving it authority to extend the deadline for SIP submissions or restart the FIP clock. And nothing in the Act requires EPA to give the states another opportunity, following promulgation of the Transport Rule, to promulgate a SIP before EPA promulgates a FIP. The plain language of section 110(a)(1) of the Act requires the submission of SIPs that meet the requirements of 110(a)(2)(D)(i)(I) within 3 years after the promulgation of or revision of a primary NAAQS. See 42 U.S.C. 7410(a)(1). Section 110(a)(2)(D)(i)(I) SIPs for the 1997 ozone and PM<sub>2.5</sub> NAAQS were due in 2000 and 110(a)(2)(D)(i)(I) SIPs for the 2006 PM<sub>2.5</sub> NAAQS were due in 2009. While the statute gives EPA authority to prescribe a shorter period of time for states to make these SIP submissions, it does not give EPA authority to extend the 3-year deadline established by the Act. See 42 U.S.C. 7410(a)(1). The plain language of section 110(c)(1) of the Act, in turn, provides that EPA shall promulgate a FIP at any time within 2 years after the Administrator makes a finding of failure to make a required SIP

<sup>15</sup> "FIP clock" is a term used to describe EPA's responsibility found in CAA Section 110(c)(1) to promulgate a FIP within 2 years after either: Finding that a state has not submitted a required SIP revision or that a submitted SIP revision is incomplete; or disapproving a SIP revision.

submission of disapproves, in whole or in part, a SIP submission. See 42 U.S.C. 7410(c)(1). EPA does not have authority to set aside the specific deadlines established in the statute, and neither provision allows for the deadlines to be extended or to run from promulgation by EPA of a rule to quantify the state's specific obligations pursuant to section 110(a)(2)(D)(i)(I). The Act does not require EPA to promulgate a rule or issue guidance regarding the specific requirements of section 110(a)(2)(D)(i)(I) in advance of the SIP submittal deadline, much less require EPA to promulgate such a rule a specific amount of time before the SIP submittal deadline. For these reasons, EPA has neither authority to alter the SIP submittal deadline nor authority to alter the statute provision regarding when EPA's obligation to promulgate a FIP is triggered.

Finally, EPA does not believe it would be appropriate, in light of the Court's decision in *North Carolina*, to establish a lengthy transition period to the rule that will replace CAIR. The Court decision remanding CAIR without vacatur stressed the court's conclusion that CAIR was deeply flawed and emphasized EPA's obligation to remedy those flaws expeditiously. *North Carolina*, 550 F.3d 1176. Although the Court did not set a specific deadline for corrective action, the Court took care to note that the effect of its opinion would not be delayed "indefinitely" and that petitioners could bring a mandamus petition if EPA were to fail to modify CAIR in a manner consistent with its prior opinion. *Id.* Given the Court's emphasis on remedying CAIR's flaws expeditiously, EPA does not believe it would be appropriate to establish a lengthy transition period to the rule which is to replace CAIR.

### 3. Additional Information Regarding CAA Section 110(a)(2)(D)(i)(I) SIPs for States in the Transport Rule Modeling Domain

This final rule quantifies out-of-state contributions for the 38 states that are fully contained within the 12 kilometers (km) eastern U.S. modeling domain. EPA is making no specific finding for states that are not fully contained within the eastern 12 km modeling domain. EPA did not conduct a contribution analysis or make any specific finding for New Mexico, Colorado, Wyoming, and Montana since they are only partially contained within the 12 km modeling domain. With regard to the 1997 PM<sub>2.5</sub> NAAQS and 2006 PM<sub>2.5</sub> NAAQS, EPA believes that states that are included in this 38 state modeling domain will meet their section 110(a)(2)(D)(i)(I)

obligations to address the "significant contribution" and "interference with maintenance" requirements by complying with the requirements in this rule. With regard to the 1997 ozone NAAQS, EPA believes that states that are included in this 38 state modeling domain will meet their section 110(a)(2)(D)(i)(I) obligations to address the "significant contribution" and "interference with maintenance" requirements by complying with the requirements in this rule, except for the 10 states found to significantly contribute to nonattainment or interference of maintenance in either Houston or Baton Rouge (*i.e.*, Alabama, Arkansas, Georgia, Illinois, Indiana, Kentucky, Louisiana, Mississippi, Tennessee, and Texas). States that are in the 38 state modeling domain, and that are not found to be contributing significantly to nonattainment or interfering with maintenance for any NAAQS evaluated in the modeling for the final rule, could rely on this analysis as technical support that their existing or future interstate transport SIP submittals are adequate to address the transport requirements of 110(a)(2)(D)(i)(I). For example, this rule finds that South Carolina significantly contributes to nonattainment and interferes with maintenance of the 1997 ozone NAAQS and the 1997 PM<sub>2.5</sub> NAAQS in downwind states. The technical support for the rule does not show that South Carolina significantly contributes to nonattainment or interferes with maintenance of the 2006 PM<sub>2.5</sub> NAAQS in downwind states. EPA believes that South Carolina can make a negative declaration concluding that the state does not significantly contribute to nonattainment or interfere with maintenance in other states with regard to the 2006 PM<sub>2.5</sub> NAAQS.

### D. Correction of CAIR SIP Approvals

In this action, EPA is also correcting its prior approvals of CAIR related SIP submissions and CAA 110(a)(2)(D)(i) SIP submissions from Alabama, Arkansas, Connecticut, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maryland, Massachusetts, Minnesota, Mississippi, Missouri, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Virginia and West Virginia to rescind any statements that the SIP submissions either satisfy or relieve the state of the obligation to submit a SIP to satisfy the requirements of section 110(a)(2)(D)(i)(I) with respect to the 1997 ozone and/or 1997 PM<sub>2.5</sub> NAAQS or any statements that EPA's approval of the SIP submissions either relieve EPA of the obligation to promulgate a FIP or

remove EPA's authority to promulgate a FIP. This action is based on EPA's determination that those SIP approvals were in error to the extent they provided explicitly or implicitly that compliance with CAIR satisfies the requirements of 110(a)(2)(D)(i)(I) with respect to the 1997 ozone and 1997 PM<sub>2.5</sub> NAAQS. The July 2008 decision of the DC Circuit held, among other things, that the CAIR rule did not "achieve[] something measureable toward the goal of prohibiting sources 'within the State' from contributing to nonattainment or interfering with maintenance in 'any other State.'" *North Carolina*, 531 F.3d 908; see also, *e.g.*, *id.* at 916 (EPA not exercising its authority to make measureable progress towards the goals of section 110(a)(2)(D)(i)(I) because the emission budgets were insufficiently related to the statutory mandate). EPA's actions to approve CAIR SIP submittals as satisfying the requirements of section 110(a)(2)(D)(i)(I), based on the flawed determination in CAIR that compliance with CAIR satisfied those statutory requirements, were thus in error as were the separate actions taken to approve section 110(a)(2)(D)(i)(I) submissions that relied wholly or in part on CAIR.

The approval for Alabama titled "Approval and Promulgation of Implementation Plans; Alabama; Clean Air Interstate Rule" which is hereby corrected was originally published in the **Federal Register** on October 1, 2007 (72 FR 55659).

The approval for Arkansas titled "Approval and Promulgation of Implementation Plans; Arkansas; Clean Air Interstate Rule Nitrogen Oxides Ozone Season Trading Program" which is hereby corrected was originally published in the **Federal Register** on September 26, 2007 (72 FR 54556).

The approval for Connecticut titled "Approval and Promulgation of Air Quality Implementation Plans; Connecticut; State Implementation Plan Revision to Implement the Clean Air Interstate Rule" which is hereby corrected was originally published in the **Federal Register** on January 24, 2008 (73 FR 4105) and the approval for Connecticut titled "Approval and Promulgation of Air Quality Implementation Plans; Connecticut; Interstate Transport of Pollution" which is hereby corrected was originally published in the **Federal Register** on May 7, 2008 (73 FR 25516).

The approval for Florida titled "Approval and Promulgation of Implementation Plans; Florida; Clean Air Interstate Rule" which is hereby corrected was originally published in the **Federal Register** on October 12, 2007 (72 FR 58016).

The approval for Georgia titled "Approval and Promulgation of Implementation Plans; Georgia; Clean Air Interstate Rule" which is hereby corrected was originally published in the **Federal Register** on October 9, 2007 (72 FR 57202).

The approval for Illinois titled "Approval of Implementation Plans of Illinois: Clean Air Interstate Rule" which is hereby corrected was originally published in the **Federal Register** on October 16, 2007 (72 FR 58528).

The approval for Indiana titled "Limited Approval of Implementation Plans of Indiana: Clean Air Interstate Rule" which is hereby corrected was originally published in the **Federal Register** on October 22, 2007 (72 FR 59480) and the approval for Indiana titled "Approval and Promulgation of Air Quality Implementation Plans; Indiana; Clean Air Interstate Rule" which is hereby corrected was originally published in the **Federal Register** on November 29, 2010 (75 FR 72956).

The approval for Iowa titled "Approval and Promulgation of Implementation Plans; Iowa; Clean Air Interstate Rule" which is hereby corrected was originally published in the **Federal Register** on August 6, 2007 (72 FR 43539) and the approval for Iowa titled "Approval and Promulgation of Implementation Plans; Iowa; Interstate Transport of Pollution" which is hereby corrected was originally published in the **Federal Register** on March 8, 2007 (72 FR 10380).

The approval for Kentucky titled "Approval of Implementation Plans of Kentucky: Clean Air Interstate Rule" which is hereby corrected was originally published in the **Federal Register** on October 4, 2007 (72 FR 56623).

The approval for Louisiana titled "Approval and Promulgation of Implementation Plans; Louisiana; Clean Air Interstate Rule Sulfur Dioxide Trading Program" which is hereby corrected was originally published in the **Federal Register** on July 20, 2007 (72 FR 39741) and the approval for Louisiana titled "Approval and Promulgation of Implementation Plans; Louisiana; Clean Air Interstate Rule Nitrogen Oxides Trading Program" which is hereby corrected was originally published in the **Federal Register** on September 28, 2007 (72 FR 55064).

The approval for Maryland titled "Approval and Promulgation of Air Quality Implementation Plans; Maryland; Clean Air Interstate Rule" which is hereby corrected was originally published in the **Federal Register** on October 30, 2009 (74 FR 56117).

The approval for Massachusetts titled "Approval and Promulgation of Air

Quality Implementation Plans; Massachusetts; State Implementation Plan Revision to Implement the Clean Air Interstate Rule" which is hereby corrected was originally published in the **Federal Register** on December 3, 2007 (72 FR 67854).

The approval for Minnesota titled "Approval and Promulgation of Air Quality Implementation Plans; Minnesota; Interstate Transport of Pollution" which is hereby corrected was originally published in the **Federal Register** on June 2, 2008 (73 FR 31366).

The approval for Mississippi titled "Approval and Promulgation of Implementation Plans; Mississippi; Clean Air Interstate Rule" which is hereby corrected was originally published in the **Federal Register** on October 3, 2007 (72 FR 56268).

The approval for Missouri titled "Approval and Promulgation of Implementation Plans; Missouri; Clean Air Interstate Rule" which is hereby corrected was originally published in the **Federal Register** on December 14, 2007 (72 FR 71073) and the approval for Missouri titled "Approval and Promulgation of Implementation Plans; Missouri; Interstate Transport of Pollution" which is hereby corrected was originally published in the **Federal Register** on May 8, 2007 (75 FR 25975).

The approval for New York titled "Approval and Promulgation of Implementation Plans; New York; Clean Air Interstate Rule" which is hereby corrected was originally published in the **Federal Register** on January 24, 2008 (73 FR 4109).

The approval for North Carolina titled "Approval of Implementation Plans; North Carolina; Clean Air Interstate Rule" which is hereby corrected was originally published in the **Federal Register** on October 5, 2007 (72 FR 56914) and the approval for North Carolina titled "Approval and Promulgation of Air Quality Implementation Plans; North Carolina; Clean Air Interstate Rule" which is hereby corrected was originally published in the **Federal Register** on November 30, 2009 (74 FR 62496).

The approval for Ohio titled "Approval and Promulgation of Air Quality Implementation Plans; Ohio; Clean Air Interstate Rule" which is hereby corrected was originally published in the **Federal Register** on February 1, 2008 (73 FR 6034) and the approval for Ohio titled "Approval and Promulgation of Air Quality Implementation Plans; Ohio; Clean Air Interstate Rule" which is hereby corrected was originally published in the **Federal Register** on September 25, 2009 (74 FR 48857).

The approval for Pennsylvania titled "Approval and Promulgation of Air Quality Implementation Plans; Pennsylvania; Clean Air Interstate Rule; NO<sub>x</sub> SIP Call Rule; Amendments to NO<sub>x</sub> Control Rules" which is hereby corrected was originally published in the **Federal Register** on December 10, 2009 (74 FR 65446).

The approval for South Carolina titled "Approval of Implementation Plans of South Carolina: Clean Air Interstate Rule" which is hereby corrected was originally published in the **Federal Register** on October 9, 2007 (72 FR 57209) and the approval for South Carolina titled "Approval and Promulgation of Air Quality Implementation Plans; South Carolina; Clean Air Interstate Rule" which is hereby corrected was originally published in the **Federal Register** on October 16, 2009 (74 FR 53167).

The approval for Virginia titled "Approval and Promulgation of Air Quality Implementation Plans; Virginia; Clean Air Interstate Rule Budget Trading Programs" which is hereby corrected was originally published in the **Federal Register** on December 28, 2007 (72 FR 73602).

The approval for West Virginia titled "Approval and Promulgation of Air Quality Implementation Plans; West Virginia; Clean Air Interstate Rule" which is hereby corrected was originally published in the **Federal Register** on December 18, 2007 (72 FR 71576) and the approval for West Virginia titled "Approval and Promulgation of Air Quality Implementation Plans; West Virginia; Clean Air Interstate Rule" which is hereby corrected was originally published in the **Federal Register** on August 4, 2009 (74 FR 38536).

EPA is taking this final action without prior opportunity for notice and comment because EPA finds, for good cause, that notice and public procedure thereon are unnecessary and not in the public interest. Section 553(b)(B) of the Administrative Procedure Act provides that the notice and comment requirements in section 553 do not apply when the agency for good cause finds that notice and public procedure there on are impracticable, unnecessary, or contrary to the public interest. 5 U.S.C. 553(b)(B). Section 307(d)(1) of the CAA in turn provides that the requirements of section 307(d) do not apply in the case of a rule or circumstance referred to in section 553(b)(A) or section 553(b)(B) of the Administrative Procedure Act in Title 5. 42 U.S.C. 7607(1).

EPA finds that notice and public procedure are unnecessary because EPA has no discretion given the specific

circumstances presented in this case. EPA is bound by the decisions of the courts and must act in accordance with those decisions. EPA must accept the Court's conclusion that compliance with CAIR does not satisfy the requirements of CAA section 110(a)(2)(D)(i)(I) and lacks discretion to reach a different conclusion. This correction is a ministerial matter consistent with the decisions of the courts. For these reasons, it is unnecessary to provide an opportunity for notice and comment.

## V. Analysis of Downwind Air Quality and Upwind State Emissions

### A. Pollutants Regulated

To address interstate transport of air pollution, EPA must choose which pollutants to regulate relevant to significant contribution to nonattainment or interference with maintenance of the NAAQS of concern downwind. This section of the preamble discusses the pollutants regulated under the final Transport Rule.

#### 1. Background

Based on scientific and technical information, as well as EPA's air quality modeling, EPA concluded for CAIR that the most effective approach to reducing the contribution of interstate transport to PM<sub>2.5</sub> was to control SO<sub>2</sub> and NO<sub>x</sub> emissions. For CAIR, EPA did not limit emissions of other components of PM<sub>2.5</sub>, noting that "current information relating to sources and controls for other components identified in transported PM<sub>2.5</sub> (carbonaceous particles, ammonium, and crustal materials) does not, at this time, provide an adequate basis for regulating the regional transport of emissions responsible for these PM<sub>2.5</sub> components" (69 FR 4582).

With respect to ozone transport, EPA has previously concluded that it is proper to control ozone-season NO<sub>x</sub> emissions. For CAIR and the NO<sub>x</sub> SIP Call programs, EPA based this conclusion on the assessment of ozone transport conducted by the Ozone Transport Assessment Group (OTAG) in the mid-1990s. The OTAG Regional and Urban Scale Modeling and Air Quality Analysis Work Groups concluded that regional NO<sub>x</sub> emission reductions are effective in producing ozone benefits that grow with increasing regional NO<sub>x</sub> abatement.

The relative importance of NO<sub>x</sub> and VOC in ozone formation and control varies with local and time-specific factors, including the relative amounts of VOC and NO<sub>x</sub> present. In rural areas and many urban areas with high concentrations of VOC from biogenic sources, ozone formation and control is

governed by NO<sub>x</sub>. In some urban core situations, NO<sub>x</sub> concentrations can be high enough relative to VOC to suppress ozone formation locally, but still contribute to increased ozone downwind from the city. In such situations, VOC reductions are most effective at reducing ozone within the urban environment and immediately downwind. The formation of ozone increases with temperature and sunlight, which is one reason ozone levels are higher during the summer. Increased temperature also increases emissions of volatile man-made and biogenic organics and can indirectly increase NO<sub>x</sub> as well (e.g., increased electricity generation for air conditioning). Summertime conditions also bring increased episodes of large scale stagnation of air masses, which promote the build-up of direct emissions and pollutants formed through atmospheric reactions over large regions. Authoritative assessments of ozone control approaches have concluded that, for reducing regional scale ozone transport, a NO<sub>x</sub> control strategy is most effective, whereas VOC reductions are generally most effective locally, in more dense urbanized areas.

Studies conducted since the 1970s established that ozone occurs on a regional scale (i.e., thousands of kilometers) over much of the eastern U.S., with elevated concentrations occurring in rural as well as metropolitan areas. While substantial progress has been made in reducing ozone in many urban areas, regional-scale ozone transport is still an important component of high ozone concentrations during the extended summer ozone season. A series of more recent progress reports discussing the effect of the NO<sub>x</sub> SIP Call reductions can be found on EPA's Web site at: <http://www.epa.gov/airmarkets/progress/progress-reports.html>.

More recent assessments of ozone (including those conducted for the Regulatory Impact Analysis for the ozone standards in 2008) continue to show the importance of NO<sub>x</sub> transport as a factor in ozone formation. For addressing interstate ozone transport in CAIR, EPA required NO<sub>x</sub> emission reductions but did not include requirements for VOCs. EPA believes that VOCs from some upwind states do indeed have an impact in some nearby downwind states, particularly over short transport distances. EPA expects that states, typically in local nonattainment planning, would benefit from examining the extent to which VOC emissions affect ozone pollution levels within and near urban nonattainment areas, and states may identify areas where multi-

state VOC strategies might assist in attainment planning for meeting the 8-hour standard. However, EPA continues to believe that the most effective regional pollution control strategy for mitigation of interstate transport of ozone remains NO<sub>x</sub> emission reductions.

2. Which pollutants did EPA propose to control for purposes of PM<sub>2.5</sub> and ozone transport?

For the proposed rule, EPA concluded that its findings in CAIR regarding the nature of pollutant contributions are still appropriate. EPA proposed to require SO<sub>2</sub> and annual NO<sub>x</sub> emission reductions to control PM<sub>2.5</sub> transport and to require ozone-season NO<sub>x</sub> emission reductions to control ozone transport. In the proposal, EPA discussed and requested comment on the inclusion of southern states in the annual NO<sub>x</sub> program for PM<sub>2.5</sub> control.

#### 3. Comments and Responses

EPA received no adverse comments on its proposal to regulate SO<sub>2</sub> for addressing PM<sub>2.5</sub> transport, the proposal not to regulate direct PM<sub>2.5</sub> or organic PM<sub>2.5</sub> precursors, and the proposal to focus ozone-season efforts on NO<sub>x</sub> and not to regulate VOCs.

One commenter questioned EPA's regulation of NO<sub>x</sub> for purposes of addressing PM<sub>2.5</sub> transport in all states (including northern states with cooler climates and higher nitrate deposition). Several commenters, representing southern state air quality agencies and regulated sources in southern states, disagreed with EPA's proposed regulation of annual NO<sub>x</sub> emissions for all regulated states. These commenters, while not disagreeing with the need for regulation of SO<sub>2</sub>, observed that in EPA's modeling analysis, contributions from certain southern states' NO<sub>x</sub> emissions to PM<sub>2.5</sub> in downwind states were relatively small.

Accordingly, these commenters argued that either (1) EPA should remove NO<sub>x</sub> as a precursor analyzed for PM<sub>2.5</sub> contribution from those states, or (2) the required remedy for emission reductions in those states should not require reductions in annual NO<sub>x</sub>.

For the final rule, EPA retains the approach for regulated pollutants in the proposal, which regulates annual NO<sub>x</sub> and SO<sub>2</sub> for states affecting downwind state PM<sub>2.5</sub> nonattainment and maintenance sites, and ozone-season NO<sub>x</sub> for states impacting downwind state ozone nonattainment and maintenance. EPA considered commenters' requests to remove some states from the annual NO<sub>x</sub> program. However, EPA believes that it is



appropriate to establish a cap on these states' annual NO<sub>x</sub> emissions, in part to ensure the continued annual operation of existing control equipment that would prevent substantial increases in NO<sub>x</sub> emissions. EPA believes that without these reductions, increased "nitrate replacement" could occur, a known atmospheric phenomenon whereby some of the sulfate reductions due to SO<sub>2</sub> emission reductions are eroded by increases in nitrate concentrations due solely to those SO<sub>2</sub> reductions.<sup>16</sup> This is an especially pertinent concern for southern states which have significant impacts on northern receptors in colder climates where nitrate concentrations are generally higher. For example, Alabama and Tennessee are both linked to Washtenaw County, MI for 24-hour PM<sub>2.5</sub>; North Carolina is linked to Lancaster County, PA for 24-hour PM<sub>2.5</sub>; and Texas is linked to Madison County, IL for both annual and 24-hour PM<sub>2.5</sub>. All of these downwind areas have appreciable nitrate deposition contributing to nonattainment and maintenance concerns for the PM<sub>2.5</sub> NAAQS. If the states linked to those receptors were to make SO<sub>2</sub> reductions only, their beneficial impact on downwind air quality would be partially eroded by nitrate replacement. EPA therefore believes that it is reasonable to seek both SO<sub>2</sub> and NO<sub>x</sub> reductions from states included in the Transport Rule program that are found to significantly contribute to nonattainment or interfere with maintenance of the PM<sub>2.5</sub> NAAQS in downwind states.

In addition, EPA notes that there would be important disbenefits to effectively removing CAIR's existing annual NO<sub>x</sub> requirements in those states. If EPA were to allow annual NO<sub>x</sub> emissions to increase for those states, there would be potentially harmful effects on visibility, nitrogen deposition, and other aspects of human and environmental health.

#### *B. Baseline for Pollution Transport Analysis*

Implementing the mandate of CAA section 110(a)(2)(D)(i)(I) requires EPA to determine which states significantly contribute to nonattainment and interfere with maintenance of the NAAQS in other states, as well as to

quantify the emissions in each state that must be eliminated. This process begins with an analysis of baseline emissions. Baseline emissions are the emissions that would occur in each state if EPA did not promulgate the Transport Rule. To conduct such analysis, EPA generally takes into account emission limitations that are currently, and will continue to be, in place. From that baseline, EPA analyzes whether additional reductions are necessary beyond those already mandated by existing emission limitation requirements. For example, the base case used in CAIR reflected the reductions already required by the NO<sub>x</sub> SIP Call, which remained in effect even after the CAIR emission reduction requirements took effect.

The unique legal situation addressed by the Transport Rule necessarily affects the quantification of baseline emissions. Specifically, because the Transport Rule will replace CAIR, EPA cannot consider reductions associated with CAIR in the "base case" (*i.e.*, analytical baseline emissions scenario). If EPA were to consider all reductions associated with CAIR in the "base case," the baseline emissions would not adequately reflect the true 2012 baseline in each state (*i.e.*, the emissions that would occur in each state in 2012 if the Transport Rule did not require any reductions in that state). Similarly, if EPA were to treat the capital investments that have already been made to meet the requirements of CAIR as new costs rather than treating them as "sunk" capital costs, EPA's analysis would not accurately reflect the cost of emission reductions required by the Transport Rule. As explained below, EPA's analysis both properly considered all capital investments made in response to CAIR and properly recognized that, after CAIR is terminated, the emission limitations imposed by CAIR will cease to exist.

In 2005 EPA promulgated CAIR, which required large electric generating units in 29 states to make phase I emission reductions in NO<sub>x</sub> emissions starting in 2009, phase I emission reductions in SO<sub>2</sub> starting in 2010 and phase II reductions in emissions of both pollutants starting in 2015. On July 11, 2008, the DC Court of Appeals held that CAIR had "more than several fatal flaws," *North Carolina*, 531 F.3d at 901, and remanded and vacated the rule, *id.* at 930. The Court subsequently granted EPA's petition for rehearing in part and remanded CAIR without vacatur "for EPA to conduct further proceedings consistent with" the Court's July 11, 2008 opinion. *North Carolina*, 550 F.3d 1176. The Court explained that it was "allowing CAIR to remain in effect until

it is replaced by a rule consistent with [the July 11, 2008] opinion" because this "would at least temporarily preserve the environmental values covered by CAIR." *Id.* at 1178. Moreover, the Court stated that it did not "intend to grant an indefinite stay of the effectiveness of" the July 11, 2008 order vacating CAIR. *Id.* In summary, the Court determined that CAIR was fatally flawed and could remain in effect only as a stopgap measure until EPA could act to replace it.

Thus, unlike most other regulatory requirements (such as the Acid Rain Program under CAA Title IV, the NO<sub>x</sub> Budget Trading Program under the NO<sub>x</sub> SIP Call, New Source Performance Standards, and state laws and consent orders requiring emission reductions), the emission limitations contained in CAIR are only temporary. Moreover, the duration of these limitations is directly tied to the Transport Rule. The Transport Rule replaces CAIR. Thus, CAIR itself will be terminated for the SO<sub>2</sub>, annual NO<sub>x</sub>, and ozone-season NO<sub>x</sub> control periods starting in 2012 when the emission limitations established in the final Transport Rule for those control periods take effect (January 1, 2012 for the annual control periods and May 1, 2012 for the ozone-season control period). For this reason, emission reductions made to comply with CAIR cannot be treated as if they were emission reductions achieved to comply with statutory provisions, rules, consent decrees, and other enforceable requirements that establish permanent emission limitations. EPA takes reductions made to comply with permanent limitations into consideration when quantifying each state's baseline emissions for the purpose of analyzing whether its emissions significantly contribute to nonattainment or interfere with maintenance in another state. However, the unique legal status of CAIR and its replacement with the Transport Rule distinguish the emission reductions required by CAIR from those of other regulatory requirements. Since the limitations and emission reduction requirements in CAIR are temporary and will be terminated by the Transport Rule, they must be excluded from the Transport Rule's base case analysis.

Some comments on the Transport Rule proposal claim that EPA's treatment of CAIR is inconsistent with the treatment, in prior rulemakings, of the Acid Rain Program and the NO<sub>x</sub> SIP Call. Such comments ignore the unique legal status of CAIR, and EPA therefore rejects these claims.

A simple example illustrates this point. Assume state Z's emissions before

<sup>16</sup> SO<sub>2</sub> reductions successfully decrease atmospheric formation of ammonium sulfate, but in doing so they "free up" the ammonia component that would otherwise have reacted with SO<sub>2</sub> and is now free to react with NO<sub>x</sub> instead, causing a "rebound effect" partially eroding the improvement in PM<sub>2.5</sub> concentrations. This effect can be mitigated with tandem NO<sub>x</sub> reductions.

CAIR were 2,000 tons and that state Z was required by CAIR to reduce its emissions to 1,000 tons. If EPA were to determine that state Z's baseline emissions were 1,000 tons and then conclude, based on that assumption, that no additional reductions in state Z are necessary because state Z does not significantly contribute to downwind nonattainment unless its emissions exceed 1,500 tons, then state Z would not be covered by the Transport Rule. However, the Transport Rule will terminate all CAIR requirements in all CAIR states regardless of whether they are covered by the Transport Rule. Thus, after promulgation of the Transport Rule, state Z would again be allowed, and would be projected in this example, to emit 2,000 tons. In other words, state Z would be allowed to significantly contribute to nonattainment and/or interfere with maintenance in other states—a result that would be inconsistent with the statutory mandate of CAA section 110(a)(2)(D)(i)(I). On the other hand, if EPA assumes state Z's baseline emissions are 2,000 tons as projected without CAIR in place, EPA can properly determine whether, if state Z were allowed to emit that amount (*i.e.*, the amount state Z would be projected to emit if excluded from the Transport Rule), the state would significantly contribute to nonattainment or interfere with maintenance in any other state. In other words, EPA can determine the stringency of emission limitations needed (if any) to replace those that were established by CAIR in order to ensure that state Z prohibits all emissions that significantly contribute to nonattainment or interfere with maintenance in other states.

In fact, commenters' suggestion that the Transport Rule base case should include CAIR would cause the anomalous result of excluding sources in a state from the Transport Rule because of their CAIR-required emission reductions while simultaneously eliminating those CAIR emission reduction requirements. If EPA's base case analysis were to assume erroneously that reductions from CAIR would continue indefinitely, a state currently covered by CAIR, but not covered by the Transport Rule, would have no CAIR requirements once the Transport Rule programs began and so could increase emissions beyond the CAIR limitations. Downwind areas that are in attainment (and are not experiencing interference with maintenance of such attainment) solely because of emission reductions required by CAIR could again face nonattainment

or interference with maintenance problems because the current protection from upwind pollution from such an upwind state would not be replaced. In short, the analysis of whether a state should be included in a rule eliminating and replacing CAIR cannot logically assume that CAIR remains in place. For these reasons, EPA believes it is reasonable to use a base case that does not assume that the CAIR reduction requirements will continue to be achieved and so does not include CAIR-specific emission reductions.

As a result, EPA's 2012 base case shows emissions higher than current levels in some states. In the absence of the CAIR SO<sub>2</sub> and NO<sub>x</sub> programs that EPA has been directed to eliminate and replace, utility emissions in CAIR states will be limited only by non-CAIR constraints including the Acid Rain Program, the NO<sub>x</sub> SIP Call, New Source Performance Standards, any state laws and consent order requiring emission reductions, and any other permanent and enforceable binding reduction commitments. This will lead to increased emissions in some states in the 2012 base case relative to current emissions. For example, efforts to comply with the Acid Rain Program at the least cost may occur, in some cases, without the operation of existing scrubbers through use of readily available, inexpensive Title IV allowances.

It is important to note that, to the extent that emission reductions currently required by CAIR are also reflected in emission reduction requirements under the Acid Rain Program, the NO<sub>x</sub> SIP Call, New Source Performance Standards, any state laws and consent orders requiring emission reductions, and any other enforceable binding reduction commitments, such reductions are accounted for in EPA's 2012 base case. Some commenter claimed that in excluding CAIR-specific emission reductions from the base case, EPA ignores non-CAIR legal requirements (*e.g.*, in Title V permits) that may prevent sources from increasing emissions above CAIR levels. Such allegations are incorrect. As discussed elsewhere in this preamble, EPA accounted for any Title V permits, consent decrees, state rules, and other enforceable limitations on sources' emissions; if these non-CAIR limitations effectively restrain a state's emissions to not exceed the state's CAIR limitations, EPA's base case modeling would reflect this outcome. Commenters also assert that utilities are unlikely to dismantle or discontinue running the installed controls to the point of returning to pre-CAIR emission levels. EPA agrees that

installed controls are not likely to be physically dismantled, and as discussed elsewhere in this preamble, EPA's analysis properly treats the capital investments made in emission controls attributed to CAIR as "sunk" capital costs (*i.e.*, capital costs already obligated in the past) that are not included as costs of meeting Transport Rule requirements.

Our cost analysis for significant contribution reflects on-the-ground realities. Investments in pollution control equipment were made in response to CAIR requirements. Those expenditures are "sunk" capital costs, meaning that those investments were committed in the past, prior to the Transport Rule. Adding the capital costs of that equipment into the costs of Transport Rule emission reduction options would be incorrect; those capital investments are represented in place in the base case.

However, given ongoing costs associated with operating these controls, EPA believes sources would have an economic incentive to discontinue operating installed controls, or to operate those controls less effectively, except to the extent non-CAIR legal requirements mandate emission reductions or to the extent that sources would find it economic to operate the controls for non-CAIR market-based emission control programs. EPA properly treats the costs of operating controls installed to meet CAIR requirements as costs of meeting Transport Rule requirements.<sup>17</sup> EPA's base case accounts for non-CAIR requirements and does not make the unreasonable assumption that installed controls would be operated to achieve emission reductions that are not necessary to meet non-CAIR requirements. For all of these reasons, EPA rejects commenters' claims that the base case is "unrepresentative" or lacks "a rational relationship to the real world."

### C. Air Quality Modeling To Identify Downwind Nonattainment and Maintenance Receptors

#### 1. Emission Inventories

To inform air quality modeling for the development of the final Transport Rule, EPA developed emission

<sup>17</sup> For more details on how EPA models economic operation of existing pollution control equipment in the Transport Rule base case, please see Section 6 ("Dispatchable Controls") in "Updates to EPA Base Case v3.02 EISA Using the Integrated Planning Model" Technical Support Document (TSD) for the Transport Rule Docket ID No. EPA-HQ-OAR-2009-0491, U.S. EPA, July 2010 (available at [http://www.epa.gov/airmarkets/progsregs/epa-ipm/IPM\\_Update\\_Documentation.pdf](http://www.epa.gov/airmarkets/progsregs/epa-ipm/IPM_Update_Documentation.pdf)).

inventories for a 2005 base year and for 2012 and 2014 projections. The inventories for all years include emission estimates for EGUs, non-EGU point sources, stationary nonpoint sources, onroad mobile sources, nonroad mobile sources, and biogenic (non-human) sources. EPA's air quality modeling relies on this comprehensive set of emission inventories because emissions from multiple source categories are needed to model ambient air quality and to facilitate comparison of model outputs with ambient measurements. In addition, EPA considers all relevant emissions (regardless of source category) when determining whether a state is found to be significantly contributing to or interfering with maintenance of a particular NAAQS in another state.

The emission inventories were processed through the Sparse Matrix Operator Kernel Emissions (SMOKE) Modeling System version 2.6 to produce the gridded, hourly, speciated, model-ready emissions for input to the CAMx air quality model. Additional information on the development of the emission inventories and related data sets for emissions modeling are provided in the Emission Inventory Final Transport Rule TSD.

On October 27, 2010, EPA issued a NODA on "Revisions to Emission Inventories." The NODA's primary purpose was to notify the public about changes to emission inventories made since the proposal modeling. The affected emission sectors were non-EGU stationary point sources, nonpoint sources, and Category 3 commercial marine vessel sources. The NODA also presented a newly released model for developing onroad mobile source emissions for use in air quality modeling for the final Transport Rule.

The major comments received in response to the emission inventories and modeling included in the proposed Transport Rule and the October 27 NODA are summarized in the following subsections. EPA agreed with the comments summarized below and adopted technical corrections or updates to the emission inventories and modeling accordingly. For EPA to be able to take appropriate action, comments on the emission inventories needed to be specific enough to allow for credible alternative data sources to be located. EPA adopted corrections from comments on in-place control programs or devices where the controls were enforceable and quantifiable.

#### a. Foundation Emission Inventory Data Sets

EPA developed emission data representing the year 2005 to support air quality modeling of a base year from which future air quality could be forecasted. EPA used the 2005 National Emission Inventory (NEI), version 2 from October 6, 2008, as the chief basis for the U.S. inventories supporting the 2005 air quality modeling. This inventory includes 2005-specific data for point and mobile sources, while most nonpoint data were carried forward from version 3 of the 2002 NEI. The future base case scenarios modeled for 2012 and 2014 represent predicted emission reductions primarily from already promulgated federal measures.

EPA used a 2006 Canadian inventory and a 1999 Mexican inventory for the portions of Canada and Mexico within the air quality modeling domains for all modeled scenarios. Emissions from Canada and Mexico for all source sectors (including EGUs) in these countries were held constant for all base- and future-year cases. EPA made this assumption because it does not currently have sufficient data to support projections of future-year emissions from Canada and Mexico.

#### b. Development of Emission Inventories for EGUs

The annual NO<sub>x</sub> and SO<sub>2</sub> emissions for EGUs in the 2005 NEI v2 are based primarily on data from continuous emissions monitoring systems (CEMS), with other EGU pollutants estimated using emission factors and annual heat input data reported to EPA. Although only NO<sub>x</sub> and SO<sub>2</sub> are considered for control in this rule, emissions for all criteria air pollutants are necessary to model air quality. For EGUs without CEMS, EPA used data submitted to the NEI by the states. For more information on the details of how the 2005 EGU emissions were developed, see the Emissions Inventory Final Rule TSD.

Commenters stated that some point sources that were classified as non-EGUs in the proposal modeling were actually EGUs, resulting in double counting of emissions in future-year modeling. EPA reviewed its assignment of EGUs and non-EGUs and reclassified EGU sources found to be in the non-EGU inventory for the updated 2005 EGU inventory to prevent double counting of future-year emissions.

The future base case scenarios for EGUs reflect projected changes to fuel usage and economics, as described in the Emission Inventory Final Rule TSD. Future year base case EGU emissions that predict SO<sub>2</sub>, NO<sub>x</sub>, and PM<sub>2.5</sub> were

obtained from version 4.10 FTransport of the Integrated Planning Model (IPM) outputs (<http://www.epa.gov/airmarkt/progsregs/epa-ipm/index.html>). The IPM is a multi-regional, dynamic, deterministic linear programming model of the U.S. electric power sector; version 4.10 FTransport reflects state rules and consent decrees through December 1, 2010, and incorporates public comments on existing controls submitted to EPA through both the Transport Rule-related notice and comment process as well as the proposed Mercury and Air Toxics Standards Information Collection Request (ICR). The operation of existing SO<sub>2</sub> or NO<sub>x</sub> advanced controls (e.g., scrubber, SCR) on units that were not required to operate those controls for compliance with Title IV, New Source Review (NSR), state settlements, or state-specific rules was projected by IPM on the basis of providing least cost operation of the power generation system subject to existing regulatory requirements except CAIR (see baseline discussion in section V.B).

Additionally, IPM v.4.10\_FTransport incorporates comments received during the rulemaking process. Fuel-related updates include comment-driven unit-specific limitations on 2012 coal rank selection, limiting unrestricted switching from bituminous to subbituminous coal by imposing boiler modification costs for those units shifting from bituminous to subbituminous coal without historical precedent, and a correction of waste coal prices. Pollution control-related updates include keying the performance assumptions for FGD and SCR more closely to historic performance data, and the inclusion of dry sorbent injection (DSI), a SO<sub>2</sub> removal technology. Other notable updates include revised assumptions on the heat rate and consequent dispatching of cogenerating units and incorporation of additional planned retirements. Further details on these updates are available in the IPM Documentation, available in the docket and at: <http://www.epa.gov/airmarkets/progsregs/epa-ipm/index.html>.

#### c. Development of Emission Inventories for Non-EGU Point Sources

Details on the development of emission inventories are available in the Emission Inventory Final Rule TSD. In both the proposal and final modeling, controls on industrial boilers installed under the NO<sub>x</sub> SIP call were assumed to have been implemented by 2005 and captured in the 2005 NEI v2. The non-EGU point source emissions were updated from the 2005 NEI and the

emissions used for the proposal modeling through the incorporation of comments on the proposal emissions values, previously unknown facility closures, and through other data improvements as identified by EPA analyses.

EPA does not factor in economic growth to develop non-EGU point source emission projections because analysis of historical emission trends and economic data did not support using economic growth to project non-EGU emissions. More details on the rationale for not applying economic growth to non-EGU industrial sources can be found in Appendix D of the Regulatory Impact Assessment (RIA) for the PM NAAQS rule (<http://www.epa.gov/ttn/ecas/regdata/RIAs/Appendix%20D—Inventory.pdf>). Although projections based on economic growth were not included, EPA did include reductions resulting from plant and unit closures, local and federal consent decrees, and several Maximum Achievable Control Technology (MACT) standards.

For non-EGU point sources, local control programs that may be necessary for areas to attain the annual PM<sub>2.5</sub> NAAQS and the ozone NAAQS are only included in the future base case projections when specific information about existing enforceable local controls was provided.

Since aircraft at airports were treated as point emissions sources in the 2005 NEI v2, we applied projection factors based on activity growth projected by the Federal Aviation Administration Terminal Area Forecast (TAF) system, published in December 2008.

A number of comments were received on the stationary non-EGU point source inventories. Below is a summary of the major comments that impacted the stationary non-EGU point source inventories for the final modeling:

*Comment:* Commenters stated that EPA did not properly represent some point source emissions in base-year and future-year inventories due to facility and unit closures, consent decrees, emission caps, control programs, and alternative emission estimates.

*Response:* EPA reviewed the sources referenced in the individual comments regarding the base-year and future-year inventories. In cases where credible alternative data were available, EPA revised the emission inventories to incorporate additional facility and unit closures, consent decrees, emission caps, control programs, enforceable local controls, and alternative emission estimates.

*Comment:* Commenters stated that EPA should include controls from the

National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE NESHAP) in our modeling.

*Response:* EPA included reductions expected to be achieved by the RICE NESHAP across the United States in our final modeling of stationary non-EGU and nonpoint sources.

*Comment:* Commenters stated that EPA was not properly representing existing or planned controls for cement plants.

*Response:* EPA updated control and projection information for cement plants based on the latest available data and cement sector-specific modeling results.

*Comment:* EPA specifically requested comments on whether to incorporate emission reduction estimates from the NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters (75 FR 32006). Commenters stated that emission reduction estimates should not be included until the rule became final.

*Response:* EPA did not incorporate emission reduction estimates from the NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters (75 FR 32006) into the proposal or final modeling because the rule was not final at the time the modeling was performed. Note that reductions from this rule would not have impacted the 2012 base case due to its implementation schedule, and only the 2014 emissions would have been affected.

#### d. Development of Emission Inventories for Onroad Mobile Sources

The onroad emissions in the proposal modeling were primarily based on the National Mobile Inventory Model (NMIM) monthly, county, and process level emissions along with gasoline exhaust emissions from a fall 2008 draft version of the Motor Vehicle Emission Simulator (MOVES). A major comment on the proposal modeling for onroad mobile sources was the following:

*Comment:* Commenters stated that EPA should use a publicly released version of MOVES for its final modeling.

*Response:* EPA updated the final modeling to use data from the publicly released version of the MOVES 2010 model because the model became available in time for inclusion of its results in the final modeling. It was not used for the proposal modeling because it was not available at the time the modeling was performed.

In the final Transport Rule modeling, EPA used MOVES 2010 state-month level emissions for all criteria pollutants

and all modes (evaporative, exhaust, brake wear and tire wear) and allocated those emissions to counties according to state-county NMIM emissions ratios. For California (the emissions for which are included to support the coarse modeling domain), the onroad mobile emissions data were derived from data provided by the state. These data were augmented with MOVES 2010 outputs for NH<sub>3</sub> because data for that pollutant had not been provided. Additional information on the approach to onroad mobile source emissions is available in the Emission Inventory Final Rule TSD.

In the future-year base modeling for mobile sources, all national measures available at the time of modeling were included. The future scenarios for mobile sources reflect projected changes to fuel usage, as described in the Emission Inventory Final Rule TSD. Emissions for these years reflect onroad mobile control programs including the Light-Duty Vehicle Tier 2 Rule, the Onroad Heavy-Duty Rule, the Light-Duty Vehicle Greenhouse Gas Rule, the Renewable Fuel Standards Rule, and the Mobile Source Air Toxics (MSAT) final rule.

#### e. Development of Commercial Marine Category 3 Vessel Emission Inventories

For the 2005 modeling, the commercial marine category 3 (C3) vessel emissions, a portion of nonroad mobile emissions, were augmented with gridded 2005 emissions from the previous modeling efforts for the rule called “Control of Emissions from New Marine Compression-Ignition Engines at or Above 30 Liters per Cylinder.” Emissions out to 200 nautical miles from the coastline were allocated to states in the proposal modeling. A major comment on the proposal modeling was the following:

*Comment:* Commenters stated that emissions from commercial marine sources (a component of the nonroad emissions in the summaries that were provided for the NPR) were too high.

*Response:* EPA reviewed the approach used for commercial marine C<sub>3</sub> emissions in the proposal. In the final modeling, instead of using the boundary of 200 nautical miles from the coast as was used in the proposal, EPA adopted the Mineral Management Service state-federal water boundaries that assign state waters 3–10 nautical miles from the coast. This approach is consistent with the approach used in the 2005 and 2008 National Emission Inventories. In addition, the category 3 commercial marine emissions were adjusted to reflect a coordination between the Emissions Control Area proposal to the International Maritime Organization

(EPA-420-F-10-041, August 2010) control strategy; reductions of NO<sub>x</sub>, VOC, and CO emissions for new C<sub>3</sub> engines starting in 2011; and fuel sulfur limits that go into effect as early as 2010.

#### f. Development of Emission Inventories for Other Nonroad Mobile Sources

The nonroad mobile source emissions for sources other than C<sub>3</sub> marine were primarily based on NMIM monthly, county, and process level emissions from the 2005 NEI v2. These emissions were unchanged from proposal modeling, except for PM emissions in California that were updated to correct for missing emissions in a few counties and source categories.

Nonroad mobile emissions were created for future years with NMIM using an approach consistent with that used for 2005. The nonroad emissions for 2012 and 2014 were calculated using NMIM future-year equipment population estimates and control programs. Nonroad mobile emission reductions for 2012 and 2014 include reductions to locomotives, various nonroad engines including diesel engines and various marine engine types, fuel sulfur content, and evaporative emissions standards. A more comprehensive list of control programs included for mobile sources is available in the Emission Inventory Final Rule TSD.

The 2012 and 2014 nonroad mobile emissions for locomotives and category 1 and 2 (C1 and C2) commercial marine vessels were based on emissions published in EPA's Locomotive Marine Rule, Regulatory Impact Assessment, Chapter 3.

#### g. Development of Nonpoint Emission Inventories

For the proposal Transport Rule modeling, EPA augmented the 2002 NEI nonpoint emission inventory with a non-California Western Regional Air Partnership (WRAP) oil and gas exploration inventory, which includes emissions in several states within the eastern U.S. 12 km modeling domain and additional states within the national 36 km modeling domain. For the final Transport Rule modeling, EPA updated the nonpoint emission estimates for oil and gas sources. EPA continued to use the same WRAP inventory from the proposal, emissions in Texas and Oklahoma were updated but for the final modeling with data from the Texas Commission on Environmental Quality (TCEQ) and the Oklahoma Department of Environmental Quality (DEQ), respectively.

The average-year county-based inventories for wildfire and prescribed burning emissions were unchanged between the proposal and final modeling.

For stationary nonpoint sources, local control programs that may be necessary for areas to attain the annual PM<sub>2.5</sub> NAAQS and the ozone NAAQS are not included in the future base case projections unless specific information about existing enforceable controls was available (e.g., ozone SIP controls from Ozone Transport Commission rules that impact source categories such as Consumer Products, Solvent Cleaning, Adhesives and Sealants). EPA specifically requested comment on local control data as part of the proposal and the October 27 NODA, and incorporated any usable data that was provided into the final inventories.

For stationary nonpoint sources, refueling emissions were projected using the refueling results from the NMIM runs performed for the onroad mobile sector.

Portable fuel container emissions were projected to future years using estimates from previous OTAQ rulemaking inventories. Emissions of ammonia and dust from animal operations were projected based on animal population data from the Department of Agriculture and EPA. Residential wood combustion was projected by replacement of obsolete wood stoves with new wood stoves and a 1 percent annual increase in fireplaces. Landfill emissions were projected using MACT controls. All other nonpoint sources were held constant between 2005 and the future years.

Some specific adjustments to the inventories were made in the final modeling to address comments that were received as described below. Area source MACT programs and controls from the RICE NESHAP were included in the final modeling to address submitted comments, as were fuel sulfur controls that were enforceable and that take effect by 2014.

The major comments that impacted the nonpoint sectors are as follows:

*Comment:* Commenters stated that the SO<sub>2</sub> emissions from industrial fuel combustion in Nebraska EPA are too high.

*Response:* EPA reviewed the NEI 2002-based data that had been used for the proposal modeling and determined that emissions from the 2005 inventory compiled for the Central Regional Air Planning Association (CENRAP) were more up to date for this source category and based on more localized data sources. The 2005 CENRAP emissions

for industrial fuel combustion were used in the final modeling.

*Comment:* Commenters stated that EPA should include sulfur rule controls that take effect prior to the future years that were modeled.

*Response:* EPA included quantifiable sulfur rule controls in 2014 modeling for those states that had implemented the rules (New Jersey and Maine).

*Comment:* A commenter stated that emissions for Delaware were overestimated for several nonpoint categories in base-year and future-year inventories and provided alternative estimates for these categories.

*Response:* EPA reviewed the alternative estimates provided and found them to be credible and based on more detailed local scale information than were available in the national inventories. EPA incorporated the alternative emission estimates for Delaware into the final modeling.

*Comment:* A commenter stated that residual oil is not used as an industrial fuel in South Carolina.

*Response:* EPA analyzed the emissions from residual oil industrial fuel combustion in South Carolina and all other states, and analyzed preliminary regional planning office inventories and the 2008 NEI submittals. The South Carolina residual oil industrial fuel emissions were determined to be anomalously large in comparison to the near zero emissions in other submittals and were therefore removed from the nonpoint inventory.

## 2. Air Quality Basis for Identifying Receptors

### a. Introduction

In this section, we describe the final approach to identify downwind nonattainment and maintenance receptors. We briefly summarize the modeling platform, the proposed approach to identify receptors, comments received, and the results of the final analysis.

In the Transport Rule, EPA has explicitly given independent meaning to the "interfere with maintenance" prong of section 110(a)(2)(D)(i)(I) by evaluating contributions to identified maintenance receptors as well as contributions to identified nonattainment receptors. EPA identified maintenance receptors as those receptors that would have difficulty maintaining the relevant NAAQS in a scenario that takes into account historic variability in air quality at that receptor. Specifically, EPA projects future air quality design values based on measured data during the period 2003 to 2007. In determining the downwind receptors of concern, EPA

does not solely rely on the projection of an average design value based on measured data from the relevant period (in this case 2003 to 2007) to make a determination of “attainment” or “nonattainment.” Instead, EPA also evaluates the maximum future design value at that receptor based on measured data over the relevant period. Receptors for which this latter analysis projects design values higher than the NAAQS are identified as maintenance receptors.

EPA believes it is appropriate and reasonable to use this approach to identify receptors that may have maintenance problems in the future. This approach uses measured data in order to establish potential air quality outcomes at each receptor that take into account the variable meteorological conditions present across the entire period of measured data (2003 to 2007). EPA interprets the maximum future design value to be a potential future air quality outcome consistent with the meteorology that yielded maximum measured concentrations in the ambient data set analyzed for that receptor. In other words, the average design value gives a reasonable projection of future air quality at the receptor under “average” conditions. However, EPA also recognizes that previously experienced meteorological conditions (e.g., dominant wind direction, temperatures, air mass patterns) promoting ozone or fine particle formation that led to maximum concentrations in the measured data may reoccur in the future. The maximum design value gives a reasonable projection of future air quality at the receptor under a scenario in which such conditions do, in fact, reoccur. It also identifies upwind emissions that under those circumstances could interfere with the downwind area’s ability to maintain the NAAQS.

Per the court’s opinion in *North Carolina*, it is necessary for the Agency to evaluate “interference with maintenance” separately from “significant contribution to nonattainment” in order to give independent meaning to that phrase in the statute. The approach described above does so and provides a reasonable basis for identifying upwind emissions that interfere with maintenance of the NAAQS at downwind receptors.

Because the methodology is based on actual variations in design values measured at the receptors, EPA believes that the application of this design value methodology for identifying maintenance receptors reasonably anticipates possible future air quality

outcomes based on meteorological conditions independent of emission reduction requirements occurring between 2005 (the base year for air quality analysis) and 2012 (the future year for air quality analysis of the base case without CAIR or the Transport Rule in place). EPA uses air quality modeling to properly account for changes in air quality from 2005 to 2012 due to emission control requirements and trends in emission source fleet turnover (such as increasingly cleaner motor vehicle fleets). The air quality modeling process allows EPA to effectively adjust measured data to project design values in 2012 based on the forecast changes in emissions. For a given receptor, the forecast change in emissions from 2005 to 2012 is a constant factor applied across all of the design values from the period 2003 to 2007. Thus, a comparison of the projected (future-year) design values themselves is equivalent to comparing the base period design values from the data set to consider how pollution concentrations are affected by non-modeled factors such as environmental and meteorological variability independent of the forecast emission reductions that stem from successful imposition of emission limitations and controls on various sources between the base and future modeling years. EPA believes it is reasonable to anticipate that these year-to-year meteorological fluctuations may reoccur at any time in the future and are relevant to determining receptors that are at risk of having a problem in the future with maintenance of the NAAQS. Therefore, EPA assesses the relationship of the maximum projected design value for 2012 at each receptor to the relevant NAAQS, and where such a value exceeds the NAAQS, EPA determines that receptor to be a “maintenance” receptor for purposes of defining interference with maintenance under the Transport Rule.

To provide an illustrative example, consider a hypothetical receptor “Y” whose measured data for 2003–2007 yields three design values for annual fine particles: 17 for 2003–05; 14 for 2004–06; and 12  $\mu\text{g}/\text{m}^3$  for 2005–07. Thus, the maximum measured design value for this period is 17 and the average design value is 14.3. To determine whether the receptor is a nonattainment or maintenance receptor, EPA projects a corresponding future-year (2012) design value for each measured design value. These projections are based on the results of air quality modeling, which demonstrates predicted changes in pollution concentrations for each

receptor from 2005 to 2012. For this example, assume that the projected future-year design values that correspond with the measured design values, are 16 (corresponds with the 2003–05 design value of 17), 13 (corresponds with the 2004–06 design value of 14), and 11  $\mu\text{g}/\text{m}^3$  (corresponds with the 2005–07 design value of 12). The average future-year design value is 13.3 (corresponds with the average measured design value from 2003–2007 of 14.3). The projected future design values are all lower than the measured design values because air quality is projected to improve between 2005 and 2012. In this example, the analysis establishes that the average projected future design value is 13.3 and the maximum projected future design value is 16.

The average future (2012) projected design value of 13.3 based on the average design value for the period 2003–07 does not exceed the 1997 annual  $\text{PM}_{2.5}$  NAAQS. For this reason, EPA would conclude that receptor Y will most likely have attainment air quality in the future year. Therefore, it would not be identified as a nonattainment receptor.

However, the future projected design value of 16 based on the maximum design value for the period 2003–07 does exceed the NAAQS. For this reason, EPA would conclude that the receptor may have difficulty maintaining attainment with the NAAQS under future potential meteorological conditions. EPA therefore would identify the receptor as a maintenance receptor and evaluate whether upwind state emissions interfere with maintenance of the NAAQS at that receptor.

EPA’s methodology accounts for the range of meteorological conditions reflected by design values from the measured 2003–2007 data at receptor Y and also accounts for the projected changes in emissions from 2005 to 2012 at receptor Y. The range of meteorological conditions is accounted for by using data from three different 3-year periods as described above. The projected changes in emissions are accounted for by applying to the measured design values the forecasted change in  $\text{PM}_{2.5}$  concentrations, as determined through air quality modeling of the 2005 and 2012 emissions. In this example, the maximum measured design value for receptor Y is 17. This design value represents measured data from 2003 to 2005. EPA applies to this design value the modeled 2005–to–2012 change in concentrations at receptor Y to obtain a 2012 maximum design value for that

receptor, which is 16. In this way, this maximum 2012 design value takes into consideration the air quality impacts of all known and legally applicable emission limitations taking effect after the 2003 to 2005 base period. Therefore, each of the projected future-year design values provide a fair representation of future air quality at receptor Y under different conditions while accounting for the emissions projected to remain in 2012. EPA thus believes that if one of these future-year design values for a particular receptor exceeds the NAAQS, it is reasonable to conclude that the area may have difficulty maintaining that NAAQS. For this reason, EPA identifies such receptors as maintenance receptors. In this example, EPA would find that while receptor Y's average future-year design value would not exceed the NAAQS, its maximum future-year design value (16) would exceed the NAAQS, and it would thus be designated as a "maintenance" receptor for purposes of the Transport Rule analyses.

In the proposed rule we used air quality modeling to (1) Identify locations where we expected there to be nonattainment and/or maintenance problems for annual average  $PM_{2.5}$ , 24-hour  $PM_{2.5}$ , and/or 8-hour ozone in 2012, (2) quantify the impacts (*i.e.*, air quality contributions) of  $SO_2$  and  $NO_x$  emissions from upwind states on downwind annual average and 24-hour  $PM_{2.5}$  concentrations at monitoring sites projected to be nonattainment or have maintenance problems in 2012 for the 1997 annual and 2006 24-hour  $PM_{2.5}$  NAAQS, respectively, and (3) quantify the impacts of  $NO_x$  emissions from upwind states on downwind 8-hour ozone concentrations at monitoring sites projected to be nonattainment or have maintenance problems in 2012 for the 1997 ozone NAAQS.

To support the proposal, air quality modeling was performed for four emission scenarios: a 2005 base year, a 2012 "no CAIR" base case, a 2014 "no CAIR" base case, and a 2014 control case that reflects the emission reductions expected from the FIPs. The modeling for 2005 was used as the base year for projecting air quality for each of the 3 future-year scenarios. The 2012 base case modeling was used to identify future nonattainment and maintenance locations and to quantify the contributions of emissions in upwind states to annual average and 24-hour  $PM_{2.5}$  and 8-hour ozone. The 2012 ozone and  $PM_{2.5}$  concentrations were derived by projecting 2003 through 2007 based ambient ozone and/or  $PM_{2.5}$  data to the future using the relative (percent) change in modeled concentrations

between 2005 and 2012. The 2014 base case and 2014 control case modeling were used to quantify the benefits of this proposal.

In the proposed rule, EPA used the Comprehensive Air Quality Model with Extensions (CAMx) version 5.20<sup>18</sup> to simulate ozone and  $PM_{2.5}$  concentrations for the 2005 base year and the 2012 and 2014 future year scenarios. The CAMx model applications were designed to cover states in the central and eastern U.S. using a horizontal resolution of 12 x 12 km.<sup>19</sup>

CAMx contains "source apportionment" tools that are designed to quantify the contribution of emissions from various sources and areas to ozone and  $PM_{2.5}$  component species in other downwind locations. The source apportionment tools were used to quantify the downwind contributions of ozone and  $PM_{2.5}$  from upwind states.

In the proposed rule, EPA used a 2005-based air quality modeling platform which included 2005 base year emissions and 2005 meteorology for modeling ozone and  $PM_{2.5}$  with CAMx.

We received comments related to several aspects of the air quality modeling platform.

*Comment:* There was wide support from commenters for the use of CAMx as an appropriate, state-of-the science air quality tool for use in the Transport Rule. There were no comments that suggested that EPA should use an alternative model for quantifying interstate transport. Many commenters requested that EPA update the emission inventories used for the Transport Rule and then remodel the 2005 base year and future year emissions using the updated emissions and the most recent version of CAMx to reassess interstate transport for the final rule.

*Response:* For the final rule we have updated our modeling using the latest public release of CAMx (version 5.30) and associated preprocessors. We have also made numerous improvements to the emission inventories for the 2005 base year as well as the 2012 and 2014 future year base cases in response to public comments. The emissions changes are described in section V.C.1. The projection of future year

<sup>18</sup> Comprehensive Air Quality Model with Extensions Version 5 User's Guide. Environ International Corporation. Novato, CA. March 2009.

<sup>19</sup> The 12 km domain was nested within a coarse grid, 36 x 36 km modeling domain which covers the lower 48 states and adjacent portions of Canada and Mexico. Predictions from this Continental U.S. (CONUS) domain were used to provide initial and boundary concentrations for simulations in the 12 km domain.

nonattainment and maintenance sites and the quantification of ozone and  $PM_{2.5}$  transport for the final rule are based on modeling with CAMx v5.30 using the updated emission inventories. The final rule air quality projections of 2012 nonattainment and maintenance are described below. The final rule interstate contributions are presented in section V.D.

*Comment:* The performance evaluation of the 2005 base year model predictions for the proposed rule was too cursory and did not provide sufficient detail on model performance. Commenters requested additional analyses and spatial resolution describing how well base year model predictions compare to the corresponding measured values.

*Response:* For the final rule we have expanded the scope of the model evaluation for 2005 to include a broader suite of statistics to characterize performance for individual subregions of the eastern U.S. modeling domain. The results of the performance evaluation for the final rule 2005 base year air quality modeling are described in the Air Quality Modeling Final Rule TSD.

*Comment:* The 2005 based modeling platform should be updated to a more recent year. There were several different aspects of this comment. Some commenters stated that EPA should be using a more recent emission inventory as a base year, due to identified changes and updates to the inventories. Other commenters stated that EPA should use a more recent base year, due to a trend of improvement in air quality over the past few years. The commenters claim that the 2005-based EPA modeling does not account for large emission reductions and air quality improvements that have occurred over the last several years.

*Response:* There are several reasons why the use of a 2005 modeling base case is both reasonable and, in fact, necessary for the Transport Rule. As explained in section V.B, above, because the Transport Rule will replace CAIR, EPA cannot consider reductions associated with CAIR in the analytical baseline emissions scenario. Thus, the base year for the air quality projections should be a year that represents emissions before CAIR was in place (*i.e.* 2005). We are projecting emissions to a future 2012 "no CAIR" case and therefore want to best represent the air quality change between 2005 and 2012, without CAIR. To do this, we projected emissions that existed before CAIR was in effect and modeled the air quality change that occurs between 2005 and 2012 without CAIR.

A key consideration in our projection methodology is the use of ambient data to anchor the design value projections to the future. The modeling is used in a relative sense by multiplying the modeled percent change in ozone or PM<sub>2.5</sub> species concentrations by the base year ambient data. The ozone and PM<sub>2.5</sub> modeling guidance recommends projecting design values based on 5 years<sup>20</sup> of monitoring data that is centered on the base model year. Using 2005 as a base emissions and meteorological year entailed the use of 2003–2007 ambient air quality data (5 years of data centered about 2005). This was a reasonable choice because the majority of the ambient data from this period was not impacted by CAIR emission reductions.

After 2005, early emission reductions of SO<sub>2</sub> and NO<sub>x</sub> in response to CAIR began to impact the measured air quality concentrations. Since the modeling projection methodology uses both modeled and observed data, 2005 is the latest base year that we deemed appropriate (before CAIR emission reductions took place) for use in projecting the measured air quality to a 2012 future year. The early years of the 5 year period (2003, 2004, and 2005) were not impacted by CAIR.<sup>21</sup> The last 2 years in the period (2006 and 2007) were slightly impacted by CAIR emission reductions. But the 5 year average is weighted towards the middle year of the period (2005), so the impact of the years after CAIR promulgation should be minimal.

The 2005 base year was also chosen because it was an appropriate meteorological year. In the eastern U.S. there was relatively high ozone during the summer of 2005 and relatively high PM<sub>2.5</sub> periods during the year. The modeled attainment tests for both ozone and 24-hour PM<sub>2.5</sub> depend on having a sufficient number of “high” modeled days to project to the future. Modeling a year that is not meteorologically conducive to ozone and/or PM<sub>2.5</sub> formation is discouraged by the modeling guidance because a meteorological year that is not conducive to ozone or PM<sub>2.5</sub> formation may be less responsive to changes in emissions in the future. Therefore, projecting the relative change in ozone or PM<sub>2.5</sub> for a non-conducive base year may underestimate the future change in ozone and/or PM<sub>2.5</sub> concentrations.

<sup>20</sup> The modeling guidance recommends using a five year weighted average design value. This is calculated by averaging the three consecutive design value periods of 2003–2005, 2004–2006, and 2005–2007.

<sup>21</sup> The CAIR final rule was published on May 12, 2005.

Additionally, all enforceable emission reductions that occurred between 2005 and 2012 (other than those required under CAIR) are captured by the modeling system. Any enforceable non-EGU emission reductions due to existing rules or the installation of emissions controls after 2005 were included in the 2012 base case inventory. As explained above in section V.B, to capture changes in EGU emissions between 2005 and 2012, EPA did not assume operation of all controls installed during that time period, as many of those controls were built in response to CAIR. EPA used IPM to project 2012 EGU emissions incorporating all non-CAIR enforceable emission constraints; operation of existing pollution controls was taken into account only where non-CAIR constraints made it economic or legally necessary to operate them. We also accounted for permanent source shutdowns that occurred after 2005. Where possible, we incorporated reported emission changes based on comments to the proposed rule and a subsequent emission inventory NODA.

*Comment:* Several commenters stated that we used a “modeled + monitored” test in CAIR to identify future year nonattainment receptors, but we only used a modeled test in the Transport Rule proposal. They suggest that we should either go back to the “modeled + monitored” test or explain why we should not use monitoring data in the identification of nonattainment and maintenance receptors. They say that we should not base nonattainment and maintenance receptors solely on modeled violations. They also say that we if we had looked at the most recent ambient data we would see that most of the modeled nonattainment and maintenance receptors are already attaining the ozone and/or PM<sub>2.5</sub> NAAQS.

*Response:* In the identification of future year nonattainment receptors for CAIR, EPA used what was called the “modeled + monitored test”. The most recent ambient data (2001–2003 design values at the time) were examined to further verify that nonattainment was still being measured at potential future year nonattainment receptors. In the proposed Transport Rule, EPA identified future year nonattainment and maintenance receptors based on modeled projections of ambient data from the 2003–2007 time period. The future year receptors were not compared to most recent ambient data to verify that nonattainment still existed.

For the final Transport Rule, there are several reasons that EPA did not examine the most recent ambient data to

verify that receptors were still measuring nonattainment. The main reason for dropping the “monitored” part of the modeled + monitored test is the fact that the most recent monitoring data (2007–2009 design values) include large emission reductions from CAIR. As explained in section V.B, above, because the Transport Rule will replace CAIR, we must model a future year base case which does not assume that CAIR is in place (a “no-CAIR” case). It is simply not appropriate to examine the current monitoring data, which represent air quality with CAIR emission reductions in place, and compare the values to 2012 projected air quality that is based on a no-CAIR modeling case. As discussed above, we modeled a 2005 base case with pre-CAIR emissions and a 2012 future “no CAIR” case. The change in modeled air quality is due to the non-CAIR enforceable emission changes between 2005 and 2012 and therefore explicitly does not take CAIR into account. As a consequence, the 2012 projected design values represent a unique case (necessary for analyzing future air quality without either CAIR or its replacement Transport Rule in effect) that cannot be represented by current ambient data.

It is also important to note that all of the projected 2012 design values are based on projections of measured ambient data. They are a combination of measured data and modeled response factors. Therefore, it is inaccurate to imply that future year nonattainment and maintenance receptors are solely based on modeled projections. The future year concentrations are firmly rooted in base year measured ambient data that have been projected to the future using modeled data.

There are additional reasons for not verifying the nonattainment and maintenance receptors against the most recent ambient data. In CAIR we did not explicitly identify maintenance receptors. In the Transport Rule proposal we identified maintenance receptors based on 2012 projections of maximum design values from the 2003–2007 period. Even though receptors may be measuring attainment based on recent data, they may still be at risk for falling back into nonattainment. Therefore, even if commenters argue that recent data show that monitoring sites should not be nonattainment receptors (with which we disagree), the same argument cannot be made regarding maintenance receptors. Clearly, receptors with recent “clean” ambient data may still experience higher PM<sub>2.5</sub> and/or ozone concentrations in the future (based on



meteorological and emission variability) and therefore may be appropriate maintenance receptors.

*Comment:* Several commenters claim that the maintenance receptor methodology overstates actual future design values. They also recommend an alternative methodology which takes into account the downward trend in observed PM<sub>2.5</sub> concentrations over the last 5+ years. The methodology would remove the trend in the data where air quality is improving over the period by applying a linear fit to the data, calculating the residuals and then adding the residuals back to the average of the data. Given a site with a downward trend, this has the effect of decreasing the calculated maximum values from the early years in the period and increasing the values from the end years in the period.

*Response:* EPA continues to believe that our approach to identify maintenance receptors is reasonable and appropriate. For the final rule, we continue to identify maintenance receptors by projecting the maximum design value from the 2003–2007 period to the future. The methodology assumes that the combination of emissions and meteorology that occurred in the base period (which led to relatively high ambient design values) could happen again in the future (albeit at lower emissions levels). There is no information presented by the commenters which explains why the magnitude of base year design value variability could not occur in the same way in the future. The commenters cite the downward trend in ambient data as the reason why the EPA methodology is not reasonable. However, in most cases, the recent downward trend in ambient data is due to a combination of ongoing emission reductions (which includes CAIR), variability in meteorology, and depressed emissions due to the recession. In fact, the most recent ambient design value period (2007–2009) is heavily influenced by extremely low ozone and PM<sub>2.5</sub> concentrations measured in 2009. The 2009 data are marked by relatively low emissions due to cool summer weather and ongoing effects of the recession. The preliminary<sup>22</sup> 2010 ambient data in the eastern U.S. show that ozone and PM<sub>2.5</sub> values were considerably higher in 2010 compared to 2009. In the states that are included in the final Transport Rule region, there were 158 ozone monitor days that exceeded 84 ppb in 2009 compared to 412 monitor exceedance

days in 2010. For PM<sub>2.5</sub>, there were 251 monitor days that exceeded 35 µg/m<sup>3</sup> in 2009 compared to 417 monitor exceedance days in 2010. Even though the SO<sub>2</sub> and NO<sub>x</sub> emissions were generally lower in 2010, the observed ozone and PM<sub>2.5</sub> concentrations were higher. This shows the important influence of meteorology on ambient concentrations. Clearly, the year to year variability due to meteorology can be large. We acknowledge the downward trend in ambient data over the last few years. But this does not mean that conditions that led to high ozone and/or PM<sub>2.5</sub> in the 2003–2007 period could not occur again in the future. The 2010 ambient data show that meteorology can cause concentrations to go back up, even though there is a downward trend in emissions.

We also believe that the alternate maintenance methodology presented by the commenter is inappropriate. The EPA modeling for 2012 (and 2014) appropriately accounts for emission reductions that occur after 2005 except for those that should not be considered, as explained in section V.B., because they were required only by CAIR. Therefore, the starting point design values used to project to the future should not be lowered to account for emission reduction trends that occur after 2005. Doing so would give “double credit” to the more recent emission reductions and provides an inappropriate downward adjustment to the early design value periods of the 2003–2007 period.

*Comment:* One commenter claims that EPA did not follow our own modeling guidance by not doing local scale modeling in urban areas with high PM<sub>2.5</sub> concentration gradients. They suggested that the methodology to calculate future year design values should have included dispersion modeling to calculate the change in concentration over time of primary PM<sub>2.5</sub> emissions.

*Response:* EPA modeling guidance for PM<sub>2.5</sub> attainment demonstrations recommends photochemical grid modeling to examine future year changes in PM<sub>2.5</sub> concentrations. There are several optional aspects of the modeling which are recommended in specific cases. This includes a recommendation for a “local area analysis” using a dispersion model. An area with relatively large local primary PM<sub>2.5</sub> concentration gradients may want to do additional modeling to examine the impacts of local controls on its future year PM<sub>2.5</sub> concentrations. This is particularly important when local controls of primary PM<sub>2.5</sub> are included as part of the attainment demonstration.

As noted above, a “local area analysis” is recommended as part of the local attainment demonstration process in specific situations. It is impractical for EPA to perform this type of analysis for each local area in the regional Transport Rule. National rulemakings are not attainment demonstrations. We are not able to perform fine scale analyses for each area. For the final rule modeling, we have attempted to address all emissions and modeling related comments. We have updated the modeling platform to use the latest version of CAMx and are continuing to model ozone and PM<sub>2.5</sub> at 12km grid resolution, which for PM<sub>2.5</sub> is a more refined grid resolution compared to the CAIR modeling.

Additionally, there is no evidence presented by the commenter that would indicate that the future year PM<sub>2.5</sub> concentrations from the Transport Rule are biased high. In fact, depending on the circumstances, local fine scale grid or dispersion modeling may result in lower or higher future year design values. In a fine scale analysis, the dominant local primary PM<sub>2.5</sub> emissions become a larger percentage of the PM<sub>2.5</sub> concentrations. Therefore, if the local emissions are forecast to decrease, fine scale modeling may lead to lower future design values. However, if the local emissions are forecast to increase or stay the same between the base and future years, local modeling will likely show higher future year design values compared to a regional analysis. This points to the fact that perceived biases in modeling results may not always be correct.

In sum, fine scale modeling of local areas may lead to either higher or lower future year design values. There is no indication that EPA’s regional modeling is biased in either direction. EPA’s Transport Rule modeling generally followed EPA’s modeling guidance and is appropriate for the purpose of this rulemaking.

*Comment:* One commenter completed and submitted a detailed CAMx based modeling analysis with a 2008 base year and future years of 2014 and 2018. The analysis shows that the majority of the proposed rule 2012 nonattainment and maintenance sites are already attaining based on either 2006–2008 or 2007–2009 ambient data. Based on this, the commenter claims that air quality has improved more rapidly than predicted by EPA’s proposed rule modeling. Also, based on the commenter’s 2014 modeling of CAIR emissions (including utility consent decrees and state programs), the commenter concludes that no additional controls are needed

<sup>22</sup> The 2010 data is preliminary. Exceptional event data has not been flagged and removed from the reported data.

beyond CAIR to bring most or all sites into attainment by 2014.

*Response:* As an initial matter, we note that the basic question addressed by the commenter, “whether additional controls beyond CAIR are necessary,” is not on point. As explained previously, the D.C. Circuit remanded CAIR to EPA and it remains in place only temporarily. The question EPA must answer in this rulemaking, therefore, is not what controls in addition to CAIR are necessary but what, if any, restrictions on emissions must be put in place to replace CAIR in order to satisfy the requirements of section 110(a)(2)(D)(i)(I) of the CAA. For this reason, and as explained in greater detail in section V.B of this preamble, any analysis of whether beyond CAIR controls are necessary is irrelevant to this rulemaking. Nonetheless, we have carefully reviewed different aspects of the commenter’s analysis. We previously addressed comments related to the use of more recent ambient data to examine future year nonattainment and maintenance receptors. As noted above, the 2006–2008 and 2007–2009 ambient data is heavily influenced by several factors. Among them are the emissions reductions from CAIR, the relatively low recent observed ozone and PM<sub>2.5</sub> concentrations at least partially due to non-conductive meteorology (particularly in 2009), and the atypical suppression of emissions due to the sharp recession. For all of these reasons, we believe it is not possible to directly compare the most recent design values to the predicted future year 2012 and 2014 design values from the Transport Rule. In particular, it is inappropriate to compare current design values to EPA’s no-CAIR 2012 future year modeling results. As noted in the comment summary, the commenter’s modeling analysis assumed that CAIR was in place in both 2008 and the future years. This is a fundamentally different assumption than the modeling EPA used to define the Transport Rule nonattainment and maintenance receptors in 2012 and is inappropriate for purposes of the Transport Rule for reasons described above and in section V.B.

Additionally, EPA’s maintenance methodology chooses the highest of three base year design value periods projected to the future. The commenter only used a single design value period in their analysis and therefore did not fully examine maintenance issues. In fact, the 2014 nonattainment modeling receptors in the final Transport Rule and the commenter’s modeling analysis are similar. As documented in section VI.D, in the 2014 final rule remedy case,

there is only one remaining nonattainment area for ozone and one remaining nonattainment area for 24-hour PM<sub>2.5</sub>. This is similar to the modeling results presented in the comments.<sup>23</sup> However, EPA modeling identifies additional maintenance receptors in 2012 that continue to have maintenance issues in 2014.

EPA also examined our ozone and PM<sub>2.5</sub> projection procedures to see if there might be additional reasons for the relatively lower current ambient design values (and modeled design values in the commenter’s analysis) compared to the 2014 remedy modeled values. Upon further analysis of EPA’s 24-hour attainment test methodology, we noted certain discrepancies between the methodology and the calculation of the ambient 24-hour design values. In the proposed rule 24-hour attainment test, for each PM<sub>2.5</sub> monitor, we projected the measured 98th percentile concentrations from the 2003–2007 period to the future. A basic assumption in this methodology is that the distribution of high measured days in the base period will be the same in the future. For example, if the observed 98th percentile day is the 3rd high day for a particular year, we assume that the 1st, 2nd, and 3rd high days (and subsequent high days) in the future remain in the same basic distribution. Further examination of the proposed rule modeling found that this is not always the case. In situations where there are large summer PM<sub>2.5</sub> concentration reductions, some of the high days may switch from the summer in the base period to the winter in the future period.

In order to better account for the complicated future response in 24-hour design values, we have updated the 24-hour attainment demonstration methodology to more closely reflect the way 24-hour design values are calculated. In the revised methodology, we do not assume that the temporal distribution of high days in the base and future periods will remain the same. We project a larger set of ambient days from the base period to the future and then re-rank the entire set of days to find the new future 98th percentile value (for each year). More specifically, we project the highest 8 days per quarter (32 days per year) to the future and then re-rank the 32 days to derive the future year

98th percentile concentrations. In the case of the Transport Rule model results, this has the effect of lowering the future year 24-hour design values compared to the old methodology. The 2012 base case design values for all nonattainment and maintenance receptors were either unchanged or lower with the revised methodology.

3. How did EPA project future nonattainment and maintenance for annual PM<sub>2.5</sub>, 24-hour PM<sub>2.5</sub>, and 8-hour ozone?

*Final Rule:* In general, the methodology to project ozone and PM<sub>2.5</sub> concentrations to the future year(s) remains the same for the final rule. The proposal modeling followed the modeling guidance procedures for projecting ambient design values to future years. For the final rule, we continue to follow the basic procedures outlined in the guidance. The 8-hour ozone and annual PM<sub>2.5</sub> methodology are unchanged from the proposal. However, the 24-hour PM<sub>2.5</sub> methodology has been updated in the final rule to be more consistent with the calculation of 24-hour PM<sub>2.5</sub> design values. There were also additional minor updates to the ambient data.<sup>24</sup> The methodology to identify maintenance receptors is also unchanged from the proposal. We continue to use the maximum design value (projected from the 5 year base period) to calculate future year maintenance receptors.

As noted in the proposal, EPA considers that the maintenance concept has two components: Year-to-year variability in emissions and air quality, and continued maintenance of the air quality standard over time. The way that EPA defined maintenance based on year-to-year variability (as discussed in detail here) directly affects the requirements of this final rule. EPA also considered whether further reductions were necessary to ensure continued lack of interference with maintenance of the NAAQS over time (*e.g.*, after 2014). EPA concluded that in light of projected emission trends, and also considering the emission reductions from this proposed rule, no further reductions are required solely for this purpose at PM<sub>2.5</sub> and ozone receptors for which we are partially or fully determining significant contribution for the current NAAQS. (See discussion of emission trends in Chapter 7 of TSD entitled “Emission Inventories,” included in the docket for the Transport Rule proposal.)

<sup>23</sup> The purpose of this comparison is to note that the modeling analyses are actually more similar than the commenter implies. However, the Transport Rule differs from the commenter’s modeling due to the assumption that CAIR was in place. CAIR and the Transport Rule differ in state coverage and emission budgets. They are therefore not directly comparable.

<sup>24</sup> The base year design values were updated based on the latest official data. See <http://www.epa.gov/airtrends/values.html>.

a. Which ambient ozone and PM<sub>2.5</sub> data did EPA use for the purpose of projecting future year concentrations?

The final rule modeling continues to use a 2005 base case inventory and 2005 meteorology. Therefore, we continue to use ambient data from the 2003–2007 period. For each monitoring site, all valid design values (up to 3) from this period were averaged together. Since 2005 is included in all three design value periods, this has the effect of creating a 5-year weighted average, where the middle year is weighted 3 times, the 2nd and 4th years are weighted twice, and the 1st and 5th years are weighted once. We refer to this as the 5-year weighted average value. The 5-year weighted average values were then projected to the future years that were analyzed for this final rule. The 2003–2005, 2004–2006, and 2005–2007 design values are accessible at <http://www.epa.gov/airtrends/values.html>. The design values have been updated based on the latest official values. The official values have exceptional events removed from the calculations if they are flagged by states and concurred with by EPA Regional offices.

The procedures for projecting annual average PM<sub>2.5</sub> and 8-hour ozone conform to the methodology in the current attainment demonstration modeling guidance.<sup>25</sup>

b. Projection of Future Annual and 24-Hour PM<sub>2.5</sub> Nonattainment and Maintenance

(1) Methodology for Projecting Future Annual PM<sub>2.5</sub> Nonattainment and Maintenance

For the final rule, annual PM<sub>2.5</sub> modeling was performed for the 2005 base year emissions and for the 2012 base case as part of the approach for projecting which locations are expected to be in nonattainment and/or have

difficulty maintaining the PM<sub>2.5</sub> standards in 2012. We refer to these areas as nonattainment sites and maintenance sites respectively.

Concentrations of PM<sub>2.5</sub> in 2012 were estimated by applying the modeled 2005-to-2012 relative change in PM<sub>2.5</sub> species to each of the 3-year ambient monitoring data periods (*i.e.*, 2003–2005, 2004–2006, and 2005–2007) to obtain up to 3 future-year PM<sub>2.5</sub> design values for each monitoring site. We used the highest of these projections at each monitoring site to determine which sites are expected to have maintenance problems in 2012. We used the 5 year weighted average of those projections to determine which monitoring sites are expected to be nonattainment in this future year.

For the analysis of both nonattainment and maintenance, monitoring sites were included in the analysis if they had at least one complete design value in the 2003–2007 period.<sup>26</sup> There were 721 monitoring sites in the 12 km modeling domain which had at least one complete design value period for the annual PM<sub>2.5</sub> NAAQS, and 722 sites which met this criterion for the 24-hour NAAQS.<sup>27</sup>

EPA followed the procedures recommended in the modeling guidance for projecting PM<sub>2.5</sub> by projecting individual PM<sub>2.5</sub> component species and then summing these to calculate the concentration of total PM<sub>2.5</sub>. EPA’s Modeled Attainment Test Software (MATS) was used to calculate the future year design values. The software (including documentation) is available at: [http://www.epa.gov/scram001/modelingapps\\_mats.htm](http://www.epa.gov/scram001/modelingapps_mats.htm). Additional details on the annual PM<sub>2.5</sub> nonattainment and maintenance projections methodology can be found in the Air Quality Modeling Final Rule TSD.

The 2012 annual PM<sub>2.5</sub> design values were calculated for each of the 721 sites.

The calculated annual PM<sub>2.5</sub> design values are truncated after the second decimal place.<sup>28</sup> This is consistent with the ambient monitoring data truncation and rounding procedures for the annual PM<sub>2.5</sub> NAAQS. Any value that is greater than or equal to 15.05 µg/m<sup>3</sup> is rounded to 15.1 µg/m<sup>3</sup> and is considered to be violating the NAAQS. Thus, sites with projected 5-year weighted average (“average”) annual PM<sub>2.5</sub> design values of 15.05 µg/m<sup>3</sup> or greater are predicted to be nonattainment sites. Sites with projected maximum design values of 15.05 µg/m<sup>3</sup> or greater are predicted to be maintenance sites. Note that nonattainment sites are also maintenance sites because the maximum design value is always greater than or equal to the 5-year weighted average. For ease of reference we use the term “nonattainment sites” to refer to those sites that are projected to exceed the NAAQS based on both the average and maximum design values. Those sites that are projected to be attainment based on the average design value, but exceed the NAAQS based on the maximum design value, are referred to as maintenance sites. The monitoring sites that we project to be nonattainment and/or maintenance for the annual PM<sub>2.5</sub> NAAQS in the 2012 base case are the nonattainment/maintenance receptors used for assessing the contribution of emissions in upwind states to downwind nonattainment and maintenance of the annual PM<sub>2.5</sub> NAAQS.

Table V.C–1 contains the 2003–2007 base case period average and maximum annual PM<sub>2.5</sub> design values and the corresponding 2012 base case average and maximum design values for sites projected to be nonattainment of the annual PM<sub>2.5</sub> NAAQS in 2012. Table V.C–2 contains this same information for projected 2012 maintenance sites.

TABLE V.C–1—AVERAGE AND MAXIMUM 2003–2007 AND 2012 BASE CASE ANNUAL PM<sub>2.5</sub> DESIGN VALUES (µg/M<sup>3</sup>) AT PROJECTED NONATTAINMENT SITES

Monitor ID	State	County	Average design value 2003–2007	Maximum design value 2003–2007	Final rule average design value 2012	Final rule maximum design value 2012
010730023 .....	Alabama .....	Jefferson .....	18.57	18.94	16.15	16.46
010732003 .....	Alabama .....	Jefferson .....	17.15	17.69	15.16	15.64
131210039 .....	Georgia .....	Fulton .....	17.43	17.47	15.07	15.10
171191007 .....	Illinois .....	Madison .....	16.72	17.01	15.46	15.73
261630033 .....	Michigan .....	Wayne .....	17.50	18.16	15.73	16.32

<sup>25</sup> U.S. EPA, 2007: Guidance on the Use of Models and Other Analyses for Demonstrating Attainment of Air Quality Goals for Ozone, PM<sub>2.5</sub>, and Regional Haze; Office of Air Quality Planning and Standards, Research Triangle Park, NC.

<sup>26</sup> If there is only one complete design value, then the nonattainment and maintenance design values are the same.

<sup>27</sup> Design values were only used if they were deemed to be officially complete based on CFR 40 Part 50 Appendix N. The completeness criteria for the annual and 24-hour PM<sub>2.5</sub> NAAQS are different.

Therefore, there are fewer complete sites for the annual NAAQS.

<sup>28</sup> For example, a calculated annual average concentration of 14.94753 \* \* \* becomes 14.94 when digits beyond two places to the right of the decimal are truncated.

TABLE V.C-1—AVERAGE AND MAXIMUM 2003–2007 AND 2012 BASE CASE ANNUAL PM<sub>2.5</sub> DESIGN VALUES (µg/M<sup>3</sup>) AT PROJECTED NONATTAINMENT SITES—Continued

Monitor ID	State	County	Average design value 2003–2007	Maximum design value 2003–2007	Final rule average design value 2012	Final rule maximum design value 2012
390350038 .....	Ohio .....	Cuyahoga .....	17.37	18.10	15.99	16.66
390350045 .....	Ohio .....	Cuyahoga .....	16.47	16.98	15.14	15.61
390350060 .....	Ohio .....	Cuyahoga .....	17.11	17.66	15.67	16.18
390610014 .....	Ohio .....	Hamilton .....	17.29	17.53	15.76	15.98
390610042 .....	Ohio .....	Hamilton .....	16.85	17.25	15.40	15.77
390618001 .....	Ohio .....	Hamilton .....	17.54	17.90	16.01	16.33
420030064 .....	Pennsylvania .....	Allegheny .....	20.31	20.75	17.94	18.33

TABLE V.C-2—AVERAGE AND MAXIMUM 2003–2007 AND 2012 BASE CASE ANNUAL PM<sub>2.5</sub> DESIGN VALUES (µg/M<sup>3</sup>) AT PROJECTED MAINTENANCE-ONLY SITES

Monitor ID	State	County	Average design value 2003–2007	Maximum design value 2003–2007	Final rule average design value 2012	Final rule maximum design value 2012
180970081 .....	Indiana .....	Marion .....	16.05	16.36	14.86	15.16
180970083 .....	Indiana .....	Marion .....	15.90	16.27	14.71	15.06
390350065 .....	Ohio .....	Cuyahoga .....	15.97	16.44	14.67	15.10
390617001 .....	Ohio .....	Hamilton .....	16.17	16.56	14.74	15.10

(2) Methodology for Projecting Future 24-Hour PM<sub>2.5</sub> Nonattainment and Maintenance

The procedures for calculating the future year 24-hour PM<sub>2.5</sub> design values have been updated for the final rule.<sup>29</sup> The revised procedures are in response to comments which noted relatively high future year 24-hour PM<sub>2.5</sub> design values in EPA’s modeling of the proposed Transport Rule. The updates are intended to make the projection methodology more consistent with the procedures for calculating ambient design values.

As noted above, for the proposed Transport Rule EPA projected for each PM<sub>2.5</sub> monitor the measured 98th percentile concentrations from the 2003–2007 period to the future. As an additional check, we also projected the next highest concentrations from the three calendar quarters in each year when the 98th percentile did not occur in the 2003–2007 base period, to ensure that the future year 98th percentile did not switch seasons in the future year compared to the base year. A basic assumption in this methodology is that the distribution of high measured days in the base period will be the same in the future.

In other words, EPA assumed at proposal that the 98th-percentile day could only be displaced “from below” in the instance that a different day’s future concentration exceeded the original 98th-percentile day’s future concentration. In that case, the original

98th-percentile day may become the 97th- or 96th-percentile day in the future year; EPA accounted for this possibility at proposal. EPA did not, however, consider that the 98th-percentile day could also be displaced “from above” in the instance that higher-concentration days in the base period were projected to have future concentrations lower than the original 98th-percentile day’s future concentration. In that case, the original 98th-percentile day may become the 99th- or 100th-percentile day. Because EPA continued to use that day’s future concentration to determine the monitor’s future design value at proposal, this sometimes resulted in overstatement of future-year design values for 24-hour PM<sub>2.5</sub> monitoring sites whose seasonal distribution of highest-concentration 24-hour PM<sub>2.5</sub> days changed between the 2003–2007 period and the future year modeling. Examination of the proposed rule remedy modeling (2014 remedy case) showed that many of the highest PM<sub>2.5</sub> days switched from the summer in the base period to the winter in the future period. This is especially true in areas of the upper Midwest which experience both high summer and winter PM<sub>2.5</sub> episodes.

In the revised methodology, we do not assume that the seasonal distribution of high days in the base period years and future years will remain the same. We project a larger set of ambient days from the base period to the future and then re-rank the entire set of days to find the new future 98th percentile value (for

each year). More specifically, we project the highest 8 days per quarter (32 days per year) to the future and then re-rank the 32 days to derive the future year 98th percentile concentrations. In the case of the Transport Rule model results, this has the effect of lowering the future year 24-hour design values compared to the old methodology.

The modeling guidance recommendations for state attainment demonstrations have been updated to reflect the changes outlined above. Further details on the 24-hour PM<sub>2.5</sub> design value calculations can be found in the Air Quality Modeling Final Rule TSD. The above procedures for determining future year 24-hour PM<sub>2.5</sub> concentrations were applied for each site. The 24-hour PM<sub>2.5</sub> design values are truncated after the first decimal place. This approach is consistent with the ambient data truncation and rounding procedures for the 24-hour PM<sub>2.5</sub> NAAQS. Any value that is greater than or equal to 35.5 µg/m<sup>3</sup> is rounded to 36 µg/m<sup>3</sup> and is violating the NAAQS. Sites with future year 5-year weighted average design values of 35.5 µg/m<sup>3</sup> or greater, based on the projection of 5-year weighted average concentrations, are predicted to be nonattainment. Sites with future year maximum design values of 35.5 µg/m<sup>3</sup> or greater are predicted to be maintenance sites. Note that nonattainment sites for the 24-hour NAAQS are also maintenance sites because the maximum design value is always greater than or equal to the 5-year weighted average. The monitoring

<sup>29</sup> There were no updates to the ozone and annual PM<sub>2.5</sub> attainment test methodology.

sites that we project to be nonattainment and/or maintenance for the 24-hour PM<sub>2.5</sub> NAAQS in the 2012 base case are the nonattainment/maintenance receptors used for assessing the contribution of emissions in upwind

states to downwind nonattainment and maintenance of 24-hour PM<sub>2.5</sub> NAAQS as part of this final rule.

Table V.C-3 contains the 2003-2007 base period average and maximum 24-hour PM<sub>2.5</sub> design values and the 2012

base case average and maximum design values for sites projected to be 2012 nonattainment of the 24-hour PM<sub>2.5</sub> NAAQS in 2012. Table V.C-4 contains this same information for projected 2012 24-hour maintenance sites.

TABLE V.C-3—AVERAGE AND MAXIMUM 2003-2007 AND 2012 BASE CASE 24-HOUR PM<sub>2.5</sub> DESIGN VALUES (μG/M<sup>3</sup>) AT PROJECTED NONATTAINMENT SITES

Monitor ID	State	County	Average design value 2003-2007	Maximum design value 2003-2007	Final rule average design value 2012	Final rule maximum design value 2012
010730023	Alabama	Jefferson	44.0	44.2	36.9	37.3
170311016	Illinois	Cook	43.0	46.3	37.5	40.4
171191007	Illinois	Madison	39.1	40.1	36.5	36.8
180970043	Indiana	Marion	38.4	39.9	35.7	37.1
180970066	Indiana	Marion	38.3	39.6	35.7	36.9
180970081	Indiana	Marion	38.2	39.2	35.8	36.9
261470005	Michigan	St Clair	39.6	40.6	36.2	37.1
261630015	Michigan	Wayne	40.1	40.6	35.5	36.0
261630016	Michigan	Wayne	42.9	45.4	38.9	41.2
261630019	Michigan	Wayne	40.9	41.4	37.3	37.8
261630033	Michigan	Wayne	43.8	44.2	39.4	39.8
390350038	Ohio	Cuyahoga	44.2	47.0	39.4	41.8
390350060	Ohio	Cuyahoga	42.1	45.7	37.7	40.8
420030064	Pennsylvania	Allegheny	64.2	68.2	56.7	59.9
420030093	Pennsylvania	Allegheny	45.6	51.5	39.1	44.3
420030116	Pennsylvania	Allegheny	42.5	42.5	35.5	35.5
420070014	Pennsylvania	Beaver	43.4	44.6	36.2	37.4
420710007	Pennsylvania	Lancaster	40.8	44.0	35.9	38.3
540090011	West Virginia	Brooke	43.9	44.9	37.5	38.3
550790043	Wisconsin	Milwaukee	39.9	40.8	36.2	37.1

TABLE V.C-4—AVERAGE AND MAXIMUM 2003-2007 AND 2012 BASE CASE 24-HOUR PM<sub>2.5</sub> DESIGN VALUES (μG/M<sup>3</sup>) AT PROJECTED MAINTENANCE-ONLY SITES

Monitor ID	State	County	Average design value 2003-2007	Maximum design value 2003-2007	Final rule average design value 2012	Final rule maximum design value 2012
010732003	Alabama	Jefferson	40.3	40.8	35.3	35.9
170310052	Illinois	Cook	40.2	41.4	34.9	36.0
170312001	Illinois	Cook	37.7	40.6	33.6	36.1
170313301	Illinois	Cook	40.2	43.3	34.9	37.6
170316005	Illinois	Cook	39.1	41.8	34.1	36.4
171190023	Illinois	Madison	37.3	38.1	35.1	35.8
180890022	Indiana	Lake	38.9	44.0	34.9	39.5
180890026	Indiana	Lake	38.4	41.3	34.0	37.0
261610008	Michigan	Washtenaw	39.4	40.8	35.0	36.3
390170003	Ohio	Butler	39.2	41.1	34.4	36.5
390350045	Ohio	Cuyahoga	38.5	41.5	34.7	38.1
390350065	Ohio	Cuyahoga	38.6	41.0	34.9	37.6
390618001	Ohio	Hamilton	40.6	40.9	35.2	35.8
390811001	Ohio	Jefferson	41.9	45.5	34.5	37.8
391130032	Ohio	Montgomery	37.8	40.0	33.6	35.6
420031008	Pennsylvania	Allegheny	41.3	42.8	35.0	36.3
420031301	Pennsylvania	Allegheny	40.3	42.4	33.9	35.6
420033007	Pennsylvania	Allegheny	37.5	43.1	32.3	37.3
421330008	Pennsylvania	York	38.2	40.7	33.3	36.0
550790010	Wisconsin	Milwaukee	38.6	40.0	35.4	36.7
550790026	Wisconsin	Milwaukee	37.3	41.3	33.6	37.2

### (3) Methodology for Projecting Future 8-Hour Ozone Nonattainment and Maintenance

The final rule methodology to calculate 8-hour ozone nonattainment and maintenance receptors is identical to the proposed rule. The May-to-

September 24-hour maximum 8-hour average concentrations from the 2005 base case and the 2012 base case were used to project ambient design values to 2012. The following is a brief summary of the future year 8-hour average ozone calculations. Additional details are

provided in the Air Quality Modeling Final Rule TSD.

We are using the base period 2003-2007 ambient ozone design value data for projecting future year design values. Relative response factors (RRF) for each monitoring site were calculated as the

percent change in ozone on days with modeled ozone greater than 85 ppb.<sup>30</sup>

The maximum future design value is calculated by projecting design values for each of the three base periods (2003–2005, 2004–2006, and 2005–2007) separately. The highest of the three future values is the maximum design value. This maximum value is used to identify the 8-hour ozone maintenance receptors.

The future year design values are truncated to integers in units of ppb. This approach is consistent with the ambient data truncation and rounding procedures for the 8-hour ozone NAAQS. Future year design values that

are greater than or equal to 85 ppb are considered to be violating the NAAQS. Sites with future year 5-year weighted average design values of 85 ppb or greater are predicted to be nonattainment. Sites with future year maximum design values of 85 ppb or greater are predicted to be future year maintenance sites. Note that, as described previously for the annual and 24-hour PM<sub>2.5</sub> NAAQS, nonattainment sites for the ozone NAAQS are also maintenance sites because the maximum design value is always greater than or equal to the 5-year weighted average. The monitoring sites that we project to be nonattainment and/or

maintenance for the 8-hour ozone NAAQS in the 2012 base case are the nonattainment/maintenance receptors used for assessing the contribution of emissions in upwind states to downwind nonattainment and maintenance of ozone NAAQS.

Table V.C–5 contains the 2003–2007 base period average and maximum 8-hour ozone design values and the 2012 base case average and maximum design values for sites projected to be 2012 nonattainment of the 8-hour ozone NAAQS in 2012. Table V.C–6 contains this same information for projected 2012 8-hour ozone maintenance sites.

TABLE V.C–5—AVERAGE AND MAXIMUM 2003–2007 AND 2012 BASE CASE 8-HOUR OZONE DESIGN VALUES (PPB) AT PROJECTED NONATTAINMENT SITES

Monitor ID	State	County	Average design value 2003–2007	Maximum design value 2003–2007	Final rule average design value 2012	Final rule maximum design value 2012
220330003 .....	Louisiana .....	East Baton Rouge .....	92.0	96	85.6	89.3
480391004 .....	Texas .....	Brazoria .....	94.7	97	86.7	88.8
482010051 .....	Texas .....	Harris .....	93.0	98	86.1	90.8
482010055 .....	Texas .....	Harris .....	100.7	103	93.3	95.4
482010062 .....	Texas .....	Harris .....	95.7	99	88.8	91.8
482010066 .....	Texas .....	Harris .....	92.3	96	87.1	90.6
482011039 .....	Texas .....	Harris .....	96.3	100	88.8	92.2

TABLE V.C–6—AVERAGE AND MAXIMUM 2003–2007 AND 2012 BASE CASE 8-HOUR OZONE DESIGN VALUES (PPB) AT PROJECTED MAINTENANCE-ONLY SITES

Monitor ID	State	County	Average design value 2003–2007	Maximum design value 2003–2007	Average design value 2012	Maximum design value 2012
090011123 .....	Connecticut .....	Fairfield .....	92.3	94	83.9	85.5
090093002 .....	Connecticut .....	New Haven .....	90.3	93	82.7	85.1
240251001 .....	Maryland .....	Harford .....	92.7	94	84.4	85.6
260050003 .....	Michigan .....	Allegan .....	90.0	93	82.4	85.1
482010024 .....	Texas .....	Harris .....	88.0	92	83.4	87.2
482010029 .....	Texas .....	Harris .....	91.7	93	84.2	85.4
482011015 .....	Texas .....	Harris .....	89.0	96	82.4	88.9
482011035 .....	Texas .....	Harris .....	86.3	95	79.9	88.0
482011050 .....	Texas .....	Harris .....	89.3	92	82.8	85.4

D. Pollution Transport From Upwind States

1. Choice of Air Quality Thresholds

a. Thresholds

In this action, EPA uses air quality thresholds to identify linkages between upwind states and downwind nonattainment and maintenance receptors. States whose contributions to a specific receptor meet or exceed the thresholds identified are considered linked to that receptor; those states' emissions (and available emission reductions) are analyzed further in the

second step of EPA's significant contribution analysis. States whose contributions are below the thresholds are not included in the Transport Rule for that NAAQS. In other words, we are finding that states whose contributions are below these thresholds do not significantly contribute to nonattainment or interfere with maintenance of the relevant NAAQS.

We use separate air quality thresholds for annual PM<sub>2.5</sub>, 24-hour PM<sub>2.5</sub>, and 8-hour ozone. Each air quality threshold is calculated as 1 percent of the NAAQS. Specifically, we use an air quality threshold of 0.15 µg/m<sup>3</sup> for

annual PM<sub>2.5</sub>, 0.35 µg/m<sup>3</sup> for 24-hour PM<sub>2.5</sub>, and 0.8 ppb for 8-hour ozone. These are the same air quality thresholds we proposed.

EPA received a number of comments on the thresholds we proposed, and those comments and EPA's responses are discussed below.

b. General Comments on the Overall Stringency and Use of 1 Percent of the NAAQS

EPA received numerous comments supporting and opposing the proposed thresholds. A number of commenters cited support for EPA's approach. Some

<sup>30</sup> As specified in the attainment demonstration modeling guidance, if there are less than 10 modeled days > 85 ppb, then the threshold is

lowered in 1 ppb increments (to as low as 70 ppb) until there are 10 days. If there are less than 5 days

> 70 ppb, then an RRF calculation is not completed for that site.

commenters believed that use of a 1 percent threshold was too stringent, and recommended that EPA should use a threshold greater than 1 percent. Others believed that 1 percent was not stringent enough, and they recommended using a lower value such as 0.5 percent. EPA believes that for both PM<sub>2.5</sub> and for ozone, it is appropriate to use a threshold of 1 percent of the NAAQS for identifying states whose contributions do not significantly contribute to nonattainment or interfere with maintenance of the relevant NAAQS; therefore, EPA has retained the 1 percent threshold for the reasons described below.

As we found at the time of CAIR, EPA's analysis of base case PM<sub>2.5</sub> transport shows that, in general, PM<sub>2.5</sub> nonattainment problems result from the combined impact of relatively small contributions from many upwind states, along with contributions from in-state sources and, in some cases, substantially larger contributions from a subset of particular upwind states. (See section II of the January 2004 CAIR proposal, 69 FR 4575–87).

In the 1998 NO<sub>x</sub> SIP Call (63 FR 57456, October 27, 1998) and in CAIR, EPA also found important contributions from multiple upwind states. As a result of the upwind “collective contributions,” EPA determined that it is appropriate to use a low air quality threshold when analyzing upwind states' contributions to downwind states' attainment and maintenance problems for ozone as well as PM<sub>2.5</sub>.

Low threshold values are also warranted, as EPA discussed in the notices for CAIR, due to adverse health impacts associated with ambient PM<sub>2.5</sub> and ozone even at low concentrations (See relevant portions of the CAIR proposal notice (63 FR 4583–84) and the CAIR final rule notice (70 FR 25189–25192)).

To aid in responding to comments, EPA has compiled the contribution modeling results to analyze the impact of different possible thresholds. This analysis demonstrates the reasonableness of using the 1 percent threshold to account for the combined impact of relatively small contributions from many upwind states (see Air Quality Modeling Final Rule TSD). In this analysis, EPA identifies for annual PM<sub>2.5</sub> (sulfate and nitrate), 24-hour PM<sub>2.5</sub> (sulfate and nitrate), and 8-hour ozone receptors: (1) Total upwind state contributions, and (2) the amount of the total upwind state contribution that is captured at thresholds of 1 percent, 5 percent and 0.5 percent of the NAAQS. EPA continues to find that the total “collective contribution” from upwind

sources represents a large portion of PM<sub>2.5</sub> and ozone at downwind locations and that the total amount of transport is composed of the individual contribution from numerous upwind states.

The analysis shows that the 1 percent threshold captures a high percentage of the total pollution transport affecting downwind states for both PM<sub>2.5</sub> and ozone. In response to commenters who advocated a higher threshold, EPA observes that higher thresholds would exclude increasingly large percentages of total transport, which we do not believe would be appropriate. For example, a 5 percent threshold would exclude the majority—and for annual PM, more than 80 percent—of interstate pollution transport affecting the downwind state receptors analyzed (based on the average percentage of total interstate transport across all receptors captured at the 5 percent threshold).

In response to commenters who advocated a lower threshold, EPA observes that the analysis shows that a lower threshold such as 0.5 percent would result in relatively modest increases in the overall percentages of PM<sub>2.5</sub> and ozone pollution transport captured relative to the amounts captured at the 1 percent level. A 0.5 percent threshold could lead to emission reduction responsibilities in additional states that individually have a very small impact on those receptors—an indicator that emission controls in those states are likely to have a smaller air quality impact at the downwind receptor. We are not convinced that selecting a threshold below 1 percent is necessary or desirable. A strong indication that the amount of pollution transport being excluded from consideration is not excessive is that the controls required under this rule are projected to eliminate nonattainment and maintenance problems with air quality standards at most downwind state receptors.

Considering the combined downwind impact of multiple upwind states, the health effects of low levels of PM<sub>2.5</sub> and ozone pollution, and EPA's previous use of a 1 percent threshold for PM<sub>2.5</sub> in CAIR, EPA's judgment is that the 1 percent threshold is a reasonable choice.

Some commenters noted that the PM<sub>2.5</sub> thresholds used for this rule are less than the “significant impact levels” (SILs) used for permitting programs. As EPA stated at the time of CAIR, since the thresholds referred to by the commenters serve different purposes than the CAIR threshold for significant contribution, it does not follow that they should be made equivalent (70 FR 25191; May 12, 2005).

#### c. Comments on the Rounding Conventions for PM<sub>2.5</sub>

In the final Transport Rule, EPA is using two-digit values for the PM<sub>2.5</sub> thresholds. Some commenters suggested that EPA should use the same rounding convention for annual PM<sub>2.5</sub> used in CAIR; that is, the threshold should be 0.2 µg/m<sup>3</sup> rather than 0.15 µg/m<sup>3</sup>. The reasons for EPA's decision are below.

The rationale for the single digit value for the final CAIR rule was that a single digit is consistent with the EPA monitoring data reporting requirements in Part 50, Appendix N, section 4.3. These reporting requirements specify that design values for the annual PM<sub>2.5</sub> standard shall be rounded to the tenths place (decimals 0.05 and greater are rounded up to the next 0.1, and any decimal lower than 0.05 is rounded down to the nearest 0.1).

Because the design value is to be reported only to the nearest 0.1 µg/m<sup>3</sup>, EPA deemed it preferable for the final CAIR to select the threshold value at the nearest 0.1 µg/m<sup>3</sup> as well, and hence one percent of the 15 µg/m<sup>3</sup>, rounded to the nearest 0.1 µg/m<sup>3</sup> became 0.2 µg/m<sup>3</sup>.

The reporting requirements in section Part 50, Appendix N, section 4.3 for the 24-hour PM<sub>2.5</sub> standard state that design values for this standard shall be rounded to the nearest 1 µg/m<sup>3</sup> (decimals 0.5 and greater are rounded up to the nearest whole number, and any decimal lower than 0.5 is rounded down to the nearest whole number).

If the approach used in CAIR were to be used to establish an air quality threshold for the 24-hour PM<sub>2.5</sub> NAAQS (which CAIR did not address), the resulting threshold would be zero. One percent of the 24-hour standard is 0.35 µg/m<sup>3</sup>, and rounding to the nearest whole number would yield an air quality threshold of zero. Thus if we were to apply the same rationale used to develop the annual PM<sub>2.5</sub> threshold for the final CAIR, there would be no air quality threshold for 24-hour PM<sub>2.5</sub>, which EPA believes to be counter-intuitive and unworkable as an approach for assessing interstate contributions.

Therefore, for this rule, EPA proposed and is now finalizing an approach that decouples the precision of the air quality thresholds from the monitoring reporting requirements, and uses 2-digit values representing one percent of the PM<sub>2.5</sub> NAAQS; that is, 0.15 µg/m<sup>3</sup> for the annual standard, and 0.35 µg/m<sup>3</sup> for the 24-hour standard. EPA believes there are a number of considerations favoring this approach. First, it provides for a consistent approach for the annual and 24-hour standards. Second, the

approach is readily applicable to any current and future NAAQS and would automatically adjust the stringency of the transport threshold to maintain a constant relationship with the stringency of the relevant NAAQS as they are revised. The CAIR approach would not allow for this continuity: For example, if EPA were to retain the CAIR approach for the annual standard, any future lowering of the PM<sub>2.5</sub> NAAQS to below 15 µg/m<sup>3</sup> would reduce the air quality threshold to the same outcome: 0.1 µg/m<sup>3</sup>. This would occur because any value less than 0.15 µg/m<sup>3</sup> would round to 0.1 µg/m<sup>3</sup> (assuming EPA would not round down to zero for the reasons described above), which means that the air quality threshold would have a different relative stringency to each possible future NAAQS value. For the above reasons, EPA believes the use of two-digit thresholds for both annual PM<sub>2.5</sub> and 24-hour PM<sub>2.5</sub> in the final rule is both reasonable and appropriate. The departure from the approach used for annual PM<sub>2.5</sub> in CAIR is appropriate given the additional considerations that were not in existence at the time of the final CAIR, and the importance of using a consistent approach to developing air quality thresholds for all NAAQS addressed by this rule as well as future NAAQS considered in future transport-related actions.

Some of these commenters suggested using the CAIR rounding conventions coupled with use of a 1-digit threshold of 0.4 µg/m<sup>3</sup> for 24-hour PM<sub>2.5</sub>. EPA considered the approach suggested by commenters, but determined that the proposed approach is more appropriate. First, adhering to the rounding conventions used for CAIR for annual PM<sub>2.5</sub> is not workable for the 24-hour standard because the rounding convention would yield a threshold of zero. Rounding alternatively to 0.4 µg/m<sup>3</sup> would require EPA to find a basis for rounding the threshold to the nearest 0.1 µg/m<sup>3</sup> instead of using a strict application of 1 percent; we do not see any basis for such rounding at this time.

#### d. Comments Related to the Multi-Factor Test EPA Used for Ozone in CAIR

Some commenters suggested that, for ozone, EPA should use the multiple-metric test we used for CAIR, and not a simple threshold based on 1 percent of the NAAQS. With respect to ozone, EPA proposed in the Transport Rule to take a more straightforward approach to air quality thresholds than the multi-factor approaches used for the NO<sub>x</sub> SIP Call and the CAIR. As proposed, EPA is using a contribution metric that is calculated based on the multi-day

average contribution. This metric is compared to one percent of the 1997 8-hour ozone standard of 0.08 ppm. Under this approach, one percent of the NAAQS is a value of 0.8 ppb. Contributions of 0.8 ppb and higher are above the threshold; ozone contributions less than 0.8 ppb are below the threshold. In past rulemakings (e.g., CAIR) EPA used multiple ozone metrics, including the average contribution and maximum single day contribution to downwind nonattainment. EPA believes the average contribution (calculated over multiple high ozone days) is a robust metric compared to the maximum contribution on a single day. EPA believes that this approach is preferable because it uses a robust metric, it is consistent with the approach for PM<sub>2.5</sub>, and it provides for a consistent approach that takes into account, and is applicable to, any future ozone standards below 0.08 ppm.

One of these commenters suggested that the 0.8 ppb threshold value was substantially more stringent than the 2 ppb screening test which was a part of the approach used for CAIR. The 1 percent threshold (0.8 ppb) is not substantially more stringent than the previous 2 ppb test because of differences in the metrics used to evaluate contributions against these two levels. The 2 ppb test was evaluated using the highest single day absolute model-predicted downwind contribution from an upwind state. The 1 percent threshold is evaluated based on the average relative downwind impact calculated over multiple days. Therefore, it is appropriate to set a lower concentration threshold for use with the average contribution metric calculated for the Transport Rule. More details on the calculation of the contribution metric can be found in the Air Quality Modeling Final Rule TSD. As noted above, EPA believes that the approach used for the proposed rule provides for a simplified, yet robust approach compared to CAIR. Accordingly, for the final rule we have retained the approach used for the proposal.

One commenter suggested that EPA retain the CAIR multiple-factor approach for ozone, and to apply that same approach to 24-hour PM<sub>2.5</sub>. As noted above, EPA is not retaining this approach for ozone, and for similar reasons we believe a multi-factor approach is not needed for 24-hour PM<sub>2.5</sub>. The approach based on 1 percent of the NAAQS is consistent with the form of the 24-hour standard. In addition, this approach is based on contributions on days with high 24-hour

PM<sub>2.5</sub> predictions and therefore is relevant for characterizing transport during short-term high PM<sub>2.5</sub> episodic conditions.

#### e. Comments on the Relationship to Measurement Precision

Other commenters suggested that, as did commenters on the thresholds used in CAIR, EPA should take into consideration the measurement precision of existing PM<sub>2.5</sub> monitors in setting the thresholds for the Transport Rule. EPA disagrees that monitoring precision is relevant to determining the amount of modeled PM<sub>2.5</sub> or ozone that should be considered to be a "contribution" from upwind states since states are not required to, nor would it be possible for them to, measure their individual state impacts on downwind receptors. The approach for eliminating significant contribution is based on the implementation of enforceable emissions budgets and not on a measurement of ambient air quality. Thus, EPA believes it is a reasonable exercise of its discretion to de-couple monitoring precision from the choice of contribution states.

#### f. Comments Related to the CAIR Court Decision

Commenters recommended that EPA should have retained the criteria used for CAIR because those values were upheld by the Court. As noted above, EPA could not have used the approach for annual PM<sub>2.5</sub> that was used in CAIR to develop a 24-hour PM<sub>2.5</sub> threshold, as that approach would have yielded a threshold value of zero 24-hour PM<sub>2.5</sub>.

Further, nothing in the *North Carolina* opinion suggests that the thresholds and methods used in CAIR were the only possible approaches EPA could have used, that they were preferable to other approaches, or that other alternatives would not be acceptable. Instead, the Court upheld the 0.2 µg/m<sup>3</sup> threshold used for PM<sub>2.5</sub> on the grounds that it was not "wholly unsupported by the record" (*North Carolina*, 531 F.3d at 915). EPA has determined for reasons explained in the record that the thresholds used in this final rule are both reasonable and appropriate for use in this final rule.

#### 2. Approach for Identifying Contributing Upwind States

This section documents the procedures used by EPA to quantify the contribution of emissions in specific upwind states to air quality concentrations in projected 2012 downwind nonattainment and maintenance locations for annual PM<sub>2.5</sub>, 24-hour PM<sub>2.5</sub>, and 8-hour ozone. In the



proposed rule EPA used CAMx photochemical source apportionment modeling to quantify the impact of emissions in specific upwind states on projected downwind nonattainment and maintenance receptors for both PM<sub>2.5</sub> and 8-hour ozone. In this modeling we tracked the ozone and PM<sub>2.5</sub> formed from 2012 base case emissions from anthropogenic sources in each upwind state in the 12 km modeling domain. The CAMx Particulate Source Apportionment Technique (PSAT) was used to calculate downwind contributions to nonattainment and maintenance of PM<sub>2.5</sub>. In the PSAT simulation NO<sub>x</sub> emissions are tracked to particulate nitrate concentrations, SO<sub>2</sub> emissions are tracked to particulate sulfate concentrations, and primary particulates (organic carbon, elemental carbon, and other PM<sub>2.5</sub>) are tracked as primary particulates. As described earlier in section V.A, the nitrate and sulfate contributions were combined and used to evaluate interstate contributions of PM<sub>2.5</sub>.

The CAMx Ozone Source Apportionment Technique (OSAT) was used to calculate downwind 8-hour ozone contributions to nonattainment and maintenance. OSAT tracks the formation of ozone from NO<sub>x</sub> and VOC emissions.

*Comment:* Three commenters stated that the CAMx source apportionment techniques used for the proposed rule reflect state-of-the science technologies and are appropriate for evaluating interstate transport. One commenter asked that EPA do more to demonstrate that the PSAT and OSAT techniques give reliable answers, although no suggestions were provided on how this might be done. Another commenter said that the results of the contribution analyses were consistent with the results of their scientific research.

*Response:* EPA is not changing its conclusion that the CAMx source apportionment techniques are appropriate for quantifying interstate transport. The strength of the source apportionment technique is that all modeled ozone and/or PM<sub>2.5</sub> mass at a given location in the modeling domain is tracked back to specific sources of emissions and boundary conditions to fully characterize culpable sources. No commenters provided technically valid analyses indicating that EPA's use of CAMx source apportionment techniques are inappropriate for the purposes of the Transport Rule.

*Comment:* We received comments that certain states included in the proposed rule should be excluded from the final rule because EPA had overstated the 2012 emissions in these

states. Commenter requested that we redo the contribution modeling using 2012 base case emission inventories that are revised based on proposed rule comments. Several commenters also asked that EPA update the contribution modeling analyses using the latest version of CAMx.

*Response:* In response to these comments, we have rerun our source apportionment modeling for PM<sub>2.5</sub> and ozone for the 2012 base case using the updated emission inventories described above in section V.C.1 and the latest version of CAMx, version 5.30.

The states EPA analyzed for interstate contributions for ozone and for PM<sub>2.5</sub> for the final rule are: Alabama, Arkansas, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland,<sup>31</sup> Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Vermont, Virginia, West Virginia, and Wisconsin.<sup>32</sup> These are the same states that EPA analyzed for the proposed rule.

For the proposed rule, we used a relative approach for calculating the contributions to downwind nonattainment and maintenance receptors from the outputs of the source apportionment modeling. As part of this approach, the source apportionment predictions are combined with measurement-based concentrations to calculate the contributions from each state to nonattainment and/or maintenance receptors. This is similar to the approach used to calculate future year design values, as described in section V.C.2.

*Comment:* One commenter said that using the source apportionment modeling predictions in a relative sense strengthens the determination of contributions and addresses an important source of uncertainty. There were no comments that suggested an alternative approach.

<sup>31</sup> As in the proposal, EPA has combined the contributions from Maryland and the District of Columbia as a single entity in our contribution analysis for the final rule. EPA believes that this is a fair representation of emissions for transport analysis because of the small size of the District of Columbia and its close proximity to Maryland. However, the District of Columbia is not included in the Transport Rule due to the significant contribution analysis findings in section VI.D.

<sup>32</sup> There were also several other states that are only partially contained within the 12 km modeling domain (i.e., Colorado, Montana, New Mexico, and Wyoming). However, EPA did not individually track the emissions or assess the contribution from emissions in these states.

*Response:* For the final Transport Rule we are applying the relative approach developed for the proposed rule to calculate contributions from each state to downwind nonattainment and maintenance receptors.

As noted above, for the final rule we modeled the updated 2012 base case emissions using CAMx v5.30 to determine the contributions from emissions in upwind states to nonattainment and maintenance sites in downwind states. Contributions to nonattainment and maintenance receptors are evaluated independently for each state to determine if the contributions are at or above the threshold criteria.

For each upwind state, the maximum contribution to nonattainment is calculated based on the single largest contribution to a future year (2012) downwind nonattainment receptor. The maximum contribution to maintenance is calculated based on the single largest contribution to a future year (2012) downwind maintenance receptor. Since the contributions are calculated independently for each receptor, the upwind contribution to maintenance can sometimes be larger than the contribution to nonattainment, and vice versa. This also means that maximum contributions to nonattainment can be below the threshold while maximum contributions to maintenance may be at or above the threshold, or vice versa.

#### V.D.2.a. Estimated Interstate Contributions to Annual PM<sub>2.5</sub> and 24-Hour PM<sub>2.5</sub>

In this section, we present the interstate contributions from emissions in upwind states to downwind nonattainment and maintenance sites for the annual PM<sub>2.5</sub> NAAQS and the 24-hour PM<sub>2.5</sub> NAAQS based on modeling updated for the final rule. As described previously in section V.D.1, states which contribute 0.15 µg/m<sup>3</sup> or more to annual PM<sub>2.5</sub> nonattainment or maintenance in another state are identified as states with contributions large enough to warrant further analysis. For 24-hour PM<sub>2.5</sub>, states which contribute 0.35 µg/m<sup>3</sup> or more to 24-hour PM<sub>2.5</sub> nonattainment or maintenance in another state are identified as states with contributions to downwind nonattainment and maintenance sites large enough to warrant further analysis.

For annual PM<sub>2.5</sub>, we calculated each state's contribution to each of the 12 monitoring sites that are projected to be nonattainment and each of the 4 sites that are projected to have maintenance problems for the annual PM<sub>2.5</sub> NAAQS in the 2012 base case. A detailed

description of the calculations can be found in the Air Quality Modeling Final Rule TSD. The largest contribution from each state to annual PM<sub>2.5</sub> nonattainment in downwind sites is

provided in Table V.D–1. The Largest Contribution from Each State to Annual PM<sub>2.5</sub> maintenance in downwind sites is also provided in Table V.D–1. The contributions from each state to all

projected 2012 nonattainment and maintenance sites for the annual PM<sub>2.5</sub> NAAQS are provided in the Air Quality Modeling Final Rule TSD.

TABLE V.D–1—LARGEST CONTRIBUTION TO DOWNWIND ANNUAL PM<sub>2.5</sub> (µg/m<sup>3</sup>) NONATTAINMENT AND MAINTENANCE FOR EACH OF 37 STATES

Upwind state	Largest downwind contribution to nonattainment for annual PM <sub>2.5</sub> (µg/m <sup>3</sup> )	Largest downwind contribution to maintenance for annual PM <sub>2.5</sub> (µg/m <sup>3</sup> )
Alabama	0.51	0.19
Arkansas	0.10	0.04
Connecticut	0.00	0.00
Delaware	0.00	0.00
Florida	0.08	0.01
Georgia	0.46	0.13
Illinois	0.50	0.65
Indiana	1.34	1.27
Iowa	0.26	0.14
Kansas	0.09	0.04
Kentucky	0.94	0.81
Louisiana	0.09	0.03
Maine	0.00	0.00
Maryland	0.15	0.06
Massachusetts	0.00	0.00
Michigan	0.64	0.64
Minnesota	0.14	0.09
Mississippi	0.05	0.01
Missouri	1.22	0.27
Nebraska	0.06	0.03
New Hampshire	0.00	0.00
New Jersey	0.02	0.01
New York	0.21	0.21
North Carolina	0.20	0.06
North Dakota	0.06	0.04
Ohio	1.34	0.94
Oklahoma	0.08	0.03
Pennsylvania	0.54	0.54
Rhode Island	0.00	0.00
South Carolina	0.24	0.04
South Dakota	0.03	0.01
Tennessee	0.32	0.32
Texas	0.18	0.07
Vermont	0.00	0.00
Virginia	0.12	0.06
West Virginia	0.95	0.40
Wisconsin	0.22	0.19

Based on the state-by-state contribution analysis, there are 18 states<sup>33</sup> which contribute 0.15 µg/m<sup>3</sup> or more to downwind annual PM<sub>2.5</sub> nonattainment. These states are: Alabama, Georgia, Illinois, Indiana, Iowa, Kentucky, Maryland, Michigan, Missouri, New York, North Carolina, Ohio, Pennsylvania, South Carolina,

Tennessee, Texas, West Virginia, and Wisconsin. In Table V.D–2, we provide a list of the downwind nonattainment sites to which each upwind state contributes 0.15 µg/m<sup>3</sup> or more (*i.e.*, the upwind state to downwind nonattainment “linkages”).

There are 12 states which contribute 0.15 µg/m<sup>3</sup> or more to downwind annual PM<sub>2.5</sub> maintenance. These states

are: Alabama, Illinois, Indiana, Kentucky, Michigan, Missouri, New York, Ohio, Pennsylvania, Tennessee, West Virginia, and Wisconsin. In Table V.D–3, we provide a list of the downwind maintenance sites to which each upwind state contributes 0.15 µg/m<sup>3</sup> or more (*i.e.*, the upwind state to downwind maintenance “linkages”).

<sup>33</sup> As in the proposal, EPA has combined the contributions from Maryland and the District of Columbia as a single entity in our contribution analysis for the final rule. EPA believes that this is

a fair representation of emissions for transport analysis because of the small size of the District of Columbia and its close proximity to Maryland. However, the District of Columbia is not included

in the Transport Rule due to the significant contribution analysis findings in section VI.D.

TABLE V.D-2—UPWIND STATE TO DOWNWIND NONATTAINMENT SITE “LINKAGES” FOR ANNUAL PM<sub>2.5</sub>

Upwind state	Downwind receptor sites			
Alabama .....	Fulton, GA (131210039) .....	Hamilton, OH (390610014) ..	Hamilton, OH (390610042) ..	Hamilton, OH (390618001).
Georgia .....	Jefferson, AL (10730023) ....	Jefferson, AL (10732003).		
Illinois .....	Jefferson, AL (10732003) .....	Fulton, GA (131210039) .....	Wayne, MI (261630033) .....	Cuyahoga, OH (390350038).
	Cuyahoga, OH (390350045)	Cuyahoga, OH (390350060)	Hamilton, OH (390610014) ..	Hamilton, OH (390610042).
	Hamilton, OH (390618001) ..	Allegheny, PA (420030064).		
Indiana .....	Jefferson, AL (10730023) ....	Jefferson, AL (10732003) ....	Fulton, GA (131210039) .....	Madison, IL (171191007).
	Wayne, MI (261630033) .....	Cuyahoga, OH (390350038)	Cuyahoga, OH (390350045)	Cuyahoga, OH (390350060).
	Hamilton, OH (390610014) ..	Hamilton, OH (390610042) ..	Hamilton, OH (390618001) ..	Allegheny, PA (420030064).
Iowa .....	Madison, IL (171191007).			
Kentucky .....	Jefferson, AL (10730023) ....	Jefferson, AL (10732003) ....	Fulton, GA (131210039) .....	Madison, IL (171191007).
	Wayne, MI (261630033) .....	Cuyahoga, OH (390350038)	Cuyahoga, OH (390350045)	Cuyahoga, OH (390350060).
	Hamilton, OH (390610014) ..	Hamilton, OH (390610042) ..	Hamilton, OH (390618001) ..	Allegheny, PA (420030064).
Maryland .....	Allegheny, PA (420030064).			
Michigan .....	Madison, IL (171191007) .....	Cuyahoga, OH (390350038)	Cuyahoga, OH (390350045)	Cuyahoga, OH (390350060).
	Hamilton, OH (390610014) ..	Hamilton, OH (390610042) ..	Hamilton, OH (390618001) ..	Allegheny, PA (420030064).
Missouri .....	Madison, IL (171191007) .....	Cuyahoga, OH (390350038)	Cuyahoga, OH (390350045)	Cuyahoga, OH (390350060).
	Hamilton, OH (390610014) ..	Hamilton, OH (390610042) ..	Hamilton, OH (390618001).	
New York .....	Cuyahoga, OH (390350038)	Cuyahoga, OH (390350045)	Cuyahoga, OH (390350060)	Allegheny, PA (420030064).
North Carolina .....	Fulton, GA (131210039).			
Ohio .....	Jefferson, AL (10730023) ....	Jefferson, AL (10732003) ....	Fulton, GA (131210039) .....	Madison, IL (171191007).
	Wayne, MI (261630033) .....	Allegheny, PA (420030064).		
Pennsylvania .....	Fulton, GA (131210039) .....	Wayne, MI (261630033) .....	Cuyahoga, OH (390350038)	Cuyahoga, OH (390350045).
	Cuyahoga, OH (390350060)	Hamilton, OH (390610014) ..	Hamilton, OH (390610042) ..	Hamilton, OH (390618001).
South Carolina .....	Fulton, GA (131210039).			
Tennessee .....	Jefferson, AL (10730023) ....	Jefferson, AL (10732003) ....	Fulton, GA (131210039) .....	Madison, IL (171191007).
	Hamilton, OH (390610014) ..	Hamilton, OH (390610042) ..	Hamilton, OH (390618001).	
Texas .....	Madison, IL (171191007).			
West Virginia .....	Fulton, GA (131210039) .....	Wayne, MI (261630033) .....	Cuyahoga, OH (390350038)	Cuyahoga, OH (390350045).
	Cuyahoga, OH (390350060)	Hamilton, OH (390610014) ..	Hamilton, OH (390610042) ..	Hamilton, OH (390618001).
	Allegheny, PA (420030064).			
Wisconsin .....	Madison, IL (171191007) .....	Wayne, MI (261630033) .....	Cuyahoga, OH (390350038)	Cuyahoga, OH (390350045)
	Cuyahoga, OH (390350060)	Hamilton, OH (390610014) ..	Hamilton, OH (390618001).	

TABLE V.D-3—UPWIND STATE TO DOWNWIND MAINTENANCE SITE “LINKAGES” FOR ANNUAL PM<sub>2.5</sub>

Upwind state	Downwind receptor sites			
Alabama .....	Marion, IN (180970081) .....	Marion, IN (180970083) .....	Hamilton, OH (390617001).	
Illinois .....	Marion, IN (180970081) .....	Marion, IN (180970083) .....	Cuyahoga, OH (390350065)	Hamilton, OH (390617001).
Indiana .....	Cuyahoga, OH (390350065)	Hamilton, OH (390617001).		
Kentucky .....	Marion, IN (180970081) .....	Marion, IN (180970083) .....	Cuyahoga, OH (390350065)	Hamilton, OH (390617001).
Michigan .....	Marion, IN (180970081) .....	Marion, IN (180970083) .....	Cuyahoga, OH (390350065)	Hamilton, OH (390617001).
Missouri .....	Marion, IN (180970081) .....	Marion, IN (180970083) .....	Cuyahoga, OH (390350065)	Hamilton, OH (390617001).
New York .....	Cuyahoga, OH (390350065).			
Ohio .....	Marion, IN (180970081) .....	Marion, IN (180970083).		
Pennsylvania .....	Marion, IN (180970081) .....	Marion, IN (180970083) .....	Cuyahoga, OH (390350065)	Hamilton, OH (390617001).
Tennessee .....	Marion, IN (180970081) .....	Marion, IN (180970083) .....	Hamilton, OH (390617001).	
West Virginia .....	Marion, IN (180970081) .....	Marion, IN (180970083) .....	Cuyahoga, OH (390350065)	Hamilton, OH (390617001).
Wisconsin .....	Marion, IN (180970081) .....	Marion, IN (180970083) .....	Cuyahoga, OH (390350065)	Hamilton, OH (390617001).

For 24-hour PM<sub>2.5</sub>, we calculated each state’s contribution to each of the 20 monitoring sites that are projected to be nonattainment and each of the 21 sites that are projected to have maintenance problems for the 24-hour PM<sub>2.5</sub> NAAQS in the 2012 base case. A detailed

description of the calculations can be found in the Air Quality Modeling Final Rule TSD. The largest contribution from each state to 24-hour PM<sub>2.5</sub> nonattainment in downwind sites is provided in Table V.D-4. The largest contribution from each state to 24-hour

PM<sub>2.5</sub> maintenance in downwind sites is also provided in Table V.D-4. The contributions from each state to all projected 2012 nonattainment and maintenance sites for the 24-hour PM<sub>2.5</sub> NAAQS are provided in the Air Quality Modeling Final Rule TSD.

TABLE V.D-4—LARGEST CONTRIBUTION TO DOWNWIND 24-HOUR PM<sub>2.5</sub> (µg/M<sup>3</sup>) NONATTAINMENT AND MAINTENANCE FOR EACH OF 37 STATES

Upwind state	Largest downwind contribution to non-attainment for 24-hour PM <sub>2.5</sub> (µg/m <sup>3</sup> )	Largest downwind contribution to maintenance for 24-hour PM <sub>2.5</sub> (µg/m <sup>3</sup> )
Alabama .....	0.51	0.42

TABLE V.D-4—LARGEST CONTRIBUTION TO DOWNWIND 24-HOUR PM<sub>2.5</sub> (µg/M<sup>3</sup>) NONATTAINMENT AND MAINTENANCE FOR EACH OF 37 STATES—Continued

Upwind state	Largest downwind contribution to non-attainment for 24-hour PM <sub>2.5</sub> (µg/m <sup>3</sup> )	Largest downwind contribution to maintenance for 24-hour PM <sub>2.5</sub> (µg/m <sup>3</sup> )
Arkansas	0.24	0.23
Connecticut	0.10	0.18
Delaware	0.22	0.20
Florida	0.07	0.03
Georgia	1.10	0.92
Illinois	3.72	5.70
Indiana	3.56	5.15
Iowa	0.82	1.55
Kansas	0.37	0.81
Kentucky	4.38	3.58
Louisiana	0.11	0.13
Maine	0.06	0.10
Maryland	2.83	2.11
Massachusetts	0.19	0.30
Michigan	1.86	2.03
Minnesota	0.61	1.01
Mississippi	0.06	0.07
Missouri	3.73	3.71
Nebraska	0.24	0.52
New Hampshire	0.05	0.10
New Jersey	0.68	0.75
New York	0.83	1.34
North Carolina	0.40	0.38
North Dakota	0.21	0.33
Ohio	5.85	4.74
Oklahoma	0.17	0.20
Pennsylvania	2.85	2.29
Rhode Island	0.02	0.03
South Carolina	0.29	0.25
South Dakota	0.10	0.17
Tennessee	1.38	1.30
Texas	0.37	0.33
Vermont	0.03	0.05
Virginia	1.21	1.01
West Virginia	4.02	3.33
Wisconsin	0.69	0.97

Based on the state-by-state contribution analysis, there are 21 states<sup>34</sup> which contribute 0.35 µg/m<sup>3</sup> or more to downwind 24-hour PM<sub>2.5</sub> nonattainment. These states are: Alabama, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Michigan, Minnesota, Missouri, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Tennessee, Texas, Virginia, West Virginia, and Wisconsin.

In Table V.D-5, we provide a list of the downwind nonattainment counties to which each upwind state contributes 0.35 µg/m<sup>3</sup> or more (*i.e.*, the upwind state to downwind nonattainment “linkages”).

There are 21 states which contribute 0.35 µg/m<sup>3</sup> or more to downwind 24-hour PM<sub>2.5</sub> maintenance. These states are: Alabama, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland,

Michigan, Minnesota, Missouri, Nebraska, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia, and Wisconsin. In Table V.D-6, we provide a list of the downwind maintenance sites to which each upwind state contributes 0.35 µg/m<sup>3</sup> or more (*i.e.*, the upwind state to downwind maintenance “linkages”).

TABLE V.D-5—UPWIND STATE TO DOWNWIND NONATTAINMENT SITE “LINKAGES” FOR 24-HOUR PM<sub>2.5</sub>

Upwind state	Downwind receptor sites			
Alabama	Marion, IN (180970043)	Marion, IN (180970066)	Marion, IN (180970081).	
Georgia	Jefferson, AL (10730023).			
Illinois	Marion, IN (180970043)	Marion, IN (180970066)	Marion, IN (180970081)	St Clair, MI (261470005).
	Wayne, MI (261630015)	Wayne, MI (261630016)	Wayne, MI (261630019)	Wayne, MI (261630033).
	Cuyahoga, OH (390350038)	Cuyahoga, OH (390350060)	Allegheny, PA (420030064)	Allegheny, PA (420030093).
	Allegheny, PA (420030116)	Beaver, PA (420070014)	Brooke, WV (540090011)	Milwaukee, WI (550790043).

<sup>34</sup> As in the proposal, EPA has combined the contributions from Maryland and the District of Columbia as a single entity in our contribution analysis for the final rule. EPA believes that this is

a fair representation of emissions for transport analysis because of the small size of the District of Columbia and its close proximity to Maryland. However, the District of Columbia is not included

in the Transport Rule due to the significant contribution analysis findings in section VI.D.

TABLE V.D-5—UPWIND STATE TO DOWNWIND NONATTAINMENT SITE “LINKAGES” FOR 24-HOUR PM<sub>2.5</sub>—Continued

Indiana .....	Jefferson, AL (10730023) .... Wayne, MI (261630015) .....	Cook, IL (170311016) .....	Madison, IL (171191007) .....	St Clair, MI (261470005).
	Cuyahoga, OH (390350038) Allegheny, PA (420030116)	Wayne, MI (261630016) .....	Wayne, MI (261630019) .....	Wayne, MI (261630033).
Iowa .....	Cook, IL (170311016) .....	Cuyahoga, OH (390350060)	Allegheny, PA (420030064)	Allegheny, PA (420030093).
Kansas .....	Madison, IL (171191007).	Beaver, PA (420070014) .....	Brooke, WV (540090011) ....	Milwaukee, WI (550790043).
Kentucky .....	Jefferson, AL (10730023) .... Marion, IN (180970066) .....	Madison, IL (171191007) .....	Madison, IL (171191007) .....	Marion, IN (180970043).
	Wayne, MI (261630016) .....	Marion, IN (180970081) .....	St Clair, MI (261470005) .....	Wayne, MI (261630015).
	Cuyahoga, OH (390350060)	Wayne, MI (261630019) .....	Wayne, MI (261630033) .....	Cuyahoga, OH (390350038).
	Beaver, PA (420070014) .....	Allegheny, PA (420030064)	Allegheny, PA (420030093)	Allegheny, PA (420030116).
Maryland .....	Cuyahoga, OH (390350038)	Brooke, WV (540090011) ....	Milwaukee, WI (550790043).	
Michigan .....	Cook, IL (170311016) .....	Lancaster, PA (420710007).		
	Allegheny, PA (420030064)	Madison, IL (171191007) .....	Cuyahoga, OH (390350038)	Cuyahoga, OH (390350060).
	Milwaukee, WI (550790043).	Allegheny, PA (420030093)	Beaver, PA (420070014) .....	Brooke, WV (540090011).
Minnesota .....	Milwaukee, WI (550790043).			
Missouri .....	Cook, IL (170311016) .....	Madison, IL (171191007) .....	Marion, IN (180970043) .....	Marion, IN (180970066).
	Marion, IN (180970081) .....	St Clair, MI (261470005) .....	Wayne, MI (261630015) .....	Allegheny, PA (420030064).
	Allegheny, PA (420030116)	Beaver, PA (420070014) .....	Milwaukee, WI (550790043).	
New Jersey .....	Lancaster, PA (420710007).			
New York .....	St Clair, MI (261470005) .....	Wayne, MI (261630016) .....	Wayne, MI (261630019) .....	Wayne, MI (261630033).
	Cuyahoga, OH (390350060)	Lancaster, PA (420710007).		
North Carolina .....	Lancaster, PA (420710007).			
Ohio .....	Jefferson, AL (10730023) .... Marion, IN (180970066) .....	Cook, IL (170311016) .....	Madison, IL (171191007) .....	Marion, IN (180970043).
	Wayne, MI (261630016) .....	Marion, IN (180970081) .....	St Clair, MI (261470005) .....	Wayne, MI (261630015).
	Allegheny, PA (420030093)	Wayne, MI (261630019) .....	Wayne, MI (261630033) .....	Allegheny, PA (420030064).
	Brooke, WV (540090011) ....	Allegheny, PA (420030116)	Beaver, PA (420070014) .....	Lancaster, PA (420710007).
	Jefferson, AL (10730023) ....	Milwaukee, WI (550790043).		
Pennsylvania .....	Marion, IN (180970066) .....	Cook, IL (170311016) .....	Madison, IL (171191007) .....	Marion, IN (180970043).
	Wayne, MI (261630016) .....	Marion, IN (180970081) .....	St Clair, MI (261470005) .....	Wayne, MI (261630015).
	Cuyahoga, OH (390350060)	Wayne, MI (261630019) .....	Wayne, MI (261630033) .....	Cuyahoga, OH (390350038).
	Jefferson, AL (10730023) ....	Brooke, WV (540090011) ....	Milwaukee, WI (550790043)..	
Tennessee .....	Marion, IN (180970066) .....	Madison, IL (171191007) .....	Marion, IN (180970043) .....	Marion, IN (180970066).
	Wayne, MI (261630016) .....	St Clair, MI (261470005) .....	Wayne, MI (261630015) .....	Wayne, MI (261630033).
	Cuyahoga, OH (390350038)	Allegheny, PA (420030116).		
Texas .....	Madison, IL (171191007).			
Virginia .....	Lancaster, PA (420710007).			
West Virginia .....	Jefferson, AL (10730023) .... Marion, IN (180970066) .....	Cook, IL (170311016) .....	Madison, IL (171191007) .....	Marion, IN (180970043).
	Wayne, MI (261630016) .....	Marion, IN (180970081) .....	St Clair, MI (261470005) .....	Wayne, MI (261630015).
	Cuyahoga, OH (390350060)	Wayne, MI (261630019) .....	Wayne, MI (261630033) .....	Cuyahoga, OH (390350038).
	Beaver, PA (420070014) .....	Allegheny, PA (420030064)	Allegheny, PA (420030093)	Allegheny, PA (420030116).
	Cook, IL (170311016) .....	Lancaster, PA (420710007)	Milwaukee, WI (550790043).	
Wisconsin .....		Wayne, MI (261630019) .....	Wayne, MI (261630033).	

TABLE V.D-6—UPWIND STATE TO DOWNWIND MAINTENANCE SITE “LINKAGES” FOR 24-HOUR PM<sub>2.5</sub>

Upwind state	Downwind receptor sites			
Alabama .....	Washtenaw, MI (261610008)	Butler, OH (390170003) .....	Montgomery, OH (391130032).	
Georgia .....	Jefferson, AL (10732003).			
Illinois .....	Lake, IN (180890022) .....	Lake, IN (180890026) .....	Washtenaw, MI (261610008)	Butler, OH (390170003).
	Cuyahoga, OH (390350045)	Cuyahoga, OH (390350065)	Hamilton, OH (390618001) ..	Jefferson, OH (390811001).
	Montgomery, OH (391130032).	Allegheny, PA (420031008)	Allegheny, PA (420031301)	Allegheny, PA (420033007).
	York, PA (421330008) .....	Milwaukee, WI (550790010)	Milwaukee, WI (550790026).	
Indiana .....	Jefferson, AL (10732003) ....	Cook, IL (170310052) .....	Cook, IL (170312001) .....	Cook, IL (170313301).
	Cook, IL (170316005) .....	Madison, IL (171190023) .....	Washtenaw, MI (261610008)	Butler, OH (390170003).
	Cuyahoga, OH (390350045)	Cuyahoga, OH (390350065)	Hamilton, OH (390618001) ..	Jefferson, OH (390811001).
	Montgomery, OH (391130032).	Allegheny, PA (420031008)	Allegheny, PA (420031301)	Allegheny, PA (420033007).
	York, PA (421330008) .....	Milwaukee, WI (550790010)	Milwaukee, WI (550790026).	
Iowa .....	Cook, IL (170310052) .....	Cook, IL (170312001) .....	Cook, IL (170313301) .....	Cook, IL (170316005).
	Madison, IL (171190023) .....	Lake, IN (180890022) .....	Lake, IN (180890026) .....	Milwaukee, WI (550790010).
	Milwaukee, WI (550790026).			
Kansas .....	Cook, IL (170310052) .....	Cook, IL (170316005) .....	Milwaukee, WI (550790010)	Milwaukee, WI (550790026).
Kentucky .....	Jefferson, AL (10732003) ....	Cook, IL (170310052) .....	Cook, IL (170312001) .....	Cook, IL (170313301).
	Cook, IL (170316005) .....	Madison, IL (171190023) .....	Lake, IN (180890022) .....	Lake, IN (180890026).
	Washtenaw, MI (261610008)	Butler, OH (390170003) .....	Cuyahoga, OH (390350045)	Cuyahoga, OH (390350065).
	Hamilton, OH (390618001) ..	Jefferson, OH (390811001)	Montgomery, OH (391130032).	Allegheny, PA (420031008).
	Allegheny, PA (420031301)	Allegheny, PA (420033007)	York, PA (421330008) .....	Milwaukee, WI (550790010).
	Milwaukee, WI (550790026).			

TABLE V.D-6—UPWIND STATE TO DOWNWIND MAINTENANCE SITE “LINKAGES” FOR 24-HOUR PM<sub>2.5</sub>—Continued

Maryland .....	York, PA (421330008).			
Michigan .....	Cook, IL (170310052) .....	Cook, IL (170312001) .....	Cook, IL (170313301) .....	Cook, IL (170316005).
	Madison, IL (171190023) .....	Lake, IN (180890022) .....	Lake, IN (180890026) .....	Butler, OH (390170003).
	Cuyahoga, OH (390350045)	Cuyahoga, OH (390350065)	Hamilton, OH (390618001) ..	Jefferson, OH (390811001).
	Montgomery, OH	Allegheny, PA (420031008)	Allegheny, PA (420031301)	Allegheny, PA (420033007).
	(391130032).			
	York, PA (421330008) .....	Milwaukee, WI (550790010)	Milwaukee, WI (550790026).	
Minnesota .....	Milwaukee, WI (550790010)	Milwaukee, WI (550790026).		
Missouri .....	Cook, IL (170310052) .....	Cook, IL (170312001) .....	Cook, IL (170313301) .....	Cook, IL (170316005).
	Madison, IL (171190023) .....	Lake, IN (180890022) .....	Lake, IN (180890026) .....	Washtenaw, MI
	Butler, OH (390170003) .....	Hamilton, OH (390618001) ..	Montgomery, OH	(261610008).
	Milwaukee, WI (550790010)	Milwaukee, WI (550790026).	(391130032).	Allegheny, PA (420031008).
Nebraska .....	Milwaukee, WI (550790010)	Milwaukee, WI (550790026).		
New Jersey .....	York, PA (421330008).			
New York .....	Washtenaw, MI (261610008)	Cuyahoga, OH (390350045)	Cuyahoga, OH (390350065)	York, PA (421330008).
North Carolina .....	York, PA (421330008).			
Ohio .....	Jefferson, AL (10732003) ....	Cook, IL (170310052) .....	Cook, IL (170312001) .....	Cook, IL (170313301).
	Cook, IL (170316005) .....	Madison, IL (171190023) .....	Lake, IN (180890022) .....	Lake, IN (180890026).
	Washtenaw, MI (261610008)	Allegheny, PA (420031008)	Allegheny, PA (420031301)	Allegheny, PA (420033007).
	York, PA (421330008) .....	Milwaukee, WI (550790010)	Milwaukee, WI (550790026).	
Pennsylvania .....	Jefferson, AL (10732003) ....	Cook, IL (170310052) .....	Cook, IL (170312001) .....	Cook, IL (170313301).
	Madison, IL (171190023) .....	Lake, IN (180890022) .....	Lake, IN (180890026) .....	Washtenaw, MI
	Butler, OH (390170003) .....	Cuyahoga, OH (390350045)	Cuyahoga, OH (390350065)	(261610008).
	Jefferson, OH (390811001)	Montgomery, OH	Milwaukee, WI (550790010)	Hamilton, OH (390618001).
		(391130032).		Milwaukee, WI (550790026).
Tennessee .....	Jefferson, AL (10732003) ....	Madison, IL (171190023) .....	Washtenaw, MI (261610008)	Butler, OH (390170003).
	Cuyahoga, OH (390350065)	Hamilton, OH (390618001) ..	Montgomery, OH	
			(391130032).	
Virginia .....	York, PA (421330008).			
West Virginia .....	Jefferson, AL (10732003) ....	Cook, IL (170310052) .....	Cook, IL (170312001) .....	Cook, IL (170313301).
	Madison, IL (171190023) .....	Lake, IN (180890022) .....	Lake, IN (180890026) .....	Washtenaw, MI
	Butler, OH (390170003) .....	Cuyahoga, OH (390350045)	Cuyahoga, OH (390350065)	(261610008).
	Jefferson, OH (390811001)	Montgomery, OH	Allegheny, PA (420031008)	Hamilton, OH (390618001).
		(391130032).		Allegheny, PA (420031301).
	Allegheny, PA (420033007)	York, PA (421330008) .....	Milwaukee, WI (550790010).	
Wisconsin .....	Cook, IL (170310052) .....	Cook, IL (170312001) .....	Cook, IL (170313301) .....	Cook, IL (170316005).
	Lake, IN (180890022) .....	Lake, IN (180890026).		

b. Estimated Interstate Contributions to 8-Hour Ozone

In this section, we present the interstate contributions from emissions in upwind states to downwind nonattainment and maintenance sites for the ozone NAAQS. As described previously in section V.D.1, states which contribute 0.8 ppb or more to 8-hour ozone nonattainment or maintenance in another state are identified as states with contributions to

downwind attainment and maintenance sites large enough to warrant further analysis.

We calculated each state’s contribution to ozone at each of the 4 monitoring sites that are projected to be nonattainment and each of 6<sup>35</sup> sites that are projected to have maintenance problems for the 8-hour ozone NAAQS in the 2012 base case. A detailed description of the calculations can be found in the Air Quality Modeling Final

Rule TSD. The largest contribution from each state to 8-hour ozone nonattainment in downwind sites is provided in Table V.D-7. The largest contribution from each state to 8-hour ozone maintenance in downwind sites is also provided in Table V.D.2-7. The contributions from each state to all projected 2012 nonattainment and maintenance sites for the 8-hour ozone NAAQS are provided in the Air Quality Modeling Final Rule TSD.

TABLE V.D-7—LARGEST CONTRIBUTION TO DOWNWIND 8-HOUR OZONE NONATTAINMENT AND MAINTENANCE FOR EACH OF 37 STATES

Upwind state	Largest downwind contribution to nonattainment for ozone (ppb)	Largest downwind contribution to maintenance for ozone (ppb)
Alabama .....	4.0	2.8
Arkansas .....	2.1	2.0

<sup>35</sup> There are 6 additional sites with projected 2012 nonattainment or maintenance (Harris Co., Texas sites 482010024, 482010062, 482010066,

482011015, 482011035, and 482011039) for which there are less than 5 days with 8-hour ozone

predictions of at least 70 ppb. Thus, we did not calculate contributions for these 6 sites.

TABLE V.D-7—LARGEST CONTRIBUTION TO DOWNWIND 8-HOUR OZONE NONATTAINMENT AND MAINTENANCE FOR EACH OF 37 STATES—Continued

Upwind state	Largest downwind contribution to nonattainment for ozone (ppb)	Largest downwind contribution to maintenance for ozone (ppb)
Connecticut	0.0	0.2
Delaware	0.0	0.6
Florida	0.5	3.6
Georgia	1.6	2.8
Illinois	1.9	26.8
Indiana	1.3	9.4
Iowa	0.6	0.9
Kansas	0.5	1.0
Kentucky	1.6	1.6
Louisiana	8.0	11.1
Maine	0.0	0.0
Maryland	0.0	2.7
Massachusetts	0.0	0.6
Michigan	0.0	0.9
Minnesota	0.3	0.2
Mississippi	4.0	3.3
Missouri	1.1	4.8
Nebraska	0.2	0.2
New Hampshire	0.0	0.1
New Jersey	0.0	11.5
New York	0.0	18.8
North Carolina	0.5	1.3
North Dakota	0.2	0.1
Ohio	0.1	3.2
Oklahoma	0.3	2.8
Pennsylvania	0.1	8.2
Rhode Island	0.0	0.0
South Carolina	0.4	0.9
South Dakota	0.1	0.1
Tennessee	2.2	1.1
Texas	3.9	1.9
Vermont	0.0	0.0
Virginia	0.2	8.2
West Virginia	0.0	2.8
Wisconsin	0.2	2.2

Based on the state-by-state contribution analysis, there are 11 states that contribute 0.8 ppb or more to downwind 8-hour ozone nonattainment. These states are: Alabama, Arkansas, Georgia, Illinois, Indiana, Kentucky, Louisiana, Mississippi, Missouri, Tennessee, and Texas.<sup>36</sup> In Table V.D-8, we provide a list of the downwind nonattainment counties to which each

<sup>36</sup> As discussed in section III, EPA is issuing a supplemental notice of proposed rulemaking to provide an opportunity for public comment on our conclusion that emissions from Iowa, Kansas, Michigan, Missouri, Oklahoma, and Wisconsin significantly contribute to nonattainment or interfere with maintenance of the 1997 ozone NAAQS in other states.

upwind state contributes 0.8 ppb or more (*i.e.*, the upwind state to downwind nonattainment “linkages”).

There are 26 states<sup>37</sup> which contribute 0.8 ppb or more to downwind 8-hour ozone maintenance. These states are: Alabama, Arkansas, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland,

<sup>37</sup> As in the proposal, EPA has combined the contributions from Maryland and the District of Columbia as a single entity in our contribution analysis for the final rule. EPA believes that this is a fair representation of emissions for transport analysis because of the small size of the District of Columbia and its close proximity to Maryland. However, the District of Columbia is not included in the Transport Rule due to the significant contribution analysis findings in section VI.D.

Michigan, Mississippi, Missouri, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, West Virginia, and Wisconsin.<sup>38</sup> In Table V.D.2-9, we provide a list of the downwind nonattainment counties to which each upwind state contributes 0.8 ppb or more (*i.e.*, the upwind state to downwind nonattainment “linkages”).

<sup>38</sup> As discussed in section III, EPA is issuing a supplemental notice of proposed rulemaking to provide an opportunity for public comment on our conclusion that emissions from Iowa, Kansas, Michigan, Missouri, Oklahoma, and Wisconsin significantly contribute to nonattainment or interfere with maintenance of the 1997 ozone NAAQS in other states.

TABLE V.D-8—UPWIND STATE TO DOWNWIND NONATTAINMENT “LINKAGES” FOR 8-HOUR OZONE

Upwind state	Downwind receptor sites			
Alabama .....	East Baton Rouge, LA (220330003).	Brazoria, TX (480391004) ...	Harris, TX (482010051) .....	Harris, TX (482010055).
Arkansas .....	East Baton Rouge, LA (220330003).	Brazoria, TX (480391004).		
Georgia .....	East Baton Rouge, LA (220330003).	Brazoria, TX (480391004) ...	Harris, TX (482010051) .....	Harris, TX (482010055).
Illinois .....	Brazoria, TX (480391004) ...	Harris, TX (482010051) .....	Harris, TX (482010055).	
Indiana .....	Brazoria, TX (480391004) ...	Harris, TX (482010051) .....	Harris, TX (482010055).	
Kentucky .....	Brazoria, TX (480391004) ...	Harris, TX (482010051) .....	Harris, TX (482010055).	
Louisiana .....	Brazoria, TX (480391004) ...	Harris, TX (482010051) .....	Harris, TX (482010055).	
Mississippi .....	East Baton Rouge, LA (220330003).	Brazoria, TX (480391004) ...	Harris, TX (482010051) .....	Harris, TX (482010055).
Missouri .....	Brazoria, TX (480391004) ...	Harris, TX (482010051) .....	Harris, TX (482010055).	
Tennessee .....	East Baton Rouge, LA (220330003).	Brazoria, TX (480391004) ...	Harris, TX (482010051) .....	Harris, TX (482010055).
Texas .....	East Baton Rouge, LA (220330003).			

TABLE V.D-9—UPWIND STATE TO DOWNWIND MAINTENANCE “LINKAGES” FOR 8-HOUR OZONE

Upwind state	Downwind receptor sites			
Alabama .....	Harris, TX (482010029) .....	Harris, TX (482011050).		
Arkansas .....	Allegan, MI (260050003).			
Florida .....	Harris, TX (482010029) .....	Harris, TX (482011050).		
Georgia .....	Harris, TX (482010029) .....	Harris, TX (482011050).		
Illinois .....	Fairfield, CT (90011123) .....	Allegan, MI (260050003) ....	Harris, TX (482011050).	
Indiana .....	Fairfield, CT (90011123) .....	New Haven, CT (90093002)	Harford, MD (240251001) ....	Allegan, MI (260050003).
Iowa .....	Allegan, MI (260050003).			
Kansas .....	Allegan, MI (260050003).			
Kentucky .....	Fairfield, CT (90011123) .....	New Haven, CT (90093002)	Harford, MD (240251001) ....	Harris, TX (482011050).
Louisiana .....	Harris, TX (482010029) .....	Harris, TX (482011050).		
Maryland .....	Fairfield, CT (90011123) .....	New Haven, CT (90093002).		
Michigan .....	Harford, MD (240251001).			
Mississippi .....	Harris, TX (482010029) .....	Harris, TX (482011050).		
Missouri .....	Allegan, MI (260050003).			
New Jersey .....	Fairfield, CT (90011123) .....	New Haven, CT (90093002).		
New York .....	Fairfield, CT (90011123) .....	New Haven, CT (90093002)	Harford, MD (240251001).	
North Carolina .....	New Haven, CT (90093002)	Harford, MD (240251001).		
Ohio .....	Fairfield, CT (90011123) .....	New Haven, CT (90093002)	Harford, MD (240251001).	
Oklahoma .....	Allegan, MI (260050003).			
Pennsylvania .....	Fairfield, CT (90011123) .....	New Haven, CT (90093002)	Harford, MD (240251001).	
South Carolina .....	Harris, TX (482010029).			
Tennessee .....	Fairfield, CT (90011123) .....	Harford, MD (240251001) ....	Harris, TX (482011050).	
Texas .....	Allegan, MI (260050003).			
Virginia .....	Fairfield, CT (90011123) .....	New Haven, CT (90093002)	Harford, MD (240251001).	
West Virginia .....	Fairfield, CT (90011123) .....	New Haven, CT (90093002)	Harford, MD (240251001).	
Wisconsin .....	Allegan, MI (260050003).			

**VI. Quantification of State Emission Reductions Required**

*A. Cost and Air Quality Structure for Defining Reductions*

1. Summary

Section V, above, describes EPA’s approach to identifying upwind states with air quality contributions that meet or exceed the air quality thresholds discussed therein for each of the NAAQS addressed in this rule. A state is covered by the Transport Rule if its contributions meet or exceed one of those air quality thresholds and the Agency identifies, using the cost- and air quality-based approach described

below, emissions within the state that constitute the state’s significant contribution to nonattainment and interference with maintenance with respect to the 1997 ozone, 1997 PM<sub>2.5</sub> or 2006 PM<sub>2.5</sub> NAAQS.

In this section, EPA explains its final cost- and air quality-based approach to quantify the amount of emissions that represent significant contribution to nonattainment and interference with maintenance for each state. EPA then applies that approach for the three different NAAQS being addressed in this rule: The 1997 ozone NAAQS, the 1997 annual PM<sub>2.5</sub> NAAQS and the 2006 24-hour PM<sub>2.5</sub> NAAQS. EPA believes that the methodology finalized could

also be used to address transport concerns under other NAAQS, including future revisions to the ozone and PM<sub>2.5</sub> NAAQS.

EPA applies the methodology described herein to fully quantify the emissions that constitute each covered state’s significant contribution to nonattainment and interference with maintenance with respect to the 1997 annual PM<sub>2.5</sub> and the 2006 24-hour PM<sub>2.5</sub> NAAQS. The FIPs with respect to the annual and 24-hour PM<sub>2.5</sub> NAAQS that are finalized in this action ensure that all such emissions are prohibited. Each such FIP thus fully satisfies the requirements of 110(a)(2)(D)(i)(I) with



respect to the annual and/or 24-hour PM<sub>2.5</sub> NAAQS for the covered state.

EPA also applies the methodology to quantify significant contribution to nonattainment and interference with maintenance with respect to the 1997 ozone NAAQS. However, we have not been able to fully quantify such emissions for all covered states. In this action, EPA fully quantifies the significant contribution to nonattainment and interference with maintenance for 15 states. We finalize FIPs with respect to the 1997 ozone standards for 10 of these 15 states (Florida, Maryland, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Virginia, and West Virginia). We are also publishing a supplemental notice of rulemaking to take comment on whether FIPs should be finalized for the remaining 5 states (Iowa, Kansas, Michigan, Oklahoma, and Wisconsin). The FIPs for these 10 states (and the FIPs for the remaining 5 states, if finalized) fully satisfy the requirements of 110(a)(2)(D)(i)(I) with respect to the 1997 ozone NAAQS for the covered state.

In addition, we apply the methodology described herein to quantify, for 11 additional states, ozone-season NO<sub>x</sub> emission reductions that are necessary but may not be sufficient to eliminate all significant contribution to nonattainment and interference with maintenance in other states. We finalize FIPs with respect to the 1997 ozone standards for 10 of these 11 states (Alabama, Arkansas, Georgia, Illinois, Indiana, Kentucky, Louisiana, Mississippi, Tennessee, and Texas). We are also publishing a supplemental notice of rulemaking to take comment on whether FIPs should be finalized for the remaining state (Missouri). The FIPs for these 10 states (and the FIP for the remaining state, if finalized) make measurable progress toward satisfying the requirements of 110(a)(2)(D)(i)(I) with respect to the 1997 ozone NAAQS in each covered state. To the extent that significant contribution to nonattainment and interference with maintenance is not entirely eliminated for the 1997 ozone NAAQS through today's action, EPA will address these instances in a future rulemaking. This is further explained in section VI.D.

With respect to the 1997 annual PM<sub>2.5</sub> NAAQS, this rule finds that 18 states have SO<sub>2</sub> and NO<sub>x</sub> emission reduction responsibilities. EPA also finds that 21 states have SO<sub>2</sub> and NO<sub>x</sub> emission reduction responsibilities with respect to the 2006 24-hour PM<sub>2.5</sub> NAAQS. There are a total of 23 states that have SO<sub>2</sub> and NO<sub>x</sub> emission reduction

responsibilities for one or both of the above PM<sub>2.5</sub> NAAQS. We apply the methodology to quantify emission reductions that these states must achieve to eliminate the state's significant contribution to nonattainment and interference with maintenance. The states are listed in Table III-1 in section III of this preamble.

This rule will prohibit all significant contribution to nonattainment and interference with maintenance with respect to the annual and 24-hour PM<sub>2.5</sub>. In addition, it will resolve air quality issues at most nonattainment and maintenance receptors identified by EPA. EPA projects that unresolved nonattainment and maintenance issues will remain in only a few downwind states after promulgation and implementation of the Transport Rule. For the annual PM<sub>2.5</sub> standard, EPA projects that this rule will help assure that all areas in the east fully resolve their nonattainment and maintenance concerns. This rule will also help a number of areas achieve the standard earlier than they may have otherwise. For the 2006 24-hour PM<sub>2.5</sub> NAAQS, one area is projected to remain in nonattainment (Liberty-Clairton) and three areas are projected to have remaining maintenance concerns after imposition of the Transport Rule (Chicago,<sup>39</sup> Detroit, and Lancaster County).<sup>40</sup>

The methodology provides similar assistance for ozone, assuring upwind reductions that will assist downwind states in controlling ozone pollution. It reduces ozone concentration levels in 2012 and helps assure that all but two downwind areas fully resolve their nonattainment and maintenance problems with the 1997 ozone NAAQS by 2014. While Houston is projected to still face nonattainment and Baton Rouge is projected to still face maintenance concerns with the 1997 ozone NAAQS, the Transport Rule improves air quality in these two areas and provides both health benefits and assistance for these local areas in meeting the NAAQS requirements. For reasons explained below, EPA will conduct further analysis in a subsequent transport-related rulemaking to determine whether further upwind state

reductions are warranted to assist attainment and maintenance of the ozone NAAQS in Houston and Baton Rouge areas.

When EPA proposed this air-quality and cost-based multi-factor approach to identify emissions that constitute significant contribution to nonattainment and interference with maintenance from upwind states with respect to the 1997 ozone, annual PM<sub>2.5</sub>, and 2006 24-hour PM<sub>2.5</sub> NAAQS, the Agency indicated that the approach was designed to be applicable to both current and potential future ozone and PM<sub>2.5</sub> NAAQS (75 FR 45214). EPA believes that the final Transport Rule demonstrates the value of this approach for addressing the role of interstate transport of air pollution in communities' ability to comply with current and future NAAQS. EPA believes that the Transport Rule's approach of using air-quality thresholds to determine upwind-to-downwind-state linkages and using the cost- and air quality-based multi-factor approach to quantify significant contribution to nonattainment and interference with maintenance (*i.e.*, to determine the specific amount of emissions that each upwind state must reduce) could serve as a precedent for quantifying upwind state emission reduction responsibilities with respect to potential future NAAQS.

One commenter suggested that the rule could set a flawed precedent for future transport analyses and remedies, as it does not fully eliminate the prohibited emissions in every upwind state. EPA disagrees with this characterization of the Transport Rule. EPA notes that the partial determination of significant contribution to nonattainment and interference with maintenance for certain upwind states in the Transport Rule with respect to the ozone NAAQS is not a function of the multi-factor approach itself, but is instead a function of its limited application in this rulemaking to identify emission reductions from a single source category (EGUs). In fact, the Transport Rule's approach itself allowed EPA to determine for which upwind states we have identified all emissions that constitute significant contribution to nonattainment and interference with maintenance, and for which upwind states we have identified emissions that are necessary but may not be sufficient to eliminate the prohibited emissions. As EPA explained at proposal, developing the additional information needed to consider NO<sub>x</sub> emissions from non-EGU source categories in order to fully quantify upwind state responsibility with respect to the 1997 ozone NAAQS would

<sup>39</sup> This area is not currently designated as nonattainment for the 24-hour PM<sub>2.5</sub> standard. EPA is portraying the receptors and counties in this area as a single 24-hour maintenance area based on the annual PM<sub>2.5</sub> nonattainment designation of Chicago-Gary-Lake County, IL-IN.

<sup>40</sup> In the Transport Rule proposal, EPA noted that the Liberty-Clairton receptor in Allegheny county was significantly impacted by local emissions from a sizeable coke production facility and other nearby sources (75 FR 45281).

substantially delay promulgation of the Transport Rule. EPA explained that we do not believe that effort should delay the emission reductions and large health benefits this final rule will deliver (75 FR 45213). EPA further explained that we believe it is likely that the Agency can provide the greatest assistance to states in addressing transported pollution by issuing a separate (subsequent) rule to address additional reductions that may be necessary to fully eliminate upwind state responsibility with respect to the 1997 ozone NAAQS (75 FR 45288). Thus, EPA decided to promulgate the Transport Rule as quickly as possible. EPA anticipates that application of this air-quality and cost-based multi-factor approach to a broader set of source categories in a subsequent rulemaking will identify any remaining prohibited emissions in the upwind states for which the Transport Rule may not fully eliminate those emissions with respect to the 1997 ozone NAAQS.

## 2. Background

After using air quality analysis to identify upwind states that are “linked” to downwind air quality monitoring sites with nonattainment and maintenance problems through contribution of at least one percent of the relevant NAAQS, EPA quantifies the portion of each state’s contribution that constitutes its “significant contribution” or “interference with maintenance.”

This section describes the methodology developed by EPA for this analysis and then explains how that methodology is applied to measure significant contribution to nonattainment and interference with maintenance with respect to the NAAQS of concern. For this portion of the analysis, EPA expands upon the methodology used in the NO<sub>x</sub> SIP Call and CAIR but modifies it in important respects. In the NO<sub>x</sub> SIP Call and CAIR, EPA’s methodology defined significant contribution as those emissions that could be removed with the use of “highly cost effective” controls. In the Transport Rule, rather than relying solely on an analysis of what constitutes “highly cost effective” controls, EPA relies on an analysis that accounts for both cost and air quality improvement to identify the portion of a state’s contribution that constitutes its significant contribution to nonattainment and interference with maintenance. Furthermore, in response to the Court’s opinion in *North Carolina*, EPA has developed an approach which gives independent meaning to the “interfere with

maintenance” prong of section 110(a)(2)(D)(i)(I).

The methodology takes into account both the D.C. Circuit Court’s determination that EPA may consider cost when measuring significant contribution, *Michigan*, 213 F.3d at 679, and its rejection of the manner in which cost was used in the CAIR analysis, *North Carolina*, 531 F.3d at 917. It also recognizes that the Court accepted—but did not require—EPA’s use of a single, uniform cost threshold to measure significant contribution. *Michigan*, 213 F.3d at 679.

As EPA discussed at length in the Transport Rule proposal, using both air quality and cost factors allows EPA to consider the full range of circumstances and state-specific factors that affect the relationship between upwind emissions and downwind nonattainment and maintenance problems (75 FR 45271). For example, considering cost takes into account the extent to which existing plants are already controlled as well as the potential for, and relative difficulty of, additional emission reductions. Therefore, EPA believes that it is appropriate to consider both cost and air quality metrics when quantifying each state’s significant contribution.

This methodology is consistent with the statutory mandate in section 110(a)(2)(D)(i)(I) which requires upwind states to prohibit emissions that significantly contribute to nonattainment or interference with maintenance in another state. As discussed in more detail in the proposal, interpreting significant contribution to nonattainment and interference with maintenance inherently involves a decision on how much emissions control responsibility should be assigned to upwind states, and how much responsibility should be left to downwind states. EPA’s methodology is intended to “assign a substantial but reasonable amount of responsibility to upwind states. \* \* \* to control their emissions” (75 FR 45272). EPA believes that upwind states contributing to downwind state air quality degradation should bear substantial responsibility to control their emissions because of the plain language of the good neighbor provision, the health risks and control cost impacts that upwind emissions cause in the downwind state, and the cumulative impact in the downwind state of emissions from multiple upwind states, and the importance of achieving attainment in downwind states as expeditiously as practicable but no later than specific deadlines as required by the Act. EPA’s approach does not shift the responsibility for achieving or

maintaining the NAAQS to the upwind state. See 75 FR 45272.

The methodology defines each state’s significant contribution to nonattainment and interference with maintenance as the emission reductions available at a particular cost threshold in a specific upwind state which effectively address nonattainment and maintenance of the relevant NAAQS in the linked downwind states of concern. Unlike the NO<sub>x</sub> SIP Call and CAIR, where EPA’s significant contribution analysis had a regional focus, the methodology used in the Transport Rule focuses on state-specific factors. The methodology uses a multi-step process to analyze costs and air quality impacts, identify appropriate cost thresholds, quantify reductions available from EGUs in each state at those thresholds, and consider the impact of variability in EGU operations. There are four steps to this methodology: (1) Identification of each state’s emission reductions available at ascending costs per ton as appropriate; (2) assessment of those upwind emission reductions’ downwind air quality impacts; (3) identification of upwind “cost thresholds” delivering effective emission reductions and downwind air quality improvement; and (4) enshrinement of the upwind emission reductions available at those cost thresholds in state budgets.

In step one, EPA identifies what emission reductions are available at various cost thresholds, quantifying emission reductions that would occur within each state at ascending costs per ton of emission reductions. In other words, EPA determined for specific cost per ton thresholds, the emission reductions that would be achieved in a state if all EGUs greater than 25 MW in that state used all emission controls and emission reduction measures available at that cost threshold. For purposes of this discussion, we refer to these as “cost curves.”

For this final rule, EPA used updated IPM modeling to conduct a similar cost curve analysis as conducted in the Transport Rule proposal (75 FR 45275). In the proposal, the cost curves only reflected escalating cost for one pollutant while the other pollutant cost was held constant at base case levels (*i.e.*, \$0/ton). However, EPA improved the costing analysis for the final rule by identifying upwind emission reductions available as costs were imposed on both SO<sub>2</sub> and NO<sub>x</sub> simultaneously for states linked to downwind states on the basis of the PM<sub>2.5</sub> NAAQS. In other words, the cost curves in the proposal depicted state level emissions when only one pollutant was priced (*i.e.*, NO<sub>x</sub> at \$500/

ton). Separate cost curves were done for each pollutant. For the final rule, EPA conducted some preliminary cost curve analysis for identifying NO<sub>x</sub> thresholds in this manner. However, for the final cost curve analysis, EPA relied on cost curves that reflected state emissions when pollutants were priced simultaneously (e.g., NO<sub>x</sub> at \$500/ton and SO<sub>2</sub> at \$1,600/ton). For reasons described in section VI.B, EPA was able to conduct this type of analysis because the preliminary cost curves specific to annual and ozone-season NO<sub>x</sub> suggested little flexibility in adjusting the \$500/ton cost thresholds imposed for each. Therefore, EPA was able to hold the cost threshold constant at \$500/ton for these pollutants in its examination of SO<sub>2</sub> at various cost thresholds. EPA believes this approach to cost analysis is a better simulation of the Transport Rule's likely impact on covered sources. Under the final Transport Rule, covered sources in states regulated for PM<sub>2.5</sub> must address compliance requirements for SO<sub>2</sub> and NO<sub>x</sub> emissions simultaneously, and this refined approach to cost curve analysis and subsequent air quality analysis better reflects this reality. Section VI.B of this preamble describes the costing analysis in further detail. Also, for more detail on the development of the cost curves, see "Significant Contribution and State Emission Budgets Final Rule TSD" in the docket for this rule.

Although the cost curves presented in this rule only include EGU reductions, EPA also assessed the cost of SO<sub>2</sub> and NO<sub>x</sub> emission reductions available for source categories other than EGUs in the proposed rulemaking. This preliminary assessment in the rule proposal suggested that there likely would be very large emission reductions available from EGUs before costs reach the point for which non-EGU sources have available reductions (75 FR 45272). EPA revisited these non-EGU reduction cost levels in this final rulemaking and verified that there are little or no reductions available from non-EGUs at costs lower than the thresholds that EPA has chosen (\$500/ton for NO<sub>x</sub>, \$2,300/ton for SO<sub>2</sub>).

Further details on EPA's application of cost curves are provided below, in section VI.B.

In step two, EPA uses an air quality assessment tool to estimate the impact that the combined reductions available from upwind contributing states and the downwind receptor state at different cost-per-ton levels would have on air quality at downwind monitoring sites projected to have nonattainment and/or

maintenance problems.<sup>41</sup> While less rigorous than the air quality models used for attainment demonstrations, EPA believes this air quality assessment tool (which has been refined since proposal) is acceptable for assessing the impact of numerous options for upwind emission reductions in the process of defining an upwind state's significant contribution to nonattainment and interference with maintenance. It allows the Agency to anticipate specific air quality impacts of many more potential emission reduction scenarios pertinent to the relevant NAAQS than time- and resource-intensive comprehensive air quality modeling would permit.

Further details on EPA's application of step two in this methodology are provided below, in section VI.C.

In step three, EPA examines cost and air quality information to identify "significant cost thresholds." EPA considered a significant cost threshold to be a point along the cost curves where a noticeable change occurred in downwind air quality, such as a point where large upwind emission reductions become available because a certain type of emissions control strategy becomes cost-effective.<sup>42</sup>

This methodology allows EPA, where appropriate, to define multiple cost thresholds that vary for a particular pollutant for different upwind states. As explained in the Transport Rule proposal, EPA does not believe it is required to utilize multiple cost thresholds to regulate upwind emissions for purposes of the mandate in CAA section 110(a)(2)(D), but EPA's multi-factor methodology developed for the Transport Rule to define significant contribution to nonattainment and interference with maintenance allows the Agency to consider whether a single cost threshold or multiple cost thresholds are appropriate for meeting the requirements of CAA section 110(a)(2)(D) relevant to a particular NAAQS (75 FR 45274).

<sup>41</sup> As is discussed in the RIA, EPA also used the CAMx model to perform air quality analysis of its proposed remedy to address significant contribution. Results from this modeling will not exactly correspond to results from the air quality assessment tool both because the inputs to the air quality modeling are different and the sophisticated model more fully accounts for the complex air chemistry interactions. The full air quality modeling looks at the remedy, including reductions in upwind states that do not contribute as well as the impacts of the variability provisions discussed later in this section. It also provides a metric against which to evaluate the air quality assessment tool.

<sup>42</sup> The cost thresholds identified in this rule are specific to the section 110(a)(2)(D)(i)(I) requirements for the states and NAAQS considered in this proposal. They do not represent an agency position on the appropriateness of such cost thresholds for any other application under the Act.

In step four, EPA uses the information regarding emission reductions available in each "linked" upwind state at the appropriate cost threshold to form a state "budget," representing the remaining emissions from covered sources for the state in an average year once significant contribution to nonattainment and interference with maintenance have been eliminated; each budget also allows for the identification of an associated variability limit. These budgets and variability limits are used to develop enforceable requirements under the final remedy. The final rule's methodology for identifying state budgets is derived directly from the cost curves and multi-factor analysis EPA uses to determine each state's significant contribution to nonattainment and interference with maintenance. State emission budgets are discussed in section VI.D and the variability limits are discussed in section VI.E.

#### *B. Cost of Available Emission Reductions (Step 1)*

This subsection provides more detail on the cost curves that EPA developed to assess the costs of reducing SO<sub>2</sub> and NO<sub>x</sub> emissions to address transport related to ozone and PM<sub>2.5</sub> concentrations (described previously as Step 1). It summarizes the information from the curves and then provides EPA's interpretation of that information. EPA used IPM to develop the EGU cost curves described in this rulemaking. More information can be found regarding EPA's use of IPM for the final Transport Rule in the "Significant Contribution and State Emission Budgets Final Rule TSD".

The amount of emission reductions that the cost curves suggest are available at various costs are specific to the 2012 and 2014 time periods. These cost estimates factor in the time interval between rule finalization and compliance periods, existing controls already in place, and controls that could potentially come on line by the start of the compliance period. EPA notes that cost curves are a fluid concept and would vary given different compliance dates.

#### *1. Development of Annual NO<sub>x</sub> and Ozone-Season NO<sub>x</sub> Cost Curves*

EPA conducted preliminary cost curve analysis for annual NO<sub>x</sub> and ozone-season NO<sub>x</sub> in a similar manner to that used in the proposed rulemaking. That is, the impact of various cost thresholds on emissions was examined individually. For example, state level emissions were examined at cost levels for annual NO<sub>x</sub> of \$500, \$1,000, and

\$2,500/ton while SO<sub>2</sub> was held at base case levels. EPA used this approach to examine NO<sub>x</sub> and ozone-season NO<sub>x</sub> emission reductions available from EGUs by 2012 and 2014 at various cost levels, reaching to \$2,500/ton for annual NO<sub>x</sub> and up to \$5,000/ton for ozone-season NO<sub>x</sub> (in 2007-year dollars). Section VI.D explains why EPA analyzed the \$500/ton threshold for annual and ozone-season NO<sub>x</sub>. EPA selected two higher cost thresholds to analyze for annual and ozone-season NO<sub>x</sub> that provided a reasonable spectrum of emission reduction opportunities from EGUs at higher cost thresholds. Specifically, EPA analyzed these two higher cost thresholds because the first (\$1,000/ton) was informative in regards to the additional EGU NO<sub>x</sub> emissions reductions available without installation of advanced controls, and the second (\$2,500/ton for annual NO<sub>x</sub>, \$5,000/ton for ozone-season NO<sub>x</sub>) was informative

in regards to additional EGU reductions available at cost thresholds where advanced NO<sub>x</sub> control retrofits are economic for some units. The cost thresholds were only applied to states with air quality contributions that meet or exceed the air quality thresholds as identified in section V.D. For both annual and ozone-season NO<sub>x</sub>, EPA did not consider cost thresholds below \$500/ton for reasons explained in section VI.D.

EPA observed in the proposal that low-cost NO<sub>x</sub> reductions are available at upwind sources with existing pollution control equipment that may not otherwise be operated in the future without the Transport Rule. EPA believes it is appropriate to prohibit any “linked” upwind state from potentially increasing its emissions through a failure to operate these existing pollution controls, which could worsen downwind air quality problems. Thus, EPA reflected operation of these

controls in all modeling of different cost thresholds (*i.e.*, the modeling assumes year-round operation of post-combustion NO<sub>x</sub> controls in covered PM<sub>2.5</sub> states and ozone-season operation of post-combustion NO<sub>x</sub> controls in covered ozone states).

Table VI.B–1 shows the annual NO<sub>x</sub> emissions from EGUs at various levels of control cost per ton for 2014. Table VI.B–2 presents the cost curves for ozone-season NO<sub>x</sub> emissions from EGUs. As discussed in section VI.D, EPA determined that \$500/ton for annual and ozone NO<sub>x</sub> was the appropriate cost threshold for this rule (although EPA plans to determine in the future whether a higher cost/ton threshold may be warranted for states contributing to nonattainment or maintenance problems with the 1997 ozone air quality standard projected to remain in two downwind areas).

TABLE VI.B–1—2014 ANNUAL NO<sub>x</sub> EMISSIONS FROM FOSSIL-FUEL FIRED EGUS GREATER THAN 25 MW FOR EACH TRANSPORT RULE STATE AT VARIOUS COSTS PER TON [(2007\$) per ton (thousand tons)]

	Base case level	\$500	\$1,000	\$2,500
Alabama .....	75	72	72	70
Georgia .....	48	41	41	39
Illinois .....	55	51	50	49
Indiana .....	117	108	107	100
Iowa .....	45	40	39	37
Kansas .....	32	25	25	23
Kentucky .....	83	83	81	78
Maryland .....	17	17	17	17
Michigan .....	64	61	61	60
Minnesota .....	38	30	30	30
Missouri .....	55	54	54	51
Nebraska .....	43	27	26	21
New Jersey .....	8	8	8	8
New York .....	19	19	18	18
North Carolina .....	46	46	46	44
Ohio .....	99	95	94	92
Pennsylvania .....	132	124	124	116
South Carolina .....	38	38	37	36
Tennessee .....	29	29	29	29
Texas .....	141	138	138	136
Virginia .....	36	35	35	28
West Virginia .....	64	64	64	61
Wisconsin .....	37	32	32	31
Total .....	1,321	1,236	1,229	1,174

TABLE VI.B–2—2012 OZONE-SEASON NO<sub>x</sub> EMISSIONS FROM FOSSIL-FUEL FIRED EGUS GREATER THAN 25 MW FOR EACH TRANSPORT RULE STATE AT VARIOUS COSTS [(2007\$) per ton (thousand tons)]

	Base case level	\$500	\$1,000	\$5,000
Alabama .....	34	34	34	31
Arkansas .....	15	15	15	14
Florida .....	42	27	27	24
Georgia .....	29	28	28	25
Illinois .....	21	21	21	21
Indiana .....	47	46	46	43
Kentucky .....	38	37	36	34

TABLE VI.B-2—2012 OZONE-SEASON NO<sub>x</sub> EMISSIONS FROM FOSSIL-FUEL FIRED EGUS GREATER THAN 25 MW FOR EACH TRANSPORT RULE STATE AT VARIOUS COSTS—Continued  
 [(2007\$) per ton (thousand tons)]

	Base case level	\$500	\$1,000	\$5,000
Louisiana .....	13	13	13	13
Maryland .....	7	7	7	7
Mississippi .....	10	10	10	9
New Jersey .....	3	3	3	3
New York .....	8	8	8	8
North Carolina .....	23	23	23	21
Ohio .....	42	42	42	38
Pennsylvania .....	53	53	52	49
South Carolina .....	15	15	15	14
Tennessee .....	16	16	15	15
Texas .....	65	63	63	60
Virginia .....	15	15	15	13
West Virginia .....	26	26	26	24
Total .....	523	504	501	467

EPA notes that the cost curves presented here differ somewhat from the cost curves presented in the proposal. The NO<sub>x</sub> emissions modeled at a \$500/ton cost threshold for the final rule are lower than they were at proposal. In addition, the emission reductions they represent from the updated base case are not as pronounced as was found in modeling for the proposed rule. It is worth emphasizing that the lower emission reductions observed at \$500/ton in this final rulemaking are due to a lower starting point in updated base case EGU NO<sub>x</sub> emission levels (and thus do not reflect higher NO<sub>x</sub> emissions remaining after the reductions made at the \$500/ton threshold). While the base case 2012 nationwide annual EGU NO<sub>x</sub> emissions were approximately 3 million tons in the proposal, they were only 2.1 million tons in the final rule. This approximately 33 percent reduction in base case EGU NO<sub>x</sub> emissions in the final rule modeling relative to the proposal is due to a combination of modeling updates, including lower natural gas prices, reduced electricity demand, newly-modeled consent decrees and state rules, and updated NO<sub>x</sub> rates to reflect 2009 emissions data. All of these factors resulted in substantially lower base case Transport Rule NO<sub>x</sub> emissions in the final rule modeling.

## 2. Development of SO<sub>2</sub> Cost Curves

As explained in detail below in section VI.D, EPA determined that a single threshold of \$500/ton for ozone-season NO<sub>x</sub> control in the states covered for the 1997 ozone NAAQS and a single threshold of \$500/ton for annual NO<sub>x</sub> control in the states covered for the PM<sub>2.5</sub> NAAQS were appropriate cost thresholds for identifying upwind

control under the Transport Rule. With these parameters determined, EPA was able to assess the availability of SO<sub>2</sub> emission reductions from EGUs at various SO<sub>2</sub> cost per ton thresholds with the corresponding NO<sub>x</sub> reduction requirements simultaneously represented in the analysis.

This approach of simultaneously modeling cost levels for covered pollutants is different from the approach taken in the proposal. In the proposal, cost curves were developed and examined independently for each pollutant. For example, with the SO<sub>2</sub> cost curves in the proposal, the NO<sub>x</sub> cost level was held constant at base case levels as the SO<sub>2</sub> cost threshold was varied from base case levels to \$2,400/ton. Commenters noted that this did not accurately reflect a reality where source owners/operators view price signals for all covered pollutants simultaneously and make operation decisions accordingly. For the final rule, EPA included cost thresholds of \$500/ton for annual NO<sub>x</sub> in PM<sub>2.5</sub> states and \$500/ton for ozone-season NO<sub>x</sub> in ozone-season states while examining different SO<sub>2</sub> cost thresholds. This allows EPA to develop final cost curves for air quality analysis and budget determination that reflect EGU operation when faced with the appropriate cost thresholds on all covered pollutants. EPA believes this approach of modeling final cost curves is superior to the methodology used in the proposal because it reflects market signals for each pollutant simultaneously, as would be experienced by states and sources regulated under the Transport Rule.

In this manner, EPA examined several SO<sub>2</sub> cost thresholds of \$500, \$1,600, \$2,300, \$2,800, \$3,300 and \$10,000 per ton. EPA selected these cost thresholds

for the final rule's analysis as a representative sampling of points along the SO<sub>2</sub> cost curve thoroughly explored at proposal. Modeling of these cost thresholds provided a spectrum of emission reduction opportunities yielding meaningful differences to consider in total costs and air quality improvements at each threshold. The proposal's more detailed analysis using smaller increments between cost thresholds outlined the general form of the sector's SO<sub>2</sub> emission reduction cost curve and therefore allowed EPA to use larger increments between cost thresholds for the final rule's analysis. Each of the cost thresholds examined for the final rule represents a point where there is a significant change in available controls, emission reductions, or costs and economic impacts. EPA believes analysis of these thresholds illustrate a meaningful progression of costs and air quality impacts that enabled the Agency to determine a proper threshold along this cost curve to identify significant contribution to nonattainment and interference with maintenance for this rulemaking.

The cost thresholds above \$500/ton were applied starting in 2014. In all modeling, the 2012 cost per ton threshold was held constant at \$500/ton as EPA believes that this cost threshold captures all emission reductions feasible by 2012 (see section VI.B.3 below for more discussion). At the higher cost levels (e.g., \$2,800/ton and above), the curve does not include all available reductions as they do not include non-EGU reductions. As described above for NO<sub>x</sub>, EPA also observed at proposal that substantial low-cost SO<sub>2</sub> reductions are available from the operation of existing scrubbers that may not otherwise operate in the future without the

Transport Rule in place. Therefore, all of the final SO<sub>2</sub> cost curves assume operation of existing scrubbers in PM<sub>2.5</sub> states under the Transport Rule. In 2014, approximately 3 million tons of SO<sub>2</sub> reductions can be achieved at the \$500/ton cost threshold through operation of existing controls and some fuel switching.

This final cost curve also appropriately reflects the Group 1/ Group 2 distinction for states covered for PM<sub>2.5</sub>. As discussed in more detail in section VI.D, EPA identified Group 2 states as those that were linked to states where all nonattainment and maintenance issues had been resolved at \$500/ton levels. There is no longer any significant contribution to nonattainment or interference with maintenance by these seven Group 2 states at levels above \$500/ton. Therefore, in the final curves, these Group 2 states' cost thresholds were held constant at \$500/ton as the higher cost thresholds were applied to the remaining Group 1 states starting in 2014. For example, the modeled emissions at the \$2,300 per ton cost threshold shown in Table VI.B-3 below reflect each state's emissions when Group 1 states are subjected to a \$2,300 per ton SO<sub>2</sub> constraint and Group 2 states are subjected to a \$500/ton SO<sub>2</sub> constraint.

Additional reductions can be achieved at the higher cost thresholds. The cost curves demonstrate that sources begin to build significant additional flue gas desulfurization (FGD) retrofits at an SO<sub>2</sub> cost threshold of \$1,600 per ton and additional dry

sorbent injection (DSI) retrofits at an SO<sub>2</sub> cost threshold of \$2,300 per ton.

With these final cost curves in hand, EPA was able to identify the combined reductions available from upwind contributing states and the downwind state, at different cost-per-ton levels. Additionally, EPA was able to examine the economic impacts of imposing such cost constraints on power sector generation. However, this only constitutes a portion of EPA's multi-factor assessment used to determine the amount of emissions that represent significant contribution to nonattainment and interference with maintenance. As noted in the Transport Rule proposal, EPA's multi-factor assessment considered air quality and cost considerations when identifying cost thresholds (75 FR 45271). The air quality portion of the assessment is described in section VI.C of the final Transport Rule preamble.

3. Amount of Reductions That Could Be Achieved by 2012 and 2014

EPA applied escalating SO<sub>2</sub> cost per ton thresholds for Group 1 states to create the cost curves for 2014 and beyond. For 2012 SO<sub>2</sub>, the cost per ton was held constant at \$500/ton as the cost thresholds in 2014 and beyond were varied. The advanced pollution controls incentivized by these higher cost-per-ton levels can reasonably be installed by 2014. EPA also considered whether any of these emission reductions could be achieved prior to 2014. For the reasons that follow, EPA concluded that significant reductions could be achieved by 2012 and that it is important to require all such

reductions by 2012 to ensure that they are achieved as expeditiously as practicable. SO<sub>2</sub> and NO<sub>x</sub> reductions come from operating existing controls, installing combustion controls, fuel switching, and increased dispatch of lower-emitting generation which can be achieved by 2012. In general, compliance mechanisms that do not involve post-combustion control installation are feasible before 2014. For this reason, EPA believes it is appropriate to require these emissions to be removed in 2012, consistent with the Act's requirement that downwind states attain the NAAQS as expeditiously as practicable.

Therefore, all of the cost curves presented below include all feasible 2012 reductions up to a threshold of \$500/ton for SO<sub>2</sub> and \$500/ton for annual NO<sub>x</sub> in states linked to receptors for PM<sub>2.5</sub>, as well as \$500/ton for ozone-season NO<sub>x</sub> in states linked to receptors for ozone. These cost per ton levels do not precipitate advanced post-combustion control installation in 2012 (as EPA acknowledges that such installations are not feasible by 2012), but they do promote the compliance options outlined above. The higher cost thresholds for SO<sub>2</sub> Group 1 states were only applied starting in 2014. Therefore, the 2012 state level emissions in the "\$2,300 per ton threshold" reflect a cost threshold of only \$500/ton for all pollutants (the \$2,300 per ton value starts in 2014 for Group 1 states' SO<sub>2</sub>).

The table below illustrates the change in state level SO<sub>2</sub> emissions as the higher cost per ton thresholds are applied to Group 1 states.

TABLE VI.B-3—2014 SO<sub>2</sub> EMISSIONS FROM FOSSIL-FUEL-FIRED EGUS GREATER THAN 25 MW FOR EACH TRANSPORT RULE STATE AT VARIOUS COSTS PER TON

[Thousand tons]<sup>a</sup>

	State SO <sub>2</sub> group	Base case level	\$500	\$1,600	\$2,300	\$2,800	\$3,300	\$10,000
Alabama	2	417	201	226	213	214	236	190
Georgia	2	170	94	94	95	95	95	98
Illinois	1	138	134	130	124	117	102	36
Indiana	1	711	245	179	161	153	121	69
Iowa	1	127	112	78	75	67	45	13
Kansas	2	70	55	57	61	61	61	45
Kentucky	1	488	161	126	106	103	89	46
Maryland	1	43	32	28	28	26	24	18
Michigan	1	266	206	189	144	105	94	24
Minnesota	2	66	43	45	46	46	46	44
Missouri	1	382	212	173	166	109	84	21
Nebraska	2	72	68	70	70	70	70	66
New Jersey	1	39	7	7	7	7	6	5
New York	1	40	21	20	12	11	10	8
North Carolina	1	120	104	61	58	49	40	30
Ohio	1	832	294	175	137	123	115	65
Pennsylvania	1	507	294	164	112	107	102	75
South Carolina	2	210	93	100	103	104	104	105
Tennessee	1	284	82	63	59	59	59	24

TABLE VI.B-3—2014 SO<sub>2</sub> EMISSIONS FROM FOSSIL-FUEL-FIRED EGUS GREATER THAN 25 MW FOR EACH TRANSPORT RULE STATE AT VARIOUS COSTS PER TON—Continued[Thousand tons]<sup>a</sup>

	State SO <sub>2</sub> group	Base case level	\$500	\$1,600	\$2,300	\$2,800	\$3,300	\$10,000
Texas .....	2	453	281	282	284	281	281	243
Virginia .....	1	65	59	51	35	33	32	16
West Virginia .....	1	497	157	122	76	74	72	55
Wisconsin .....	1	125	51	47	40	38	34	14
Total .....	.....	6,122	3,007	2,487	2,212	2,053	1,919	1,311
Group 1 total .....	.....	4,665	2,172	1,612	1,340	1,180	1,025	520
Group 2 total .....	.....	1,457	835	875	872	872	894	791

<sup>a</sup> **Note:** As described in the preamble language for this section, the escalating cost per ton figures in each column header only apply to Group 1 states in 2014 and each year thereafter. Cost per ton for Group 2 states is held constant at \$500/ton for all the costing runs. In some cases, the escalating cost levels in Group 1 states affect emission levels in Group 2 states as some generation shifts between states in response to newly imposed costs.

### C. Estimates of Air Quality Impacts (Step 2)

After developing cost curves to show the state-by-state cost-effective emission reductions available, EPA estimates the air quality impacts of these reductions using the air quality assessment tool coupled with full-scale air quality modeling where possible. EPA uses the air quality assessment tool to evaluate the impact on air quality for downwind nonattainment and maintenance receptors from upwind reductions in “linked” states. This section describes the development of the air quality assessment tool and summarizes the results of this evaluation.

#### 1. Development of the Air Quality Assessment Tool and Air Quality Modeling Strategy

In response to comments on the methodology used for the proposed rule, EPA made significant improvements to the air quality assessment tool (AQAT) for the final Transport Rule. Furthermore, EPA relied on CAMx to model the air quality response to NO<sub>x</sub> reductions and limited AQAT’s role (relative to the Transport Rule proposal) to estimating the relative response of sulfate concentrations from SO<sub>2</sub> reductions. EPA did not use AQAT to address NO<sub>x</sub> reductions in the final rule analyses. These and other changes to our approach, as described below and in the “Significant Contribution and State Emission Budgets Final Rule TSD”, address commenter’s concerns about the scientific rigor of the design and application of AQAT and commenter’s recommendations to rely upon air quality modeling as part of this analysis.

For the final Transport Rule, EPA created an AQAT calibration scenario consisting of full-scale air quality

modeling using CAMx of a 2014 control scenario reflecting SO<sub>2</sub> and NO<sub>x</sub> emission reductions of similar stringency and from the same geography as the Transport Rule proposal. Modeling of this AQAT calibration scenario reflected all updates made to the air quality modeling platform, as described in the “Air Quality Modeling Final Rule TSD” found in the docket for this rulemaking. CAMx modeling of each receptor’s response in this control scenario accounts for complex chemical interactions and covariation of these pollutants. Among the important atmospheric chemical interactions accounted for in CAMx is “nitrate replacement.”<sup>43</sup> Nitrate replacement occurs when SO<sub>2</sub> emission reductions lead to decreases in ammonium sulfate, which in turn, can result in an increase in ammonium nitrate concentrations. As described below, EPA used the CAMx modeling results for this AQAT calibration scenario together with the modeling for the 2012 base case to characterize the response of ozone, nitrate, and sulfate at each nonattainment and maintenance receptor to the mix of upwind NO<sub>x</sub> and SO<sub>2</sub> emission reductions at each cost threshold.

As described in section VI.D, EPA determined that the \$500/ton threshold for upwind annual and ozone-season NO<sub>x</sub> control is appropriate for the final Transport Rule (although EPA plans to determine in the future whether a higher cost/ton threshold may be

<sup>43</sup> Observable indicators of the sensitivity of PM<sub>2.5</sub> nitrate to emission reductions—Part II: Sensitivity to errors in total ammonia and total nitrate of the CMAQ-predicted non-linear effect of SO<sub>2</sub> emission reductions. R.L. Dennis, P.K. Bhawe, and R.W. Pinder. 2008. Atmospheric Environment (42):1287–1300. doi:10.1016/j.atmosenv.2007.10.036.

warranted for states contributing to nonattainment or maintenance problems with the 1997 ozone air quality standard projected to remain at receptors in two downwind areas<sup>44</sup>). Because this threshold corresponds to the NO<sub>x</sub> control strategy modeled in the AQAT calibration scenario described above, EPA is able to rely on this CAMx air quality modeling to assess the response of ozone and nitrate concentrations due to NO<sub>x</sub> reductions and does not estimate ozone or nitrate impacts for this final rulemaking using AQAT. Further information on the air quality modeling of this AQAT calibration scenario can be found in the Air Quality Modeling Final Rule TSD and the Significant Contribution and State Emission Budgets Final Rule TSD in the docket for this rulemaking.

In order to estimate 2014 annual and 24-hour PM<sub>2.5</sub> concentrations, AQAT uses the 2012 annual and seasonal contributions which quantify the contribution of SO<sub>2</sub> emissions in specific upwind states to sulfate concentrations at specific downwind receptors. These contributions are described in section V.D.2 and the Air Quality Modeling Final Rule TSD.

EPA utilizes CAMx modeling of the AQAT calibration scenario, described above, to “calibrate” the contribution factors by developing and applying linear sulfate response factors for each downwind receptor. These factors calibrate each receptor’s sulfate response to varying levels of upwind SO<sub>2</sub> emissions. These calibration factors are based on the sulfate response modeled by CAMx due to emission changes occurring between the 2012 base case and the 2014 AQAT

<sup>44</sup> Houston and Baton Rouge nonattainment areas.

calibration scenario. Calibration factors were constructed for the annual and 24-hour PM<sub>2.5</sub> AQAT.

To further allow adequate assessment of the seasonal impacts of various levels of upwind SO<sub>2</sub> reductions on each receptor's 24-hour PM<sub>2.5</sub> concentration using AQAT, EPA developed response factors for sulfate on a quarterly basis to capture important air quality differences between summer and winter emissions and concentrations. This process allowed EPA to estimate the air quality values for each season at each cost threshold, and then estimate the air quality design values.

Finally, EPA's air quality assessment accounts for the impact that this differential response in sulfate by quarter can have on the ordering of 24-hour concentrations when calculating the 98th percentile for the 24-hour standard. AQAT estimates quarterly-specific relative response factors that estimate quarterly-specific proportional change in ammonium sulfate resulting from the SO<sub>2</sub> emission reduction from the 2012 base case scenario to the 2014 cost threshold scenario being assessed. These quarterly relative response factors are then applied to each of the maximum 24-hour PM<sub>2.5</sub> concentrations for eight days per quarter per year at each receptor from the 2012 base case. This methodology improvement allows EPA to redetermine the 98th percentile day for each year and recalculate average and maximum design values for the 24-hour PM<sub>2.5</sub> standard.

These improvements for the final rule increase EPA's confidence that the air quality estimates provided by AQAT, now customized for this application, more accurately estimate the results of full-scale air quality modeling of the various levels of upwind SO<sub>2</sub> reductions considered. EPA evaluated the estimates from AQAT using an independent data set, the 2014 base case estimates from CAMx, finding that the results are unbiased with minimal differences. See "Significant Contribution and State Emission Budgets Final Rule TSD" for more details.

As such, EPA believes the revised AQAT provides an appropriate basis for assessing the air quality portion of the multi-factor methodology to define significant contribution to nonattainment and interference with maintenance.<sup>45</sup>

<sup>45</sup> EPA used CAMx to conduct full air quality modeling of the final Transport Rule remedy embodying the emission reductions that EPA first selected on the basis of the multi-factor analysis using AQAT to project air quality impacts from varying levels of emission reductions analyzed. The CAMx results confirmed the relative magnitude and direction of AQAT's estimates of the outcomes for

## 2. Utilization of AQAT To Evaluate Control Scenarios

For the final Transport Rule, EPA performed air quality analysis for each downwind annual and 24-hour PM<sub>2.5</sub> receptor with a nonattainment and/or maintenance problem in the 2012 base case. For each receptor, EPA quantified the sulfate reduction and resulting air quality improvement when a group of states consisting of the upwind states that are "linked" to the downwind receptor (as explained in section V.D) and the downwind state where the receptor is located, all made the SO<sub>2</sub> emission reductions that EPA identified as available at each cost threshold. EPA assumes reductions at each cost threshold from the linked upwind states as well as the downwind receptor state to assess the shared responsibility of these upwind states to address air quality at the identified receptors. Analysis of each receptor did not assume any emission reductions beyond those included in the 2014 base case from upwind states that are not "linked" to that specific downwind receptor (even if the state was "linked" to a different receptor and/or otherwise would have made emission reductions beginning in 2012 due to the Transport Rule).

EPA disagrees with comments suggesting that emission reductions, and resulting decreases in contribution, from upwind states that are not "linked" to a particular downwind receptor should be accounted for in the 2014 AQAT analysis of that receptor. EPA decided to assume reductions only from linked states when analyzing each receptor because EPA is performing a state-specific analysis to support a determination of the amount of each upwind state's responsibility for air quality problems at the downwind receptors that it significantly affects. If the AQAT analysis were to assume emissions reductions in other non-linked states, the AQAT analysis would then contradict the first step of our two-

the 2012 base case nonattainment and maintenance receptors analyzed, and the AQAT estimates closely tracked CAMx-modeled concentrations at those receptors under the Transport Rule remedy. The paired AQAT-estimated and CAMx-modeled concentrations were found to be highly correlated with an R<sup>2</sup> value of 0.997. As a result, EPA is confident that AQAT's estimates of impacts on sulfate concentrations at the varying levels of SO<sub>2</sub> emission reductions analyzed provide a technically valid and sound basis for the Agency's selection of the final rule's emission reductions necessary to eliminate (or make meaningful progress toward eliminating) significant contribution and interference with maintenance for the PM<sub>2.5</sub> NAAQS considered in this rulemaking. Further details on the comparison of CAMx and AQAT results can be found in the Significant Contribution and State Emission Budgets Final Rule TSD.

step approach to defining significant contribution to nonattainment and interference with maintenance. Under EPA's two-step approach, only a state that (1) contributes a threshold amount or more to a particular downwind state receptor's air quality problem, and (2) has emission reductions available at the selected cost threshold can be deemed to have responsibility to reduce its emissions to improve air quality at that downwind receptor. EPA believes that the commenters' suggested approach would not qualify as a state-specific approach for determining upwind state responsibility for downwind air quality problems.

Because EPA is relying on the CAMx estimate of nitrate concentrations from the AQAT calibration scenario, the response in nitrate to NO<sub>x</sub> reductions at a cost threshold of \$500/ton is present in each SO<sub>2</sub> cost threshold scenario analyzed.

EPA determines the cumulative air quality improvement that can be expected at a particular downwind receptor by multiplying each upwind state's percent SO<sub>2</sub> emission reduction by its calibrated receptor specific sulfate response factor and summing the sulfate, nitrate, and other PM<sub>2.5</sub> components (also taken from the 2014 CAMx AQAT calibration scenario).

## 3. Air Quality Assessment Results

The results of EPA's air quality assessment of the cost threshold scenarios focus on air quality metrics including, but not limited to, average air quality improvement at receptors with 2012 base case nonattainment and maintenance exceedances and an evaluation of estimated receptor design values against annual and 24-hour PM<sub>2.5</sub> standards. See "Significant Contribution and State Emission Budgets Final Rule TSD" for more details.

In EPA's air quality analysis of each downwind receptor, all air quality improvements are measured relative to the "AQAT base case." This base case reflects AQAT's estimated PM<sub>2.5</sub> concentrations under base case 2014 SO<sub>2</sub> emissions. The AQAT base case itself is not used for any decision points and only serves as an appropriate starting point for comparison of air quality improvements at SO<sub>2</sub> cost thresholds. EPA ensures internal analytic consistency by comparing all air quality improvements at analyzed SO<sub>2</sub> cost thresholds to the AQAT base case.

Regarding average air quality improvement at exceeding 2012 base case receptors, EPA identified 41 receptors with nonattainment or maintenance problems in the 2012 base



case. EPA assessed the cumulative reduction in 24-hour PM<sub>2.5</sub> maximum design value at each increasing SO<sub>2</sub> cost threshold from the maximum design value from the AQAT base case, and averaged the reduction across the 41 receptors. The results of this assessment indicate diminishing incremental returns to 24-hour PM<sub>2.5</sub> maximum design value reduction as SO<sub>2</sub> cost threshold levels increase. EPA finds reductions in maximum design value of 4.28 µg/m<sup>3</sup> at \$500; 4.98 µg/m<sup>3</sup> at \$1,600; 5.33 µg/m<sup>3</sup> at \$2,300; 5.46 µg/m<sup>3</sup> at \$2,800; 5.60 µg/m<sup>3</sup> at \$3,300; and 6.08 µg/m<sup>3</sup> at \$10,000. These results are provided in table VI.C-1.

TABLE VI.C-1—AVERAGE 2014 AIR QUALITY IMPROVEMENT AT RECEPTORS WITH 2012 BASE CASE NON-ATTAINMENT AND MAINTENANCE PROBLEMS

Group 1 state SO <sub>2</sub> cost per ton threshold	Average air quality improvement at exceeding receptors in 2012 base case (µg/m <sup>3</sup> )
\$500 .....	4.28
\$1,600 .....	4.98
\$2,300 .....	5.33
\$2,800 .....	5.46
\$3,300 .....	5.60
\$10,000 .....	6.08

Additionally, EPA evaluated the AQAT estimated 2014 average and maximum design values for these receptors at each cost threshold against the annual and 24-hour PM<sub>2.5</sub> standards. EPA determined the estimated number of receptors with nonattainment or maintenance problems at \$500/ton cost threshold of NO<sub>x</sub> and each of the cost threshold scenarios assessed for SO<sub>2</sub>. These results are provided in table VI.C-2 in terms of the number of receptors and the number of nonattainment areas containing these receptors.

TABLE VI.C-2—RECEPTORS WITH NONATTAINMENT AND/OR MAINTENANCE EXCEEDANCES OF THE ANNUAL OR 24-HOUR PM<sub>2.5</sub> NAAQS IN 2014

SO <sub>2</sub> cost threshold	Annual nonattainment		Annual nonattainment or maintenance		24-hour nonattainment		24-hour nonattainment or maintenance		Annual and 24-hour nonattainment and maintenance	
	Receptors	Areas	Receptors	Areas	Receptors	Areas	Receptors	Areas	Receptors	Areas
\$500 .....	1	1	1	1	2	2	9	6	9	6
\$1,600 .....	1	1	1	1	2	2	8	5	8	5
\$2,300 .....	0	0	1	1	1	1	6	4	6	4
\$2,800 .....	0	0	1	1	1	1	5	4	5	4
\$3,300 .....	0	0	1	1	1	1	5	4	5	4
\$10,000 .....	0	0	1	1	1	1	3	3	3	3

In the proposal, EPA evaluated whether the imposition of the rule's upwind emission reduction requirements could cause changes in operation of electric generating units in states not regulated under the proposal. EPA recognized that such changes could lead to increased emissions in those states, potentially affecting whether they would meet or exceed the 1 percent contribution thresholds used to identify linkages between upwind and downwind states. Such shifting of emissions between states may occur because of the interconnected nature of the country's energy system (including both the electricity grid as well as coal and natural gas supplies).

Using updated emissions and air quality information developed for the final rule, EPA's IPM modeling found that of the states not covered in the final rule for PM<sub>2.5</sub>, Arkansas, Colorado, Louisiana, Montana, and Wyoming are all projected to have SO<sub>2</sub> emission increases above 5,000 tons in 2014 with the rule in effect. EPA analysis shows the SO<sub>2</sub> emission increases result from expected shifts to higher sulfur coal in these states. Using AQAT, a state-level assessment of these emission increases relative to the state specific contributions to downwind receptors

(where available) indicates that projected increases in the SO<sub>2</sub> emissions would not increase any of these states' contributions to an amount that would meet or exceed the 0.15 µg/m<sup>3</sup> or 0.35 µg/m<sup>3</sup> thresholds for annual and 24-hour PM<sub>2.5</sub>, respectively. For this reason, EPA has determined that it is not necessary to include these additional states in the Transport Rule as a result of the effects of the rule itself on SO<sub>2</sub> emissions in uncovered states. See "Significant Contribution and State Emission Budgets Final Rule TSD" in the docket for this rulemaking for more details.

*D. Multi-Factor Analysis and Determination of State Emission Budgets*

EPA used the cost, emission, and air quality information described in the previous sections to perform its multi-factor analysis. By looking at different "cost thresholds"—places where there was a noticeable change on the cost curve because emission reductions occur—and examining the corresponding impact on air quality, EPA identified the amount of emissions that represent significant contribution to nonattainment and interference with maintenance within each state. After quantifying this amount of emissions,

EPA established state "budgets" which represent the remaining emissions for the state in an average year (step 4).

For states covered by the rule for PM<sub>2.5</sub>, EPA calculated annual NO<sub>x</sub> and annual SO<sub>2</sub> budgets. For states covered by the rule for ozone, EPA calculated ozone-season NO<sub>x</sub> budgets. This section explains the multi-factor assessment and how EPA used this assessment to determine state-specific budgets.

1. Multi-Factor Analysis (Step 3)

a. Overview

As described in section VI.B, EPA examined how different cost thresholds impacted emissions in states with air quality contributions that meet or exceed specific air quality thresholds, as discussed in section V.D of this preamble. Section VI.C summarizes the estimated air quality impacts in 2014 of these emission levels at downwind receptors, including estimates of their nonattainment and maintenance status (see "Significant Contribution and State Emission Budgets Final Rule TSD" for more details). From these two steps, EPA evaluated the interaction between upwind emissions at different cost levels and air quality at downwind receptors to identify "significant cost thresholds." These cost thresholds are

based on air quality considerations (such as the cost at which the air quality assessment analysis projects large numbers of downwind site maintenance and nonattainment problems would be resolved) or cost criteria (such as a cost where large emissions reductions occur because a particular technology is widely implemented at that cost). EPA examined each cost threshold and then used a multi-factor assessment to determine which serve as cost thresholds that eliminate significant contribution to nonattainment and interference with maintenance for upwind states. Air quality considerations in the assessment include, for example, how much air quality improvement in downwind states results from upwind state emission reductions at different levels; whether, considering upwind emission reductions and assumed local (in-state) reductions, the downwind air quality problems would be resolved; and the components of the remaining downwind air quality problem (*e.g.*, whether it is a predominantly local or in-state problem, or whether it still contains a large upwind component). Cost considerations include, for example, how the cost per ton of emission reduction compares with the cost per ton of existing federal and state rules for the same pollutant; whether the cost per ton is consistent with the cost per ton of technologies already widely deployed (similar to the highly-cost-effective criteria used in both the NO<sub>x</sub> SIP Call and CAIR); and what cost increase is required to achieve additional meaningful air quality improvement.

The specific cost per ton thresholds selected as a basis for identifying significant contribution to nonattainment and interference with maintenance in this rulemaking apply only to the determinations made in this rule and do not establish any precedent for future EPA actions under section 110(a)(2)(D)(i)(I) or any other section of the CAA. EPA's selection of specific cost thresholds in the context of this rulemaking relies on current analyses of the cost of available emission reductions, the pattern of interstate linkages for pollution transport, and the downwind air quality impacts specifically related to the 1997 ozone NAAQS, the 1997 annual PM<sub>2.5</sub> NAAQS, and the 2006 24-hour PM<sub>2.5</sub> NAAQS. In addition and as explained below, the selection of the threshold for ozone-season NO<sub>x</sub> was influenced by the limited scope of this rule. Any or all of these variables used to identify specific cost thresholds are subject to

change. Thus, EPA may use different cost thresholds in future actions, even if those actions relate to the same NAAQS addressed in this rule.

b. Cost Thresholds Examined and Selected for Ozone-Season NO<sub>x</sub>

In the proposal, EPA examined various cost thresholds for ozone season NO<sub>x</sub> and identified a cost threshold with rapidly diminishing returns at \$500/ton. EPA observed that moving beyond the \$500 cost threshold up to a \$2,500 cost threshold would result in only minimal additional ozone season NO<sub>x</sub> emission reductions and would likely bypass less expensive non-EGU emission reduction opportunities (75 FR 45281). EPA noted that for greater costs the curves did not include all available reductions as they do not include non-EGU reductions (75 FR 44286). In the proposal, EPA noted the timely promulgation and implementation of this rule is responsive to the Court's remand of CAIR, will accelerate critical air quality improvement, and more effectively address the mandate of CAA section 110(a)(2)(D) to address significant contribution to nonattainment and interference with maintenance as expeditiously as practicable. EPA did not want to risk delaying air quality benefits available from EGU emission reductions, particularly those emission reductions which eliminate significant contribution to nonattainment and interference with maintenance for many receptors, while the Agency conducts additional analysis to support subsequent transport-related rulemakings including coverage of non-EGU sources (75 FR 45285).

EPA received comments suggesting that it consider cost thresholds higher than \$500/ton as reductions beyond the proposed \$500/ton cost threshold were needed to fully resolve nonattainment and maintenance issues in downwind states analyzed at proposal. Some of these comments suggested EPA should include non-EGUs as they consider the higher cost thresholds, others suggested EPA continue to exclude non-EGU sources in this rulemaking.

In response to those comments that suggested EPA explore higher cost thresholds because nonattainment and maintenance was not fully resolved, EPA first notes that CAA section 110(a)(2)(D)(i)(I) only requires the elimination of emissions that significantly contribute to nonattainment or interfere with maintenance of the NAAQS in other states. Section 110(a)(2)(D)(i)(I) focuses exclusively on the transport component of nonattainment and maintenance problems. Section 110(a)(2)(D)(i)(I) does

not shift to upwind states the responsibility for ensuring that all areas in other states attain the NAAQS. As such, the mandate of section 110(a)(2)(D)(i)(I) is not to ensure that reductions in upwind states are sufficient to bring all downwind areas in to attainment, it is simply to ensure that all significant contribution to nonattainment and interference with maintenance is eliminated. Thus, the presence of residual nonattainment or maintenance areas does not, by itself, signify a failure to satisfy the requirements of 110(a)(2)(D)(i)(I).

Furthermore, as noted in section VI.A, EPA is finalizing coverage only for the EGU emission source-sector category in this rulemaking. EPA has not included non-EGU sources in this final rulemaking. EPA remains convinced that timely promulgation and implementation of this rule is responsive to the Court's remand of CAIR.

To the extent that significant contribution is not eliminated for the 1997 ozone NAAQS standard at the \$500/ton cost threshold, EPA is not addressing in this rulemaking whether a cost threshold greater than \$500/ton is justified for some upwind states and downwind receptors. EPA believes it can best serve these states where concerns persist regarding projected nonattainment or maintenance of the 1997 ozone NAAQS by quickly finalizing this rule and seeking further non-EGU reductions in subsequent rulemakings. Table VI.B-2 illustrates the small amount of EGU reductions available as cost threshold increases above \$500/ton. The ozone-season NO<sub>x</sub> reductions available in the Transport Rule states between the \$500/ton and \$1,000/ton cost thresholds amount to less than 3,000 tons. EPA believes that potentially substantial non-EGU ozone-season NO<sub>x</sub> reductions become available approaching the \$1,000/ton cost threshold. EPA emphasized this in the proposal, noting that the cost curves for ozone season NO<sub>x</sub> did not reflect all available reductions as they do not include non-EGU reductions (75 FR 45286). For these reasons, EPA did not consider cost thresholds greater than \$500/ton.

EPA did not consider cost thresholds below \$500/ton for ozone-season NO<sub>x</sub>. \$500/ton is a reasonable threshold representing a significant amount of lowest-cost NO<sub>x</sub> emission reductions from EGUs, largely accruing from the installation of combustion controls, such as low-NO<sub>x</sub> burners, and constitutes a reasonable cost level for operation of existing NO<sub>x</sub> controls such as SCRs. EPA believes it would be

inappropriate for a state linked to downwind nonattainment or maintenance areas to stop operating existing pollution control equipment (which would increase their emissions and contribution). This is increasingly likely to occur at cost thresholds lower than \$500/ton. Therefore, EPA did not find cost thresholds lower than \$500/ton for ozone-season NO<sub>x</sub> to be reasonable for development of the Transport Rule cost curves.

As discussed in section III of this preamble, EPA intends to finalize reconsideration of the March 2008 ozone NAAQS in the summer of 2011 and to expeditiously propose a transport-related action to address any necessary upwind state control responsibilities with respect to that reconsidered NAAQS.

#### c. Cost Thresholds Examined and Selected for Annual NO<sub>x</sub>

Following the assessment of the cost curves in section IV.B and the air quality modeling of the AQAT calibration scenario using CAMx, EPA identified a single cost threshold at \$500/ton for annual NO<sub>x</sub>. Beyond requiring the year-round operation of existing post-combustion NO<sub>x</sub> controls and other reductions modeled at \$500/ton threshold, EPA observed a limitation in available low-cost annual NO<sub>x</sub> reductions from EGUs. Approximately 7,000 tons of annual NO<sub>x</sub> reductions were available from EGUs between the \$500/ton and the \$1,000/ton cost thresholds (See Table VI.B.-1). Furthermore, above the \$500/ton threshold, similar to ozone-season NO<sub>x</sub> cost curves, the annual NO<sub>x</sub> cost curves do not include all available reductions as they do not include non-EGU reductions. EPA analysis suggests that while NO<sub>x</sub> emission reductions lead to reductions in PM<sub>2.5</sub>, SO<sub>2</sub> reductions are generally more cost-effective than NO<sub>x</sub> reductions at reducing PM<sub>2.5</sub> (75 FR 45281). In part, for these reasons, EPA's multi-factor assessment suggested that the \$500/ton cost threshold for annual NO<sub>x</sub> in concert with the cost thresholds identified for SO<sub>2</sub> were the appropriate cost thresholds for eliminating significant contribution to nonattainment and interference with maintenance. EPA finds in the final Transport Rule that the \$500/ton cost threshold for annual NO<sub>x</sub>, in concert with the SO<sub>2</sub> cost threshold selected below, successfully eliminates significant contribution to nonattainment and interference with maintenance for the 1997 annual PM<sub>2.5</sub> NAAQS and the 2006 24-hour PM<sub>2.5</sub>

NAAQS in the states covered by this Rule for PM<sub>2.5</sub>.

The reasons for not considering cost thresholds lower than \$500/ton for annual NO<sub>x</sub> are the same as those identified for not doing so for ozone-season NO<sub>x</sub>. In addition to its PM<sub>2.5</sub> reduction benefits, annual NO<sub>x</sub> control at the \$500/ton threshold can help to reduce nitrate replacement in the atmosphere. As explained earlier, nitrate replacement happens when SO<sub>2</sub> emissions reductions successfully reduce ammonium sulfate (a component of PM<sub>2.5</sub>) but provoke a PM<sub>2.5</sub> rebound effect by freeing up additional ammonia to form ammonium nitrate (another component of PM<sub>2.5</sub>).

#### d. Cost Thresholds Examined and Selected for SO<sub>2</sub>

EPA first assessed the downwind air quality impacts of emission reductions modeled at the \$500/ton threshold in all states found to be linked to downwind sites for PM<sub>2.5</sub> transport, as well as in the states hosting those downwind sites. The air quality assessment tool projected that those reductions do not fully resolve nonattainment and maintenance problems with the PM<sub>2.5</sub> standards for certain areas to which the following states are linked: Illinois, Indiana, Iowa, Kentucky, Maryland, Michigan, Missouri, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia, and Wisconsin. EPA proceeded to analyze available 2014 emission reductions at higher cost thresholds from these states, collectively referred to as Group 1 states for SO<sub>2</sub> control.

For Group 2 states, the air quality assessment tool projected that the SO<sub>2</sub> reductions at this first cost threshold assessed would resolve the nonattainment and maintenance problems for all of the areas to which the following states are linked: Alabama, Georgia, Kansas, Minnesota, Nebraska, South Carolina, and Texas. EPA thus finds that these states' significant contribution is eliminated at the \$500 per ton level in 2014; they are collectively referred to as Group 2 states for SO<sub>2</sub> control. Because their significant contribution is eliminated at this stringency of control, EPA did not analyze higher cost thresholds for Group 2 states.

The states in Group 1 and Group 2 are rationally grouped considering air quality and cost. EPA determined that it would not be appropriate to assign the same cost threshold to Group 2 and Group 1 states because a significantly lower cost threshold was sufficient to resolve air quality problems at all

downwind receptors linked to the Group 2 states. Although states are linked to different sets of downwind receptors, EPA analysis indicated that the cost threshold needed to resolve downwind air quality problems varied only to a limited extent among states within Group 1 and among states within Group 2. It did, however, vary greatly between the Group 1 and Group 2 states. The ruling of the DC Circuit in *Michigan v. EPA*, 213 F.3d 663, 679–80 (D.C. Cir. 2000), accepting EPA's prior use of a transport remedy with uniform controls, supports EPA's decision to use a uniform cost threshold for a group of states.

As discussed in section VI.B, the cost threshold for Group 1 states was examined at escalating levels in 2014 (it remained at \$500/ton for Group 2 states). EPA examined emissions at SO<sub>2</sub> cost thresholds of \$500, \$1,600, \$2,300, \$2,800, \$3,300, and \$10,000/ton for Group 1 states in 2014. The higher SO<sub>2</sub> marginal costs were only imposed in Transport Rule states starting in 2014, by which time the advanced pollution control retrofits induced at those higher cost thresholds could be installed. (See section VI.D.2 for EPA's assessment and decisions regarding SO<sub>2</sub> budget formation in Group 1 states in 2014.)

EPA observed some degree of additional air quality benefit at downwind receptors across all of the cost thresholds examined for SO<sub>2</sub>, but significant air quality outcomes were achieved at the \$2,300/ton cost threshold. The \$2,300/ton threshold is projected to resolve the last remaining nonattainment area for the annual PM<sub>2.5</sub> standard (Liberty-Clairton),<sup>46</sup> and it also is projected to resolve the nonattainment and maintenance problems with the 24-hour PM<sub>2.5</sub> standard at 1 monitor in the Detroit area and resolve the maintenance problems in the Cleveland area. There were significant air quality improvements at this level in connection with widespread deployment of pollution control technology, while the cost impacts remained reasonable.

Moving beyond \$2,300/ton to the \$2,800/ton and \$3,300/ton thresholds, EPA projected notably smaller air quality improvements compared to those projected when moving from the \$1,600/ton threshold to the \$2,300/ton threshold. EPA also projected no ultimate change in the 24-hour PM<sub>2.5</sub>

<sup>46</sup> AQAT results indicated that one receptor in the Liberty-Clairton area continued to have maintenance problems with the annual PM<sub>2.5</sub> standard. However, final air quality modeling results (described in section VIII.B) indicated that this maintenance problem was resolved for this receptor under the final Transport Rule.

attainment status of the remaining nonattainment area (Liberty-Clairton) or three remaining maintenance areas (Chicago,<sup>47</sup> Detroit, and Lancaster).<sup>48</sup> At the same time, the total program cost continued to increase by about the same interval at each of these thresholds as it had between the \$1,600/ton and \$2,300/ton thresholds. EPA thus observed a relatively lower cost-effectiveness of downwind PM<sub>2.5</sub> control via upwind

SO<sub>2</sub> reductions beyond \$2,300/ton for the receptors linked to Group 1 states. Table VI.D-1 and Figure VI.D-1 demonstrate this relationship between cost of EGU SO<sub>2</sub> control and downwind PM<sub>2.5</sub> concentration impacts, showing a sustained diminishing of cost effectiveness beyond the \$2,300/ton threshold. The \$2,300/ton threshold in this analysis is situated at the “knee-in-the-curve” area of cost-effectiveness for

addressing downwind PM<sub>2.5</sub> concentrations with SO<sub>2</sub> reductions, beyond which point the air quality gains per dollar spent on additional reductions are much smaller. This relationship is demonstrative of the economic potency of SO<sub>2</sub> reductions at each cost threshold to address the PM<sub>2.5</sub> concentrations at linked receptors in this analysis.

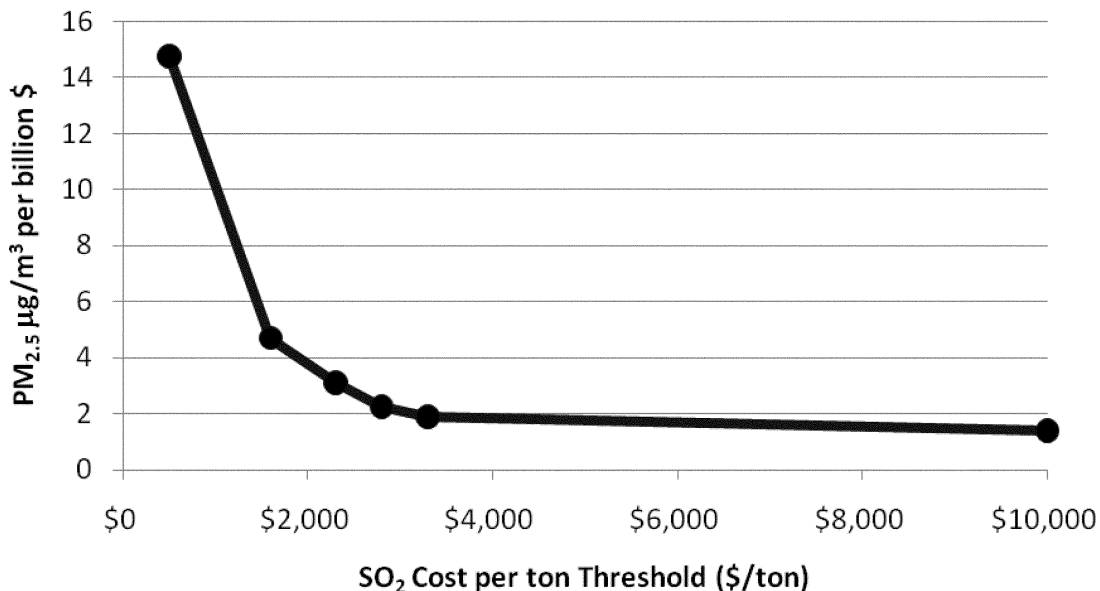
TABLE VI.D-1—COST-EFFECTIVENESS OF GROUP 1 STATE SO<sub>2</sub> REDUCTIONS<sup>a</sup> FOR DOWNWIND PM<sub>2.5</sub> CONTROL

SO <sub>2</sub> cost threshold	Additional system cost expended (2007\$, billions)	Average PM <sub>2.5</sub> air quality improvement (µg/m <sup>3</sup> ) <sup>b</sup>	Air quality cost-effectiveness (average µg/m <sup>3</sup> reduced per billion \$ expended)
\$500 .....	0.22	3.27	14.74
\$1,600 .....	0.82	3.86	4.70
\$2,300 .....	1.35	4.22	3.11
\$2,800 .....	1.94	4.37	2.25
\$3,300 .....	2.36	4.50	1.91
\$10,000 .....	3.61	4.99	1.38

<sup>a</sup> Downwind PM<sub>2.5</sub> improvement based on SO<sub>2</sub> reductions from states “linked” to specific receptors. See section VI.C.  
<sup>b</sup> Measured as the reduction in maximum design value for the 24-hour PM<sub>2.5</sub> NAAQS from AQAT base case to each SO<sub>2</sub> threshold for receptors with remaining nonattainment and maintenance exceedances at the \$500/ton threshold, averaged across these receptors.

Figure VI.D-1

**Air Quality Cost-Effectiveness**  
 (average µg/m<sup>3</sup> reduced per billion \$ expended)



Furthermore, even at the \$10,000/ton cost threshold, AQAT still projects Liberty-Clairton to face maintenance

concerns with the annual PM<sub>2.5</sub> standard and is projected to remain in nonattainment of the 24-hour PM<sub>2.5</sub>

standard, while the Chicago<sup>49</sup> and Lancaster areas are still projected to have residual maintenance problems

<sup>47</sup> This area is not currently designated as nonattainment for the 24-hour PM<sub>2.5</sub> standard. EPA is portraying the receptors and counties in this area as a single 24-hour maintenance area based on the annual PM<sub>2.5</sub> nonattainment designation of Chicago-Gary-Lake County, IL-IN.

<sup>48</sup> AQAT results indicated that two receptors in the Detroit area continued to have maintenance problems with the 24-hour PM<sub>2.5</sub> standard. However, final air quality modeling results (described in section VIII.B) indicated that only one receptor continued to have maintenance problems in this area for this standard under the final Transport Rule.

<sup>49</sup> This area is not currently designated as nonattainment for the 24-hour PM<sub>2.5</sub> standard. EPA is portraying the receptors and counties in this area as a single 24-hour maintenance area based on the annual PM<sub>2.5</sub> nonattainment designation of Chicago-Gary-Lake County, IL-IN.

with the 24-hour PM<sub>2.5</sub> standard. EPA projected that even total elimination of EGU SO<sub>2</sub> emissions (no matter the cost) would not be able to resolve either nonattainment of the 24-hour PM<sub>2.5</sub> standard in the Liberty-Clairton area or the residual maintenance concerns with that standard in Lancaster County. EPA thus finds that other PM<sub>2.5</sub> strategies, including local reductions of other PM<sub>2.5</sub> precursors, are important to consider for remaining nonattainment and maintenance areas to seek further improvements in PM<sub>2.5</sub> concentrations.

Considering both air quality and cost, EPA's multi-factor analysis indicated \$2,300 per ton as an appropriate cost threshold for SO<sub>2</sub> in the Group 1 states. EPA believes the analyzed cost thresholds lower than \$2,300/ton were not appropriate for SO<sub>2</sub> control in the Group 1 states under the Transport Rule for the following reasons:

- Downwind air quality impacts up to the \$2,300 threshold are significant. Moving up to \$2,300/ton successfully resolves all downwind nonattainment of the annual and 24-hour PM<sub>2.5</sub> standards except for the Liberty-Clairton receptor in Allegheny county with respect to 24-hour PM<sub>2.5</sub>, which EPA has noted is heavily influenced by a local source of organic carbon (75 FR 45281).

- Upwind emission reductions available up to \$2,300/ton are highly cost-effective compared with similar regulations.

- The emission reductions up to this threshold are achievable with widespread deployment of controls that can be installed at power plants by 2014.

- As stated at proposal, EPA finds it reasonable to require a substantial level of control of upwind state emissions that significantly contribute to nonattainment or maintenance problems in another state. The \$2,300/ton cost threshold is comparable to EPA's survey of local non-EGU SO<sub>2</sub> reduction opportunities in the PM<sub>2.5</sub> NAAQS RIA, which range in cost from just above \$2,300/ton to over \$16,000/ton (2007 \$). EPA thus finds it reasonable to seek EGU SO<sub>2</sub> reductions up to \$2,300/ton (rather than at a lower cost threshold) in the states linked to receptors with ongoing attainment and maintenance concerns with the PM<sub>2.5</sub> NAAQS.

EPA believes the analyzed cost thresholds above \$2,300/ton were not appropriate for SO<sub>2</sub> control in the Group 1 states under the Transport Rule for the following reasons:

- As noted above, AQAT suggests reductions up to \$2,300/ton were able to resolve all projected downwind nonattainment of the annual and 24-hour PM<sub>2.5</sub> NAAQS, with the sole

exception of projected nonattainment of the 24-hour PM<sub>2.5</sub> standard at a receptor in Liberty-Clairton. It is well-established that, in addition to being impacted by regional sources, the Liberty-Clairton area is significantly affected by local emissions from a sizable coke production facility and other nearby sources, leading to high concentrations of organic carbon in this area.<sup>50</sup> EPA finds that the remaining PM<sub>2.5</sub> nonattainment problem is predominantly local and therefore does not believe that it would be appropriate to establish a higher cost threshold solely on the basis of this projected ongoing nonattainment of the 24-hour PM<sub>2.5</sub> standard at the Liberty-Clairton receptor.

- Approximately 70 percent of base case SO<sub>2</sub> emissions from Group 1 states were eliminated at the \$2,300/ton cost threshold, leaving a decreasing amount of emission reductions available at each increased cost threshold beyond \$2,300/ton.

- Additional EGU SO<sub>2</sub> reductions available from EGUs beyond the \$2,300/ton threshold level realize significantly less improvement in downwind PM<sub>2.5</sub> concentrations per dollar spent to impact receptors linked to Group 1 states. In other words, the cost-effectiveness of controlling EGU emissions in Group 1 states to improve downwind PM<sub>2.5</sub> concentrations at the linked receptors is notably diminished beyond the \$2,300/ton threshold in this analysis. See Figure VI.D-1.

- EGUs are by far the largest source category for SO<sub>2</sub> emissions. This analysis shows that reductions of EGU SO<sub>2</sub> emissions up to the \$2,300/ton cost threshold were significantly more cost-effective for improving downwind PM<sub>2.5</sub> concentrations than further such reductions (beyond the \$2,300/ton cost threshold) would be to address the remaining PM<sub>2.5</sub> maintenance concerns. EPA's analysis also shows that these maintenance concerns cannot be fully resolved even with complete elimination of all remaining EGU SO<sub>2</sub> emissions, no matter the cost. EPA finds that other PM<sub>2.5</sub> precursor emission reductions, particularly those from local sources will be critical for states in these remaining areas to consider for controlling PM<sub>2.5</sub> concentrations with respect to maintenance of the 2006 24-hour PM<sub>2.5</sub> NAAQS.

In summary, the appropriate cost thresholds for each state were identified through the multi-factor assessment. This assessment included both cost and

air quality considerations. As explained above, the ozone-season NO<sub>x</sub> threshold was determined to be \$500/ton for all states required to reduce ozone-season NO<sub>x</sub>, with residual nonattainment and maintenance concerns to be addressed in a future rulemaking addressing a broader set of source categories for additional cost-effective reductions. For PM<sub>2.5</sub>, the appropriate cost threshold for each state was determined to be either the level at which nonattainment and maintenance issues were completely resolved in downwind states to which the state is linked, the level where remaining nonattainment and maintenance issues are primarily local, or where we found greatly diminished improvements in air quality occurring if EPA moved further up the cost curve.

This assessment yielded a cost threshold of \$2,300/ton on SO<sub>2</sub> for Group 1 states starting in 2014 (\$500/ton in 2012), a cost threshold of \$500/ton on SO<sub>2</sub> for Group 2 states, and a cost threshold of \$500/ton on annual NO<sub>x</sub> for all states required to reduce emissions for purposes of the annual or 24-hour PM<sub>2.5</sub> NAAQS in this rule.

As explained above, none of these specific cost thresholds establish any precedent for the cost per ton stringency of reductions EPA may require in future transport-related rulemakings; these specific cost thresholds are based on current analyses of air quality and cost of emission reductions with respect to the NAAQS considered in this rulemaking and thus would not be relevant to future rulemakings (which would consider updated information) or rulemakings with respect to different NAAQS. In particular, EPA acknowledges that additional action EPA will require in a subsequent rulemaking to address significant contribution to nonattainment and interference with maintenance of the 2008 ozone NAAQS (once reconsideration is finalized) is very likely to require a higher cost per ton stringency of ozone-season NO<sub>x</sub> control applied to a broader set of source categories from upwind states than found to be appropriate for this rulemaking.

## 2. State Emission Budgets (Step 4)

### a. Budget Methodology

EPA used the multi-factor assessment to identify, for each state, the cost threshold that should be used to quantify that state's significant contribution. As described above, in the context of this rulemaking EPA identified a cost threshold of \$500/ton for ozone-season NO<sub>x</sub> control for all states required to reduce ozone-season

<sup>50</sup> [http://www.epa.gov/pmdesignations/2006standards/final/TSD/tsd\\_4.0\\_4.3\\_4.3.3\\_r03\\_PA\\_2.pdf](http://www.epa.gov/pmdesignations/2006standards/final/TSD/tsd_4.0_4.3_4.3.3_r03_PA_2.pdf).

NO<sub>x</sub> emissions for purposes of the 1997 ozone NAAQS in this rule. EPA also identified a cost threshold of \$500/ton for annual NO<sub>x</sub> control for all states required to reduce annual NO<sub>x</sub> emissions for purposes of the annual or 24-hour PM<sub>2.5</sub> NAAQS in this rule. Finally, EPA identified a cost threshold of \$500/ton for SO<sub>2</sub> starting in 2012 for all states required to reduce SO<sub>2</sub> emissions for purposes of the annual or 24-hour PM<sub>2.5</sub> NAAQS in this rule, and

\$2,300/ton for the Group 1 states starting in 2014.

EPA used these cost thresholds from the multi-factor analysis to quantify each state's emissions that significantly contribute to nonattainment or interfere with maintenance downwind. For example, for a Group 1 state, EPA modeling of the cost threshold conveys emission reductions available in each covered state from operation of existing pollution controls as well as all

emission reductions available at cost thresholds of \$500/ton for annual NO<sub>x</sub> in 2012 and 2014, \$500/ton for SO<sub>2</sub> in 2012, and \$2,300/ton for SO<sub>2</sub> in 2014. The total SO<sub>2</sub> and NO<sub>x</sub> projected at these cost levels in that state in those years represents that state's emissions once significant contribution to nonattainment or interference with maintenance downwind for the relevant PM<sub>2.5</sub> NAAQS has been eliminated.

TABLE VI.D-2—EXAMPLE OF EMISSION REDUCTIONS AND BUDGET FORMATION IN PENNSYLVANIA FOR ANNUAL SO<sub>2</sub> AND NO<sub>x</sub><sup>a</sup>

		Final cost threshold	Base case emissions (1,000 tons)	Remaining emissions at cost thresholds (1,000 tons)	Emissions eliminated (1,000 tons)
A	B	C	D	E	F
2012 .....	SO <sub>2</sub> .....	\$500	493	279	215
	NO <sub>x</sub> .....	500	129	120	9
2014 .....	SO <sub>2</sub> .....	2,300	507	112	395
	NO <sub>x</sub> .....	500	132	119	13

<sup>a</sup>**Note:** In this table, emissions are shown for fossil-fuel-fired EGUs > 25 MW (*i.e.*, those units likely covered by the Transport Rule). Table VI.D.2 illustrates how budgets are derived from the elimination of significant contribution for the state of Pennsylvania. Column C illustrates the cost thresholds applied in the costing run that was ultimately identified as the final cost threshold in the multi-factor analysis. Column D shows the base case emissions for the identified pollutant in the identified time period. Column E shows the emission levels that result when the cost thresholds identified in column C are applied. Because this is the cost threshold identified through the multi-factor analysis and the point where all significant contribution to nonattainment and interference with maintenance has been addressed for the PM<sub>2.5</sub> NAAQS—state budgets are based on these emission levels. The final column illustrates the emission reductions for the state in an average year (before accounting for variability).

EPA's modeling of a state's SO<sub>2</sub> and annual NO<sub>x</sub> emission levels (from fossil-fired EGUs > 25 MW) at the relevant cost thresholds in each state reflect that state's emissions from covered sources after the removal of significant contribution to nonattainment and interference with maintenance of the PM<sub>2.5</sub> NAAQS considered in this rulemaking. As these state emission levels reflect the removal of significant contribution and interference with maintenance, they are reasonable levels on which to determine state budgets. Consequently, EPA based state budget levels on the state level emissions that remained at the cost threshold. Each state's budget corresponds to its emission level following the elimination of significant contribution to nonattainment and interference with maintenance in an average year (before taking year-to-year variability into account, as discussed in section VI.E below). Therefore, the implementation and realization of these budgeted emission levels leads to the elimination of significant contribution to nonattainment and interference with maintenance and EPA meets the statutory mandate of section 110(a)(2)(D)(i)(I) with respect to the 1997 annual PM<sub>2.5</sub> NAAQS and the 2006 24-hour PM<sub>2.5</sub> NAAQS.

EPA's establishment of state budgets for ozone-season NO<sub>x</sub> control follow the same methodology as described above for SO<sub>2</sub> and annual NO<sub>x</sub>. Implementation of these ozone-season NO<sub>x</sub> budgets reflects the elimination of significant contribution to nonattainment and interference with maintenance of the 1997 ozone NAAQS for 15 states, whereas 11 other states' ozone-season NO<sub>x</sub> budgets reflect meaningful progress toward (but may not reflect full completion of) this elimination under the mandate of section 110(a)(2)(D)(i)(I). See section III for lists of states.

This approach to basing budgets on projected state level emissions used in the multi-factor analysis is identical to the approach used in the proposal for determining 2014 SO<sub>2</sub> budgets for Group 1 states. EPA is extending this approach more broadly in the final Transport Rule to create state budgets for ozone-season NO<sub>x</sub>, annual NO<sub>x</sub>, and SO<sub>2</sub> in all relevant states in both 2012 and 2014. In the proposal EPA used a more complex approach based on a comparison of historic and projected unit-level emissions (further adjusted for operation of existing controls) in each state to create 2012 state budgets for ozone-season NO<sub>x</sub>, annual NO<sub>x</sub>, and Group 2 SO<sub>2</sub>. At the time of proposal,

EPA believed that historic 2009 emissions data were in some cases more representative of expected emissions in 2012 than pure modeling projections made at the time (75 FR 45290).

However, following the proposal EPA has made significant updates to the IPM model for projecting EGU emissions, including specifically the adoption of 2009 historic data into its modeling parameters directly. EPA also received substantial public input following the proposal on the model's assumptions and representation of individual units, which allowed EPA to improve its 2012 and 2014 emission projections for states under the cost thresholds considered. These modeling updates diminish the concerns EPA expressed at proposal that 2009 historic data may have offered for some states a better proxy for 2012 emissions than model projections, particularly now that EPA is incorporating 2009 data directly in its updated modeling projections. Given these updates to the model in response to public comment, EPA believes it is more appropriate for the final rule to use a consistent approach based on projected state level emissions for all state budgets, as was done for Group 1 SO<sub>2</sub> budgets in 2014 at proposal. EPA received significant comment supporting the use of the model to

project state-level emissions for creating budgets in this manner. EPA also received comments that criticized the proposal's methodology for 2012 budgets for lack of transparency, unnecessary complexity, and inconsistency with the state-level emission projections used in the air quality modeling. EPA's decision for the final Transport Rule to consistently apply across all pollutants the budget methodology originally used for Group 1 SO<sub>2</sub> budgets in 2014 addresses those concerns.

This budget methodology for the final rule uses projected state-level emissions in 2012 and 2014 to set emission budgets for those years on relevant pollutants for that state to control under the Transport Rule. EPA's modeling projects that some states have 2014 emissions that are lower than their 2012 projected emissions even as the same cost threshold (e.g., \$500/ton) is applied in both years. This occurs in the annual NO<sub>x</sub>, ozone-season NO<sub>x</sub>, and Group 2 SO<sub>2</sub> program. As such, EPA's application of this budgeting methodology results in a tightening of budgets in states whose projected emissions of that budgeted pollutant decline from 2012 to 2014 as the cost threshold is held constant.

There are two primary variables that explain the decrease in emissions for some states between 2012 and 2014 as the cost threshold remains constant over both time periods. First, even though the cost threshold is constant between 2012 and 2014 for the programs noted above, the cost threshold for SO<sub>2</sub> Group 1 increases in 2014. This higher cost threshold for Group 1 SO<sub>2</sub> results in obvious reductions in SO<sub>2</sub> emissions in the Group 1 states, but also may lower the cost of certain related NO<sub>x</sub> reductions in those states as well such that they become newly available within the \$500/ton threshold. For example, if a state increases natural gas generation in response to the higher SO<sub>2</sub> cost threshold, such action also yields additional annual and ozone-season

NO<sub>x</sub> emission reductions that are cost-effective at the \$500/ton NO<sub>x</sub> threshold. Where the cost curve modeling shows such additional cost-effective NO<sub>x</sub> reductions in tandem with SO<sub>2</sub> control, EPA is therefore reducing those states' 2014 annual NO<sub>x</sub> and ozone-season NO<sub>x</sub> budgets accordingly, so that those budgets accurately reflect remaining emissions from covered sources in those states after the elimination of all emissions that can be reduced up to the relevant cost thresholds (e.g., \$500/ton).

Second, some of these additional reductions are driven by non-Transport Rule variables. These are reductions that occur due to state rules, consent decrees, and other planned changes in generation patterns that occur after 2012, but during or prior to 2014. For example, EPA modeling reflects emission reduction requirements under provisions of a Georgia state rule that go into effect after 2012 but before 2014. These requirements involve the installation and operation of specific advanced pollution controls. These source-specific requirements under a legal authority unrelated to the Transport Rule result in sharp reductions in Georgia's baseline emission projections between 2012 and 2014. Even though the cost threshold for NO<sub>x</sub> and for SO<sub>2</sub> in Georgia is \$500/ton in both 2012 and 2014, EPA believes it is important to establish separate NO<sub>x</sub> and SO<sub>2</sub> budgets that accurately reflect the emissions remaining in Georgia (and other states experiencing similar reductions) after the elimination of emissions that can be reduced up to the Transport Rule remedy's cost thresholds (e.g., \$500/ton) (see Table VI.D.3). It illustrates a notable decrease between the 2012 and 2014 state budgets for NO<sub>x</sub> and SO<sub>2</sub> in Georgia that is largely driven by state rule requirements. If EPA did not adjust 2014 budgets to account for other emission reductions that would occur even in the baseline, other sources within the state would be allowed to increase their emissions under the unadjusted Transport Rule budgets to

offset the emission reductions planned under other requirements such as state rules. Therefore, to prevent the Transport Rule from allowing such offsetting of emission reductions already expected to occur between 2012 and 2014, EPA is establishing separate budgets for 2012 and 2014 in the final Transport Rule to capture emission reductions in each state that would occur for non-Transport Rule-related reasons (i.e., in the base case) during that time.

EPA's modeling also projects that other states would slightly increase emissions from 2012 to 2014 even at the same cost threshold, such as \$500/ton. There are two primary variables that explain the increase in emissions for these states between 2012 and 2014. These increases are generally small in magnitude. For annual and ozone season NO<sub>x</sub>, they occur as a byproduct of small changes in dispatch related to changes in non-Transport Rule factors (e.g., higher demand in 2014). For SO<sub>2</sub>, they primarily occur in Group 2 states and, in addition to the reasons given above, are influenced by some generation shifting from Group 1 to Group 2 states as the Group 1 states begin to face a higher cost threshold in 2014. EPA believes that allowing for such emission growth in covered states beyond 2012 would be inconsistent with the Transport Rule's identification and elimination of significant contribution to nonattainment and interference with maintenance beginning in 2012. Therefore, for any covered state whose emissions of a relevant pollutant are projected to increase from 2012 to 2014 under the relevant cost thresholds selected in the multi-factor analysis described above, EPA is finalizing that state's 2014 emission budget to maintain the same level of the 2012 emission budget, thereby disallowing such an emission increase that is inconsistent with the 110(a)(2)(D)(i)(I) mandate. Tables VI.D-3 and VI.D-4 below list state emission budgets.<sup>51</sup>

TABLE VI.D-3—SO<sub>2</sub> AND ANNUAL NO<sub>x</sub> STATE EMISSION BUDGETS FOR ELECTRIC GENERATING UNITS BEFORE ACCOUNTING FOR VARIABILITY \*  
[Tons]

	Group	SO <sub>2</sub>		NO <sub>x</sub>	
		2012-2013	2014 and beyond	2012-2013	2014 and beyond
Alabama .....	2	216,033	213,258	72,691	71,962
Georgia .....	2	158,527	95,231	62,010	40,540

<sup>51</sup> These budgets include minor technical corrections to SO<sub>2</sub> budgets in three states (KY, MI, and NY) that were made after the impact analyses for the final rule were conducted. EPA conducted

sensitivity analysis confirming that these differences do not meaningfully alter any of the Agency's findings or conclusions based on the projected cost, benefit, and air quality impacts

presented for the final Transport Rule. The results of this sensitivity analysis are presented in Appendix F in the final Transport Rule RIA.

TABLE VI.D-3—SO<sub>2</sub> AND ANNUAL NO<sub>x</sub> STATE EMISSION BUDGETS FOR ELECTRIC GENERATING UNITS BEFORE ACCOUNTING FOR VARIABILITY \*—Continued  
[Tons]

	Group	SO <sub>2</sub>		NO <sub>x</sub>	
		2012–2013	2014 and beyond	2012–2013	2014 and beyond
Illinois .....	1	234,889	124,123	47,872	47,872
Indiana .....	1	285,424	161,111	109,726	108,424
Iowa .....	1	107,085	75,184	38,335	37,498
Kansas .....	2	41,528	41,528	30,714	25,560
Kentucky .....	1	232,662	106,284	85,086	77,238
Maryland .....	1	30,120	28,203	16,633	16,574
Michigan .....	1	229,303	143,995	60,193	57,812
Minnesota .....	2	41,981	41,981	29,572	29,572
Missouri .....	1	207,466	165,941	52,374	48,717
Nebraska .....	2	65,052	65,052	26,440	26,440
New Jersey .....	1	5,574	5,574	7,266	7,266
New York .....	1	27,325	18,585	17,543	17,543
North Carolina .....	1	136,881	57,620	50,587	41,553
Ohio .....	1	310,230	137,077	92,703	87,493
Pennsylvania .....	1	278,651	112,021	119,986	119,194
South Carolina .....	2	88,620	88,620	32,498	32,498
Tennessee .....	1	148,150	58,833	35,703	19,337
Texas .....	2	243,954	243,954	133,595	133,595
Virginia .....	1	70,820	35,057	33,242	33,242
West Virginia .....	1	146,174	75,668	59,472	54,582
Wisconsin .....	1	79,480	40,126	31,628	30,398
Grand Total .....		3,385,929	2,135,026	1,245,869	1,164,910
Group 1 Total .....		2,530,234	1,345,402	NA	NA
Group 2 Total .....		855,695	789,624	NA	NA

**Note:** These state emission budgets apply to emissions from electric generating units covered by the Transport Rule Program. Group 1/Group 2 designations are only relevant for SO<sub>2</sub> emissions budgets.  
\* The impact of variability on budgets is discussed in section VI.E.

The District of Columbia is not covered by the final Transport Rule. As discussed in section V.D of this preamble and as done for the Transport Rule proposal, EPA combined contributions projected in the air quality modeling from Maryland and the District of Columbia to determine whether those jurisdictions collectively contribute to any downwind nonattainment or maintenance receptor in amounts equal to or greater than the 1 percent thresholds. This modeling confirmed that the combined contributions exceed the air quality threshold at downwind receptors for the ozone, annual PM<sub>2.5</sub>, and 24-hour PM<sub>2.5</sub> NAAQS considered. Both Maryland and the District of Columbia are therefore linked to these receptors.<sup>52</sup> However, the District of Columbia is not included in the Transport Rule because, in the second step of EPA’s significant

contribution analysis, we concluded that there are no emission reductions available from EGUs in the District of Columbia at the cost thresholds deemed sufficient to eliminate significant contribution to nonattainment and interference with maintenance of the NAAQS considered at the linked receptors. At the time of this rulemaking, EPA finds only one facility with units meeting the Transport Rule applicability requirements in the District of Columbia. EPA’s projections do not show any generation from this facility to be economic under any scenario analyzed (including the base case), and the facility’s owners have also announced plans to retire its units in early 2012.<sup>53</sup> Therefore, this unit is projected to have zero emissions in 2012. As such, the total SO<sub>2</sub> and NO<sub>x</sub> emissions in the District of Columbia for EGUs that meet the Transport Rule applicability requirements is also projected to be zero. It follows therefore,

that EPA did not identify any emission reductions available at any of the cost thresholds considered in the final rule’s multi-factor analysis to identify significant contribution to nonattainment and interference with maintenance. For this reason, EPA concludes that no additional limits or reductions are necessary, at this time, in the District of Columbia to satisfy the requirements of section 110(a)(2)(D)(i)(I) with respect to the 1997 ozone, the 1997 PM<sub>2.5</sub> and the 2006 PM<sub>2.5</sub> NAAQS. EPA is therefore neither establishing budgets nor finalizing any FIPs for the District of Columbia in this rule.

TABLE VI.D-4—OZONE SEASON NO<sub>x</sub> STATE EMISSION BUDGETS FOR ELECTRIC GENERATING UNITS BEFORE ACCOUNTING FOR VARIABILITY \*

	[Tons]	
	2012–2013	2014 and beyond
Alabama .....	31,746	31,499
Arkansas .....	15,037	15,037
Florida .....	27,825	27,825
Georgia .....	27,944	18,279
Illinois .....	21,208	21,208

<sup>52</sup> It is important to note that Maryland’s modeled contributions in isolation were greater than the 1 percent threshold for all three of the NAAQS considered at all of the same receptors for which Maryland and DC were “linked,” and therefore EPA would have considered Maryland “linked” to the same set of downwind receptors even if the Agency had treated Maryland’s contributions and the District of Columbia’s contributions separately.

<sup>53</sup> The future retirement status of this D.C. facility was also supported by its inclusion on PJM’s future deactivation list. PJM further suggested that reliability issues related to their retirement are expected to be resolved by next year in time for its planned retirement date. (See PJM pending deactivation request in TR Docket.)



TABLE VI.D-4—OZONE SEASON NO<sub>x</sub> STATE EMISSION BUDGETS FOR ELECTRIC GENERATING UNITS BEFORE ACCOUNTING FOR VARIABILITY\*—Continued

[Tons]

	2012–2013	2014 and beyond
Indiana .....	46,876	46,175
Kentucky .....	36,167	32,674
Louisiana .....	13,432	13,432
Maryland .....	7,179	7,179
Mississippi .....	10,160	10,160
New Jersey .....	3,382	3,382
New York .....	8,331	8,331
North Carolina .....	22,168	18,455
Ohio .....	40,063	37,792
Pennsylvania .....	52,201	51,912
South Carolina .....	13,909	13,909
Tennessee .....	14,908	8,016
Texas .....	63,043	63,043
Virginia .....	14,452	14,452
West Virginia .....	25,283	23,291
Total .....	495,314	466,051

**Note:** These state emission budgets apply to emissions from electric generating units covered by the Transport Rule Program. Group 1/Group 2 designations are only relevant for SO<sub>2</sub> emissions budgets.

\* The impact of variability on budgets is discussed in section VI.E.

EPA notes that the NO<sub>x</sub> budgets for five states linked to downwind ozone receptors in the final Transport Rule are equal to their projected 2012 base case emissions. The five states are Arkansas, Indiana, Louisiana, Maryland, and Mississippi. These states are among those found to meet or exceed the 1 percent contribution threshold for the 1997 ozone NAAQS at downwind receptors and are thus “linked” to downwind receptors. EPA therefore evaluates, in the second step of its significant contribution analysis, what emission limits are necessary to ensure that all emissions that constitute the state’s significant contribution to nonattainment and interference with maintenance are prohibited. As explained above, EPA decided to require from all such states all reductions available at the \$500/ton cost threshold. The five states identified above do not appear to show EGU ozone-season NO<sub>x</sub> reductions at the \$500/ton cost threshold relative to the 2012 base case projections (which do not take into account reductions to be made in other states as a result of this rule). Therefore, EPA conducted further analysis to evaluate whether such reductions were available in these states and whether emission limits are necessary to prohibit these states from significantly contributing to downwind nonattainment or interfering with

maintenance of the 1997 ozone NAAQS in other states. (See the docket to this rulemaking for the IPM run titled TR\_uncontrolled\_ozone\_states\_Final.”)

Specifically, EPA projected those states’ ozone-season NO<sub>x</sub> emissions if all other linked states (but not these five states) were to make all available reductions at the \$500/ton threshold. That analysis revealed that if emission limits were not established for these five states, ozone-season NO<sub>x</sub> emissions in each of the states would increase (beyond the 2012 base case emission projections), due to interstate shifts in electricity generation that cause “emissions leakage” in uncovered states. These increases would result in each state’s emissions being above the level associated with the prohibition of all emissions that can be eliminated at the \$500/ton threshold. EPA thus determined that it is necessary to establish emission limits for these states at the \$500/ton level. These limits, although equal to the state’s 2012 projected base case emissions, are necessary to prohibit all emissions that can be controlled at the \$500/ton cost threshold. In other words, the significant contribution to nonattainment and interference with maintenance addressed by the ozone FIPs for these states is the difference between these states’ projected emissions if they were not covered under the Transport Rule (but other states were), and their emissions after all emissions that can be eliminated at \$500/ton are prohibited.

In addition, EPA notes that four of these five states (Arkansas, Indiana, Louisiana, and Mississippi) are linked to receptors in either the Houston or Baton Rouge areas, which are projected to continue facing nonattainment or maintenance concerns with the 1997 ozone NAAQS, respectively. To allow these states to increase emissions above base case projections would erode the measurable progress toward eliminating significant contribution to nonattainment and interference with maintenance secured by achieving ozone-season NO<sub>x</sub> reductions in the other states linked to these receptors. Furthermore, as discussed in section III, EPA may require additional reductions in these states to fully address significant contribution to nonattainment and interference with maintenance with respect to the 1997 ozone NAAQS in a future rulemaking to be proposed after finalizing reconsideration of the 2008 ozone NAAQS.

b. Relationship of Group 1 and Group 2 States for SO<sub>2</sub> Control

In the Proposal, EPA chose not to allow sources in Group 1 states to use Group 2 SO<sub>2</sub> allowances for compliance, and likewise not to allow sources in Group 2 states to use Group 1 SO<sub>2</sub> allowances for compliance at any time. The preamble clearly states, “With regard to interstate trading, the two SO<sub>2</sub> stringency tiers would lead to two exclusive SO<sub>2</sub> trading groups. That is, states in SO<sub>2</sub> Group 1 could not trade with states in SO<sub>2</sub> Group 2” (75 FR 45216). No such distinction or limitation exists for NO<sub>x</sub> allowance trading.

EPA received significant public comment both in support and opposition to the two distinct SO<sub>2</sub> trading programs. Those in opposition noted that the variability limits imposed at the state level made the compliance restrictions between the two groups unnecessary. Commenters also noted that it may unfairly penalize sources that are part of the same airshed, but are on opposite sides of a state boundary. Those in favor of the separate SO<sub>2</sub> compliance programs noted that it would reduce the probability of a state exceeding its variability limit. Allowing the use of Group 1 or Group 2 allowances for compliance between the two SO<sub>2</sub> programs would potentially encourage Group 1 states to purchase allowances instead of making reductions necessary to eliminate significant contribution. Group 1 states are states that need continued reductions (beyond the \$500/ton threshold) to eliminate their significant contribution to nonattainment and interference with maintenance. Group 2 states have already eliminated their significant contribution to nonattainment and interference with maintenance at the \$500/threshold. So to allow Group 1 or Group 2 allowances to be used interchangeably for compliance between the two SO<sub>2</sub> groups would be to allow the shifting of reductions from areas where they are needed to eliminate significant contribution to nonattainment and interference with maintenance to areas where they are not needed to eliminate the prohibited emissions. EPA also agrees that allowing for trading between the two groups in the remedy finalized in this action would increase risk of a state exceeding its variability limit. For these reasons, EPA is finalizing this rulemaking with the same prohibition on SO<sub>2</sub> trading between Group 1 and Group 2 states that was defined in the proposal. Further, EPA clarifies that while trading of allowances (*i.e.*,

buying, selling, and banking) is allowed without restriction, it is specifically the surrender of SO<sub>2</sub> allowances for compliance that is limited. As mentioned earlier, a source in a Group 1 state can only use SO<sub>2</sub> allowances allocated to Group 1 states for compliance with the SO<sub>2</sub> trading program. Likewise, a source in a Group 2 state can only use SO<sub>2</sub> allowances allocated to Group 2 states for compliance with the SO<sub>2</sub> trading program.

#### c. Ozone-Season Budgets

EPA established the ozone-season NO<sub>x</sub> budgets in a similar manner to the annual NO<sub>x</sub> and SO<sub>2</sub> budgets by using the state level emissions from the cost threshold that reflected the removal of significant contribution to nonattainment and interference with maintenance. Ozone-season budgets were based on the state level emissions from fossil-fuel-fired units greater than 25 MW observed at this cost threshold. As described in section VI.B, all cost thresholds examined reflected the final Transport Rule geography and the marginal costs were applied accordingly. Therefore, for an ozone-only state like Florida, the state level emissions would only reflect an ozone-season cost threshold of \$500/ton in the final cost curves for 2012 and 2014. For a state subject to both annual and ozone-season programs, the marginal cost curves would reflect a \$500/ton NO<sub>x</sub> cost year round, a \$500/ton SO<sub>2</sub> cost in 2012 and the \$2,300/ton SO<sub>2</sub> cost starting in 2014 if a Group 1 state.

#### (1) Length of Ozone Season

(a) Proposed Rule. For purposes of determining ozone-season budgets in the proposed rule, EPA defined the ozone season based on a 5 month period (May 1 through September 30). This 5 month ozone season was consistent with the approach taken by the OTAG, the NO<sub>x</sub> SIP Call, and CAIR. EPA requested comment on whether EPA should base final rule budgets on a longer season, such as March through October.

(b) Public Comments. Several commenters supported continuing with the May through September time period. One commenter supported continuing with this time period, but argued that EPA should consider lengthening the ozone season for future efforts. One commenter questioned the concept of ozone season budgets and recommended EPA focus on sources with greater emissions on high ozone days.

(c) Final rule. For the final rule, EPA has retained the approach in the

proposed rule, as commenters broadly supported the proposal's ozone-season duration and ozone-season NO<sub>x</sub> limitations. Notably, many Transport Rule states covered for PM<sub>2.5</sub> reductions will have sources with annual NO<sub>x</sub> controls that are likely to keep operating year round to address PM<sub>2.5</sub> and ozone. EPA believes that experience from ozone-season NO<sub>x</sub> trading has consistently shown that the emission measures taken to comply with ozone-season budgets provide emission reductions throughout the ozone-season, including the highest ozone days. (See NO<sub>x</sub> Budget Trading Program and CAIR Program progress reports in the docket to this rulemaking or at <http://www.epa.gov/airmarkets/progress/nbp08.html> and [http://www.epa.gov/airmarkets/progress/CAIR\\_09/CAIR09.html](http://www.epa.gov/airmarkets/progress/CAIR_09/CAIR09.html).) However, EPA believes that there is merit in future Agency actions addressing ozone transport in considering strategies to target high ozone days more specifically.

#### d. Summary of Cost Thresholds and Final Budgets for PM<sub>2.5</sub> and Ozone

Summary of methodology. In summary, EPA determined that SO<sub>2</sub> emissions that could be reduced for \$2,300/ton in 2014 should be considered a state's significant contribution to nonattainment and interference with maintenance, unless EPA determined that a lesser reduction would fully resolve the nonattainment and/or maintenance problem for all the downwind receptors to which a particular state might be linked. For these Group 2 states EPA is determining that a lesser reduction of SO<sub>2</sub>, based on the amount of SO<sub>2</sub> reductions that can be reasonably achieved by 2012 is appropriate. This level is defined by the reductions observed in the \$500/ton cost threshold. EPA also determined that all states linked to downwind PM<sub>2.5</sub> nonattainment and maintenance problems should be required to achieve those emission reductions that can be reasonably achieved by 2012. Finally, EPA determined that all states linked to downwind PM<sub>2.5</sub> nonattainment and maintenance problems should, by 2012, remove all NO<sub>x</sub> emissions that can be reduced for \$500/ton and run all existing controls in 2012.

For ozone-season NO<sub>x</sub>, EPA determined that all states linked to downwind ozone and nonattainment and maintenance problems should be required to achieve those ozone-season emission reductions associated with a cost threshold of \$500 per ton. Additionally, EPA examined final 2012 and 2014 budgets based on state level emissions at \$500 cost threshold.

The budget formation methodology finalized in this action responds to concerns about state budgets expressed by commenters on the Transport Rule proposal. EPA requested comment on the four step approach used to determine significant contribution and determine budgets in the proposal. Some commenters noted that the state level emissions from the cost thresholds used to determine significant contribution to nonattainment and interference with maintenance did not match the state level emissions allowed by the final budgets. The concern was that the state level emissions that reflected the elimination of significant contribution in the AQAT analysis, in particular for NO<sub>x</sub>, were less than the emissions allowed by the final budgets. The result would be an implementation that did not quite fully eliminate the significant contribution to nonattainment and interference with maintenance defined in the rule. The proposed budgets not matching the levels reflected in the proposed costing runs were an artifact of the budget formation process that relied on a combination of historic and projected data. While EPA noted this process resulted in state budgets that "reflected" EGU emissions at \$500/ton, it was not always consistent with the EGU emissions at \$500/ton in the costing runs as the commenters noted. By using the cost curves to determine both significant contribution to nonattainment and interference with maintenance—and state budgets—in the final rule, EPA addresses the commenter's concerns about any inconsistency between the two in the proposal.

Some commenters expressed concern that the Transport Rule would result in state budgets that were in some cases higher than those established in CAIR. Commenters suggested that this would be inconsistent with requirements or the spirit of certain CAA provisions aimed at preventing backsliding, *i.e.*, sections 110(l), 172(e), and 193. However, the DC Court of Appeals rejected the state budgets in CAIR as arbitrary and capricious and not consistent with CAA section 110(a)(2)(D)(i)(I) (North Carolina, 531 F.3d 918 and 921) and remanded CAIR to EPA to promulgate a new rule replacing CAIR and consistent with the Court's decision (North Carolina, 550 F.3d 1178). As discussed elsewhere in this section, on remand EPA developed new, final state budgets that address the Court's concerns and meet section 110(a)(2)(D)(i)(I) requirements.

Although some state budgets under the final rule are higher than those

under CAIR, this does not violate either the letter or the spirit of CAA provisions aimed at backsliding. In particular, CAA section 110(l) provides that the Administrator may not approve a plan revision that would “interfere with any \* \* \* applicable requirement” of the CAA. 42 U.S.C. 7410(l). Because the Court reversed and remanded CAIR with instructions to “remedy” the rule’s “fundamental flaws” (including specifically the state budgets found to be unlawful (North Carolina, 550 F.3d 1178), it is difficult to see how new state budgets replacing unlawful budgets and meeting section 110(a)(2)(D)(i)(I) requirements could be viewed as interfering with requirements of the CAA. Indeed, the commenters’ approach would severely limit EPA’s ability to meet the Court’s mandate to develop a new rule consistent with section 110(a)(2)(D)(i)(I). See North Carolina, 531 F.3d 921 (explaining that EPA may not require “some states to exceed the mark” of eliminating their significant contribution). Further, the other CAA sections cited by the commenters (section 172(e), addressing circumstances where the Administrator relaxes a NAAQS, and section 193, addressing the treatment of requirements promulgated before the November 15, 1990, enactment date for the 1990 Amendments to the Clean Air Act) are not applicable here.

Additionally, while the CAIR budgets may have been tighter than Transport Rule state budgets for a couple of states, the sum of state budgets that were subject to both CAIR and the Transport Rule is lower under the Transport Rule for the annual programs. Moreover, the carryover of the large Title IV allowance bank in CAIR allowed for a great deal more emissions within any given state than is permitted under the Transport Rule.

#### *E. Approach to Power Sector Emission Variability*

##### **1. Introduction to Power Sector Variability**

Variability is an inherent aspect of the production and delivery of electricity. It follows that variations in state emissions are not only a result of variations in the level of emission control, but also are caused by the inherent variability in power generation. The state budgets do not account for this latter source of variability at the state level. Emission variability is built into the design of power systems, which use a wide mix of power generation sources with varying use and emission patterns to ensure reliability in electric power generation. Variations in weather,

demand due to changes in the level of economic activity, the portion of electric generation that is fossil-fuel-fired, the length and number of outages at power generation units, and other factors, can lead to significant variations in the load levels of different power generation sources. Variations in the load levels of sources in any given state cause variations in the level of emissions in that state. Thus, EPA believes it is appropriate, in this rule, to take into account the variations that are caused by inherent variability in power generation. More specifically, variations in these external variables can cause significant fluctuations in state emissions, even when action has been taken to prohibit all emissions within a state that significantly contribute to nonattainment or interfere with maintenance in another state. For this reason, EPA considers variability when determining the state specific requirements in this rule. EPA does so by developing variability limits and assurance levels for each state, as described in this section, that are consistent with the statutory mandate of CAA section 110(a)(2)(D)(i)(I).

Loads on a power system, and thus on power generation sources in a given state that are on the power system, vary over every time interval, changing not only in the short term and seasonally, but also annually. As noted above, load patterns and levels are determined by a multiplicity of factors, including weather, economic activity, the portion of electric generation that is fossil-fuel-fired, and the length and number of outages at power generation units, which vary over time. In particular, weather obviously varies not just from season-to-season but also from year-to-year, and even small changes in annual weather patterns can affect how the power system and power generation sources on the power system operate during a year. For example, load, and the resulting use of generation sources on an interconnected grid to meet load, depend not only on how hot a summer day is, but also on where a heat wave occurs and how long it lasts. Similarly, a relatively cold winter that drives up winter load may also change what generation sources are used to address the increased demand for heat. Thus, the pattern of generation may shift geographically as a weather pattern moves across the country. Because weather and other factors affecting loads, and the patterns of generation used to meet loads, vary over time and from state to state, the resulting level of emissions also varies over time and from state to state.

This variability in emissions is not a result of variation in emission rates, emission controls, or emission control strategies, but instead is a result of the inherent variability in power generation. Patterns of generation change to ensure demand for electricity is met and to ensure continued reliability of the power system. This results in temporal and geographic fluctuations in emissions. In the final Transport Rule, like the proposed rule, EPA explicitly takes account of these changing patterns of generation and the resultant variability in power sector emissions.

As discussed previously, EPA identified a specific amount of emissions that must be prohibited by each state to meet the requirements of CAA section 110(a)(2)(D)(i)(I). EPA also developed state baseline emissions for power generation sources based on projections of state emissions in an average year before the elimination of prohibited emissions, and state budgets for power generation sources based on projections of state emissions in an average year after the elimination of such emissions. However, because of the inherent variability in state-level baseline emissions—resulting from the inherent variability in loads and power system and power generation source operations—state-level emissions will fluctuate from year-to-year even after all significant contribution to nonattainment and interference with maintenance that EPA identified in this final rule are eliminated. In an above average year, emissions may exceed the state budgets which are based on an analysis of projected emissions in an average year. EPA believes that, because baseline emissions are variable for reasons unrelated to the degree of emission control in a state and emissions after the elimination of all significant contribution to nonattainment and interference with maintenance are therefore also variable, it is appropriate to take this variability into account in developing the remedy for meeting the requirements of CAA section 110(a)(2)(D)(i)(I). The variability limits and assurance levels in the final rule account for this inherent variability, while ensuring that emissions within each state that significantly contribute to nonattainment or interfere with maintenance in another state are prohibited. EPA believes this approach is both reasonable in that it reflects the operation of the power system generation in order to maintain electric reliability and consistent with the statutory mandate of CAA section 110(a)(2)(D)(i)(I). For these reasons, EPA

is finalizing variability limits for each state budget to identify the range of emissions that EPA believes is likely to occur in each state following the elimination of all the state's significant contribution to nonattainment and interference with maintenance.

As discussed above, the air quality-assured trading remedy's state-specific budgets represent each state's emissions in an average year after elimination of significant contribution to nonattainment and interference with maintenance. Because actual base case emissions are likely to vary from projected base case emissions, this remedy incorporates provisions that account for such variability. While the primary purpose of this remedy is to eliminate significant contribution and interference with maintenance, EPA believes variability limits also satisfy several other objectives. The remedy provides the flexibility to deal with real-world variability in the operation of the power system through air quality-assured trading and reduces costs of compliance with emission reduction requirements, while still providing assurance for downwind states that significant contribution to nonattainment and interference with maintenance by upwind states will be eliminated. EPA believes the limited fluctuation in state level emissions that this approach permits is consistent with the statutory mandate of section 110(a)(2)(D)(i)(I) because some geographic and temporal shifting of emissions necessarily results from the inherent variability in power generation and is caused by factors unrelated to the degree of emission control, such as weather, economic activity, and unit availability. Far from excusing any state from addressing emissions within the state that significantly contribute to nonattainment or interfere with maintenance in other states, these variability limits ensure that the system can accommodate the inherent variability in the power sector while ensuring that each state eliminates the amount of emissions within the state, in a given year, that must be eliminated to meet the statutory mandate of section 110(a)(2)(D)(i)(I).

Moreover, the structure of the program, which achieves the required emission reductions through limits on the total number of allowances allocated, assurance provisions, and penalty mechanisms, ensures that the variability limits only allow the amount of temporal and geographic shifting of emissions that is likely to result from the inherent variability in power generation, and not from decisions to avoid or delay the installation of

necessary controls. Under the remedy, an individual state can have emissions up to its budget plus the variability limit. However, the requirement that all sources hold allowances covering emissions, and the fact that those allowances are allocated based on state-specific budgets *without* variability, ensure that the total emissions from the states do not exceed the sum of the state budgets. The remedy, therefore, ensures both that total emissions do not exceed the total of the state budgets and that the required emission reductions occur in each state.

This section describes how EPA calculated variability limits for each state to achieve this goal.

## 2. Transport Rule Variability Limits

EPA performed analyses using historical data to demonstrate that there is year-to-year variability in base case emissions (even when emission rates for all units are held constant) and to quantify the magnitude of this variability.

The focus of the analysis is on quantifying the magnitude of the inherent year-to-year variability in state-level EGU emissions independent of measures taken to control those emissions (and thus due only to changes in electricity generation within each state). EPA used this analysis to set variability limits as part of the remedy to ensure that states are eliminating their significant contribution to nonattainment and interference with maintenance to protect air quality.

As discussed in detail below, EPA is finalizing the Transport Rule with 1-year variability limits calculated using a modified approach from the one described in the proposal. EPA is not including the proposal's 3-year variability limits in the final Transport Rule. EPA received comments that the 3-year variability limits increased program costs and diminished compliance flexibility without delivering any additional air quality benefits. EGU owners and operators expressed concern that 3-year variability limits would be impracticable to implement and that the 1-year variability limits themselves would be adequately stringent to ensure elimination of significant contribution to nonattainment and interference with maintenance in each state.

After further consideration, EPA has concluded that 3-year variability limits would be unnecessary, would be difficult to anticipate, and would not have a measurable impact on air quality benefits. EPA has determined that annual limits are sufficient to eliminate significant contribution to

nonattainment and interference with maintenance in all upwind states while accommodating the historically observed year-to-year fluctuation in state-level EGU emissions even at the same rate of emissions control in a given state.

In the proposal, EPA used statistical methods to derive the 3-year variability limit directly from the 1-year variability limit, meaning that the two are statistically equivalent in the long run under certain statistical assumptions. Primarily, these assumptions were that the variation in electric demand around the budget is random from year-to-year and that, when the annual emissions are averaged over a multi-year time period, the average emissions per year will equal the state's budget. The first assumption was also made in the assessment of the historical year-to-year variation in heat input in developing the 1-year limit (*see* section 2 of the "Power Sector Variability Final Rule TSD" for more details). Regarding the second assumption, since the state-by-state emission budgets are based on the availability of emission reductions at an equal marginal cost level, EPA expects the sources in each of the upwind states to make these cost-effective reductions and to meet the emission budgets each year, on average.

Since the 3-year variability limit was based on average year-to-year variability over a longer time horizon, EPA notes that a random ordering of those years could yield 2 above-average years in a row. If, by chance, a third above-average year were to follow, the state could face violation of the 3-year limit, even if over a time period longer than 3 years, that state would never have exceeded the statistically-equivalent 1-year variability limit and its annual emissions would have averaged to the level of its budget. Effectively, this means that imposing a multi-year variability limit would erode the 1-year variability limit's ability to accommodate historically observed year-to-year variability in state-level EGU emissions (due only to generation changes), and it would do so without providing any additional air quality benefits or protection for downwind areas (since the average emissions over the long time horizon equal the level of the budget).

For more details about the relationship between the 1- and 3-year limits, see the discussions in section 3 of the "Power Sector Variability" TSD from the proposed Transport Rule, which describes the derivation of the 3-year limit from the 1-year variability and section 3 of the "Power Sector Variability Final Rule TSD", which describes the results of a numerical

simulation showing that the 1- and 3-year limits are statistically indistinguishable and, thus, redundant over the course of the program to accommodate year-to-year variability.

While EPA expects the yearly emissions in each state, on average, to equal the level of the budgets, EPA also estimated the air quality impacts of 5, 10, 15, and 20 percent emission variability using the air quality assessment tool, which is presented in section 4 of the "Power Sector Variability Final Rule TSD." That analysis shows that year-to-year fluctuations of up to 20 percent in SO<sub>2</sub> emissions from upwind states linked to a given downwind receptor do not undermine the ability of the Transport Rule programs to resolve nonattainment or maintenance concerns at that receptor. The analysis presented in the TSD focuses on SO<sub>2</sub> emissions and was designed to examine the sensitivity of downwind air quality to upwind EGU emission levels. The share of total SO<sub>2</sub> emitted by EGUs is significantly larger than the share of total NO<sub>x</sub> emitted by EGUs. For example, in the states for which EPA modeled base case contributions of these pollutants, EGUs accounted for 74 percent of total SO<sub>2</sub>, 14 percent of total annual NO<sub>x</sub>, and 15 percent of total ozone-season NO<sub>x</sub> emissions. Therefore, when varying EGU emissions only, downwind air quality would be most sensitive to upwind variations in SO<sub>2</sub>, because relative variations in EGU SO<sub>2</sub> emissions have a greater impact on total SO<sub>2</sub> emissions than the same relative variation in EGU NO<sub>x</sub> emissions would have on total NO<sub>x</sub> emissions affecting downwind air quality. Because the Transport Rule only affects upwind emissions from EGU sources, downwind air quality would be more sensitive to variability in upwind state SO<sub>2</sub> emissions under this rule than variability in upwind state NO<sub>x</sub> emissions under this rule (given that the rule affects a smaller scope of total NO<sub>x</sub> emissions compared to the scope affected of total SO<sub>2</sub> emissions). Thus, EPA chose to analyze the "worst-case" potential downwind air quality impacts from year-to-year variability above upwind state SO<sub>2</sub> budgets, and EPA therefore believes that its findings from this analysis are valid for ascertaining the potential downwind air quality impacts from variation at those levels in both SO<sub>2</sub> and NO<sub>x</sub> under the Transport Rule programs.

Furthermore, because the state budgets are based directly on IPM modeling of electric generation when cost-effective emission reductions have been achieved, sources within each state

should have the same incentive to meet that budget, on average, in any given year. Additional EPA analysis supports the claim that states would be no more likely to exceed 1-year variability limits without the 3-year limits than with the 3-year limits. See the "Power Sector Variability Final Rule TSD" for more details on this statistical analysis. Finally, because the state budgets (and thus the total amount of allowances available) are fixed and every covered source must hold allowances covering its emissions, it is not feasible for all, or even many, states to repeatedly exceed their budgets.

The approach calculated the standard deviation in state-level heat input from units expected to be covered by the final Transport Rule over an 11-year time period (2000 through 2010), from which the 95th percent confidence level was calculated. EPA divided this value by the mean to get the percentage variation in heat input. The two-tailed 95th percent confidence level is the equivalent of the 97.5 percent upper (single-tailed) confidence level. This approach yielded an average year-to-year heat input variability for each state, as a proxy for historic year-to-year variability in state-level EGU emissions while holding emission rates constant. The result, expressed as a percentage, conveys the maximum degree to which EGU emissions at the state level may be expected with 95th percent confidence to vary around a given target (*i.e.*, budget) from year-to-year, on average, based on the statistical analysis of historic heat input over the 2000 through 2010 time period.

From the state-by-state variability calculations, EPA identified a single variability level (percentage) for each of the annual and ozone-season programs based on the historic variability measured at units in covered states on an annual basis and an ozone-season basis, respectively. In the proposal, EPA "identified a single set of variability levels \* \* \* to apply to all states in order to make the application of the variability limits straightforward rather than developing state-by-state percentage variability values" (75 FR 45293). In the final rule, EPA is taking the straightforward approach of identifying a single set of variability levels to apply to all states because EPA has determined that it is reasonable to afford all states under the Transport Rule programs the extent of measured historic variability experienced by any Transport Rule state during 2000 through 2010. In the variability analysis for the final rule, EPA identified Tennessee as having the highest measured historic variability of annual

heat input of 18 percent, and Virginia as having the highest measured historic variability of ozone-season heat input of 21 percent. Because the percentage of variability in Tennessee on an annual basis and in Virginia on an ozone-season basis are reasonably likely to occur in each of the other states in the future, EPA believes it is appropriate to apply an 18 percent annual variability limit to all states covered by the annual SO<sub>2</sub> and NO<sub>x</sub> programs and a 21 percent ozone-season variability limit to all states covered by the ozone-season NO<sub>x</sub> program.<sup>54</sup>

EPA's analysis of historic heat input variability in multiple states over the 2000 to 2010 baseline yields a range of potential year-to-year variability values for state-level EGU emissions. As discussed above, any one state's measured variability (in this case, from 2000 to 2010) is due to a multiplicity of factors. These factors include, but are not limited to, variation in weather, variation in demand due to increased or decreased level of economic activity, variation in the portion of electric generation that is fossil-fuel-fired, and variation in the length and number of outages at power generation units, and these individual factors may sometimes act in concert and may other times be offsetting.

The mix and levels of factors present in a state from year-to-year can lead to variation of state-level emissions above and below the level for the state under average conditions. Because the levels of the various factors are difficult to predict on a year-to-year basis for an individual state, the resulting variability in state-level emissions is difficult to predict. Moreover, because the electric generation, transmission, and distribution system in the eastern half of the U.S. is highly integrated, year-to-year variation in these factors in one state can cause year-to-year variability in state-level emissions both in that state and in other states on the system. For example, increased demand due to extreme weather or increased economic activity in one state can be met through increased generation and emissions in a number of states.

Because these factors can vary year-to-year in every state in ways that are difficult to predict and can affect other states, EPA maintains that the maximum variability measured in one state for a discrete period (2000–2010) is

<sup>54</sup> The six states in the supplemental proposal for inclusion in the Transport Rule's ozone-season NO<sub>x</sub> program have measured historic ozone-season variability that would be adequately covered by this final rule's ozone-season NO<sub>x</sub> variability level (21 percent). Please see the "Power Sector Variability Final Rule TSD" for more details.

reasonably likely to occur in the future in any of the states in the region. Consequently, EPA believes that it is reasonable to use the maximum historic percentage variability figure as a proxy for the percentage variability that any of the states is likely to experience in the future. Although EPA is therefore using a uniform percentage figure for variability, EPA applies that percentage figure to each state-specific budget so that variability in tons of emissions is determined on a state-specific basis. That state-specific number is used in determining whether the assurance provisions and penalty are triggered in the specific state. EPA also believes that it is appropriate to accommodate this potential future variability at the state level if and only if it can be accommodated without undermining the programs' beneficial impacts on downwind air quality that eliminate significant contribution to nonattainment or interference with maintenance of the NAAQS assessed in this rulemaking (see the "Power Sector Variability Final Rule TSD" for more information on this analysis). The Transport Rule identifies and quantifies, on a state-by-state basis, the emissions in each state that significantly contribute to nonattainment or interfere with maintenance in another state. This is done by analyzing specific air pollution linkages between each upwind state and each downwind maintenance or nonattainment receptor. Nonetheless, it is clear from the air quality analyses that the air quality outcome at a given downwind receptor is a function of the cumulative emissions from all upwind states and the receptor's home state. Once the Transport Rule emission reduction requirements are implemented in all states subject to the programs, EPA's analysis shows that the impact on a downwind receptor of any single upwind state's year-to-year fluctuation of up to 20 percent in SO<sub>2</sub> emissions would be so limited as to not disturb that receptor's ability to maintain or attain the NAAQS analyzed in this rulemaking. Therefore, to the extent that such variability has been measured in historic data in any state subject to the Transport Rule programs, it is reasonable to provide for potential future variability in Transport Rule states within the scope of what EPA's analysis shows to preserve downwind

air quality gains achieved by the Transport Rule programs.

The approach to establishing variability limits in the final rule modifies the approach from the proposed rule in two ways. First, EPA is applying only a percentage variability limit to each budget in the final rule, whereas the proposed rule applied the greater of a percentage or an absolute tonnage variability limit to each budget. EPA explained in the proposal that it was necessary to impose both a percentage and a tonnage limit due to the inclusion of "states with small numbers of units where expected variability would be more pronounced in percentage terms" (75 FR 45293). However, the states with the smallest numbers of units included at proposal (such as Connecticut and the District of Columbia) are not covered by any of the final Transport Rule's programs. In the final rule's variability analysis, Tennessee has the highest measured annual variability percentage and Virginia has the highest measured ozone-season variability percentage. Both of these states have a sufficient number of units for the percentage variability findings to be representative of variability in all of the Transport Rule states; therefore, it is not necessary to impose a tonnage limitation in the final rule.

Second, EPA has expanded the historic baseline of the variability analysis to consider heat input data from 2000 through 2010, as compared to 2002 through 2008 at proposal, and EPA has also expanded the dataset to include all units expected to be covered by the final Transport Rule's programs. EPA received a number of comments that the proposal's variability limits were too stringent in part because they relied on too short a historical baseline that failed to capture the full extent of long-run year-to-year variability. EPA agrees with these comments and believes that the historic baseline modification described above supports variability limits in the final rule that are a better approximation of future potential year-to-year variability in state-level EGU emissions around the budgets as a function of inherent variability in baseline state-level EGU operations. EPA believes the 2000 through 2010 historic baseline supports a more accurate approximation of year-to-year variability in state-level EGU operations than previously

measured on a 2002 through 2008 baseline.

Some commenters expressed the view that allowing variability limits in addition to state budgets undermines the requirements of CAA section 110(a)(2)(D)(i)(I) to eliminate significant contribution to nonattainment and interference with maintenance of the NAAQS in downwind states. EPA disagrees with these comments. As explained above, EPA finds that year-to-year variability is an inherent characteristic of power sector emissions whether or not such emissions are controlled by state budgets; the future year-to-year variability is a component of the sector's emissions baseline before emission reductions are required. As done for proposal, EPA has analyzed the impact of allowing emissions from upwind states in a given year to rise above the budgets but within the variability limits allowed in the final rule. This analysis shows that emission fluctuations around the budgets but within the variability limits will not undermine the downwind air quality gains achieved by the implementation of the Transport Rule budgets, and therefore the variability limits cannot be said to undermine the elimination of significant contribution to nonattainment or interference with maintenance achieved under the Transport Rule programs. Based on historical data and projected air quality impacts, the Agency believes that states will have sufficient flexibility and room to operate within the final rule's variability limits while addressing all emissions identified as significantly contributing to nonattainment or interfering with maintenance in other states.

#### *F. Variability Limits and State Emission Budgets: State Assurance Levels*

As explained above, EPA applied the variability levels on a state-by-state basis to calculate specific emission budgets with variability limits. The state budget plus the variability limit is also called the "state assurance level." Table VI.F-1 shows final state budgets, variability limits, and assurance levels by state for SO<sub>2</sub> emissions. Table VI.F-2 shows final state budgets, variability limits, and assurance levels by state for annual NO<sub>x</sub> emissions. Table VI.F-3 shows final state budgets, variability limits, and assurance levels by state for ozone-season NO<sub>x</sub> emissions.

TABLE VI.F-1—STATE BUDGETS, VARIABILITY LIMITS, AND ASSURANCE LEVELS FOR SO<sub>2</sub> EMISSIONS

	Emission budget (tons)		Emission variability limit (tons)		State emissions assurance level (tons)	
	2012–2013	2014 and beyond	2012–2013	2014 and beyond	2012–2013	2014 and beyond
Alabama .....	216,033	213,258	38,886	38,386	254,919	251,644
Georgia .....	158,527	95,231	28,535	17,142	187,062	112,373
Illinois .....	234,889	124,123	42,280	22,342	277,169	146,465
Indiana .....	285,424	161,111	51,376	29,000	336,800	190,111
Iowa .....	107,085	75,184	19,275	13,533	126,360	88,717
Kansas .....	41,528	41,528	7,475	7,475	49,003	49,003
Kentucky .....	232,662	106,284	41,879	19,131	274,541	125,415
Maryland .....	30,120	28,203	5,422	5,077	35,542	33,280
Michigan .....	229,303	143,995	41,275	25,919	270,578	169,914
Minnesota .....	41,981	41,981	7,557	7,557	49,538	49,538
Missouri .....	207,466	165,941	37,344	29,869	244,810	195,810
Nebraska .....	65,052	65,052	11,709	11,709	76,761	76,761
New Jersey .....	5,574	5,574	1,003	1,003	6,577	6,577
New York .....	27,325	18,585	4,919	3,345	32,244	21,930
North Carolina .....	136,881	57,620	24,639	10,372	161,520	67,992
Ohio .....	310,230	137,077	55,841	24,674	366,071	161,751
Pennsylvania .....	278,651	112,021	50,157	20,164	328,808	132,185
South Carolina .....	88,620	88,620	15,952	15,952	104,572	104,572
Tennessee .....	148,150	58,833	26,667	10,590	174,817	69,423
Texas .....	243,954	243,954	43,912	43,912	287,866	287,866
Virginia .....	70,820	35,057	12,748	6,310	83,568	41,367
West Virginia .....	146,174	75,668	26,311	13,620	172,485	89,288
Wisconsin .....	79,480	40,126	14,306	7,223	93,786	47,349

**Note:** Budgets, limits, and assurance levels apply to each state's emissions from covered sources, as defined by this final rule, only.

TABLE VI.F-2—STATE BUDGETS, VARIABILITY LIMITS, AND ASSURANCE LEVELS FOR ANNUAL NO<sub>x</sub> EMISSIONS

	Emission budget (tons)		Emission variability limit (tons)		State emissions assurance level (tons)	
	2012–2013	2014 and beyond	2012–2013	2014 and beyond	2012–2013	2014 and beyond
Alabama .....	72,691	71,962	13,084	12,953	85,775	84,915
Georgia .....	62,010	40,540	11,162	7,297	73,172	47,837
Illinois .....	47,872	47,872	8,617	8,617	56,489	56,489
Indiana .....	109,726	108,424	19,751	19,516	129,477	127,940
Iowa .....	38,335	37,498	6,900	6,750	45,235	44,248
Kansas .....	30,714	25,560	5,529	4,601	36,243	30,161
Kentucky .....	85,086	77,238	15,315	13,903	100,401	91,141
Maryland .....	16,633	16,574	2,994	2,983	19,627	19,557
Michigan .....	60,193	57,812	10,835	10,406	71,028	68,218
Minnesota .....	29,572	29,572	5,323	5,323	34,895	34,895
Missouri .....	52,374	48,717	9,427	8,769	61,801	57,486
Nebraska .....	26,440	26,440	4,759	4,759	31,199	31,199
New Jersey .....	7,266	7,266	1,308	1,308	8,574	8,574
New York .....	17,543	17,543	3,158	3,158	20,701	20,701
North Carolina .....	50,587	41,553	9,106	7,480	59,693	49,033
Ohio .....	92,703	87,493	16,687	15,749	109,390	103,242
Pennsylvania .....	119,986	119,194	21,597	21,455	141,583	140,649
South Carolina .....	32,498	32,498	5,850	5,850	38,348	38,348
Tennessee .....	35,703	19,337	6,427	3,481	42,130	22,818
Texas .....	133,595	133,595	24,047	24,047	157,642	157,642
Virginia .....	33,242	33,242	5,984	5,984	39,226	39,226
West Virginia .....	59,472	54,582	10,705	9,825	70,177	64,407
Wisconsin .....	31,628	30,398	5,693	5,472	37,321	35,870

**Note:** Budgets, limits, and assurance levels apply to each state's emissions from covered sources, as defined by this final rule, only.

TABLE VI.F-3—STATE BUDGETS, VARIABILITY LIMITS, AND ASSURANCE LEVELS FOR OZONE-SEASON NO<sub>x</sub> EMISSIONS

	Emission budget (tons)		Emission variability limit (tons)		State emissions assurance level (tons)	
	2012–2013	2014 and beyond	2012–2013	2014 and beyond	2012–2013	2014 and beyond
Alabama .....	31,746	31,499	6,667	6,615	38,413	38,114
Arkansas .....	15,037	15,037	3,158	3,158	18,195	18,195
Florida .....	27,825	27,825	5,843	5,843	33,668	33,668
Georgia .....	27,944	18,279	5,868	3,839	33,812	22,118
Illinois .....	21,208	21,208	4,454	4,454	25,662	25,662
Indiana .....	46,876	46,175	9,844	9,697	56,720	55,872
Kentucky .....	36,167	32,674	7,595	6,862	43,762	39,536
Louisiana .....	13,432	13,432	2,821	2,821	16,253	16,253
Maryland .....	7,179	7,179	1,508	1,508	8,687	8,687
Mississippi .....	10,160	10,160	2,134	2,134	12,294	12,294
New Jersey .....	3,382	3,382	710	710	4,092	4,092
New York .....	8,331	8,331	1,750	1,750	10,081	10,081
North Carolina .....	22,168	18,455	4,655	3,876	26,823	22,331
Ohio .....	40,063	37,792	8,413	7,936	48,476	45,728
Pennsylvania .....	52,201	51,912	10,962	10,902	63,163	62,814
South Carolina .....	13,909	13,909	2,921	2,921	16,830	16,830
Tennessee .....	14,908	8,016	3,131	1,683	18,039	9,699
Texas .....	63,043	63,043	13,239	13,239	76,282	76,282
Virginia .....	14,452	14,452	3,035	3,035	17,487	17,487
West Virginia .....	25,283	23,291	5,309	4,891	30,592	28,182

**Note:** Budgets, limits, and assurance levels apply to each state’s emissions from covered sources, as defined by this final rule, only.

See section VII.E for the discussion of how variability limits and state assurance levels are used in the implementation of assurance provisions for the air quality-assured trading programs.

*G. How the State Emission Reduction Requirements Are Consistent With Judicial Opinions Interpreting the Clean Air Act*

The methodology described in this notice quantifies states’ significant contribution to nonattainment and interference with maintenance in a manner that is consistent with the decisions of the DC Circuit. As discussed previously, the DC Circuit has issued two significant decisions addressing the requirements of 110(a)(2)(D)(i)(I). The first opinion largely upheld the NO<sub>x</sub> SIP Call, *Michigan*, 213 F.3d 663, and the second found significant flaws in CAIR, *North Carolina*, 531 F.3d. 896. In both cases, the Court considered aspects of the methodology used by EPA to identify emissions that, pursuant to section 110(a)(2)(D)(i)(I), must be eliminated due to their impact on air quality in downwind states. EPA believes that the methodology used in this final rule is consistent with both opinions and rectifies the flaws the *North Carolina* court identified with the methodology used in CAIR. The methodology used for this rule relies on state-specific data to analyze each individual state’s significant contribution, uses air quality considerations in addition to cost

considerations to identify each state’s significant contribution, and gives independent meaning to the “interference with maintenance” prong. This methodology is then applied in a reasonable manner consistent with the relevant judicial opinions.

In *North Carolina*, the Court held that EPA’s approach to evaluating significant contribution was inadequate because, by evaluating only whether emission reductions were highly cost effective “at the regional level assuming a trading program”, it failed to conduct the required state-specific analysis of significant contribution. See *id.* at 907. EPA, the Court concluded, “never measured the ‘significant contribution’ from sources within an individual state to downwind nonattainment areas.” *Id.* The Court did not, however, disturb the air-quality-based methodology used by EPA to identify the states with contributions large enough to warrant further consideration.

For this rule, EPA uses a first step similar to that used in CAIR to identify the states with relatively large contributions. However, in contrast to CAIR, it then uses a state-specific analysis. Instead of identifying a single emission level that could be achieved by the application of highly cost effective controls in the region, EPA determines, on a state-by-state basis, what reductions could effectively be achieved by sources in each state. EPA’s new approach does not, as the CAIR methodology did, establish a regional cap on emissions that is then divided

into state budgets that set the emission reduction requirements for each state. Instead, EPA develops, for each covered state, emission budgets based on the reductions achievable at a particular cost per ton in that particular state, taking into account the need to ensure reliability of the electric generating system. The selected cost/ton levels reflect consideration of both cost factors and air quality factors including the estimated impact of upwind states’ emissions on each downwind receptor.

In addition, in developing this approach, EPA was guided by the Court’s holdings regarding the use of cost to identify significant contribution. Specifically, the Court held in *Michigan* that EPA could “in selecting the ‘significant’ level of ‘contribution’ under section 110(a)(2)(D)(i)(I), choose a level corresponding to a certain reduction in cost.” *North Carolina*, 531 F.3d at 917 (citing *Michigan*, 213 F.3d at 676–77). This holding also supported the Court’s conclusion in *Michigan* that it was acceptable for EPA to apply a uniform cost-criterion across states. See *Michigan*, 213 F.3d at 679. In the CAIR case, the Court rejected EPA’s analysis, not because it relied on cost considerations to identify significant contribution, but because it found that EPA had failed to draw the significant contribution line at all. See *North Carolina*, 531 F.3d at 918 (“\* \* \* here EPA did not draw the [significant contribution] line at all. It simply verified sources could meet the SO<sub>2</sub> caps with controls EPA dubbed ‘highly



cost-effective.’’). The holdings in *Michigan* regarding the use of cost and a uniform cost-criterion across states were left undisturbed. *See, e.g., North Carolina*, 531 F.3d at 917 (explaining that in *Michigan* the Court held that ‘‘EPA may ‘after [a state’s] reduction of all [it] could \* \* \* cost-effectively eliminate[,]’ consider ‘any remaining contribution insignificant’’). In fact, the Court acknowledged that, based on the *Michigan* holdings, the measurement of a state’s significant contribution need not ‘‘directly correlate with each state’s individualized air quality impact on downwind nonattainment relative to other upwind states.’’ *North Carolina*, 531 F.3d at 908.

For these reasons, EPA determined that it was appropriate in this rulemaking to consider the cost of controls to determine what portion of a state’s contribution is its ‘‘significant contribution.’’ However, EPA also heeded the *North Carolina* Court’s warning that ‘‘EPA can’t just pick a cost for a region, and deem ‘significant’ any emissions that sources can eliminate more cheaply.’’ *North Carolina*, 531 F.3d at 918. Thus, in this rulemaking, EPA departs from the practice used in the NO<sub>x</sub> SIP Call and in CAIR of evaluating, based solely on the cost of control required in other regulatory environments, what controls would be considered ‘‘highly-cost-effective.’’ Instead, as part of its determination of a reasonable cost per ton for upwind state control, EPA evaluates the air quality impact of reductions at various cost levels and considers the reasonableness of possible cost thresholds as part of a multi-factor analysis.

In addition, the methodology used in this rulemaking gives independent meaning to the interfere with maintenance prong of section 110(a)(2)(D)(i)(I). In *North Carolina*, the Court concluded that CAIR improperly ‘‘gave no independent significance to the ‘interfere with maintenance’ prong of section 110(a)(2)(D)(i)(I) to separately identify upwind sources interfering with downwind maintenance.’’ *North Carolina*, 531 F.3d at 910. EPA rectified this flaw in this rulemaking by separately identifying downwind ‘‘nonattainment sites’’ and downwind ‘‘maintenance sites.’’ EPA decided to consider upwind states’ contributions not only to sites that EPA projected would be in nonattainment, but also to sites that, based on the historic variability of their emissions, EPA determined may have difficulty maintaining the relevant standards. The specific mechanism EPA used to implement this approach is described in

detail in section V.C, previously. For annual PM<sub>2.5</sub>, this approach identified 16 maintenance sites in addition to the 32 nonattainment sites identified in the analysis of nonattainment receptors. For 24-hour PM<sub>2.5</sub> this approach identified 38 maintenance sites in addition to the 92 nonattainment sites identified in the analysis of nonattainment receptors. For ozone it identified 16 maintenance sites in addition to the 11 ozone nonattainment sites identified.

EPA applied this methodology using available information and data to measure the emissions from states in the eastern United States that significantly contribute to nonattainment or interfere with maintenance in downwind areas with regard to the 1997 and 2006 PM<sub>2.5</sub> NAAQS and the 1997 ozone NAAQS. Although EPA has not completely quantified the total significant contribution of these states with regard to all existing standards, EPA has determined, on a state-specific basis, that the emissions prohibited in the FIPs are either part of or constitute the state’s significant contribution to nonattainment and interference with maintenance. Thus, elimination of these emissions will, at a minimum, make measurable progress towards satisfying the section 110(a)(2)(D)(i)(I) prohibition on significant contribution to nonattainment and interference with maintenance.

## VII. FIP Program Structure To Achieve Reductions

### A. Overview of Air Quality-Assured Trading Programs

EPA is finalizing an air quality-assured trading remedy that is substantially similar to the preferred trading remedy presented in the proposal. Key differences from the preferred trading remedy in the proposal include:

- Recalculated state budgets and variability limits (*i.e.*, state assurance levels) based on updated modeling;
- Simplified variability limits for 1-year application only;
- Revised allocation methodology for existing and new units and revised new unit set-asides for new units in Transport Rule states and new units potentially locating in Indian country;
- Changed start of assurance provisions to 2012 and increased assurance provision penalties; and
- Removed opt-in provisions.

In the final rule, as in the proposed rule, EPA is promulgating FIPs to require SO<sub>2</sub> and NO<sub>x</sub> reductions from power plants in jurisdictions<sup>55</sup> that

contribute significantly to nonattainment in, or interfere with maintenance by, a downwind area with respect to the 1997 ozone NAAQS, the 1997 annual PM<sub>2.5</sub> NAAQS, and/or the 2006 24-hour PM<sub>2.5</sub> NAAQS. These FIPs establish state-specific emission control requirements using state budgets starting in 2012, with a second phase of SO<sub>2</sub> reductions in some states in 2014. Section IV explains EPA’s authority to issue FIPs.

The air quality-assured trading remedy in the final rule allows interstate trading to account for variability in the electricity sector, but also includes assurance provisions to ensure that the necessary emission reductions occur within each covered state. The assurance provisions restrict EGU emissions within each state to the state’s budget plus the variability limit and ensure that every state is making reductions to eliminate the significant contribution to nonattainment and interference with maintenance that EPA has identified. While EPA proposed to impose these assurance provisions starting in 2014, the final rule implements these provisions starting in 2012 (*see* section VII.E of this preamble). Additionally, the final FIPs include penalty provisions adequate to ensure that the state budget with the variability limit will not be exceeded.

In the final rule, as in the preferred trading remedy discussed in the proposed rule, state-specific emission budgets without the variability limits are used to determine the number of emission allowances allocated to sources in each state. An EGU source is required to hold one SO<sub>2</sub> or one NO<sub>x</sub> allowance, respectively, for every ton of SO<sub>2</sub> or NO<sub>x</sub> emitted during the control period. Banking of allowances for use or trading in future years is allowed.

The final rule establishes four interstate trading programs, each starting in 2012: two for annual SO<sub>2</sub>, one for annual NO<sub>x</sub>, and one for ozone-season NO<sub>x</sub>. One SO<sub>2</sub> trading program is for sources in states (referred to as SO<sub>2</sub> Group 1) that need to make larger reductions to eliminate their significant contribution, while the second is for sources in states (referred to as SO<sub>2</sub> Group 2) that need to make smaller reductions. A source in a Group 1 state can only use SO<sub>2</sub> allowances allocated to Group 1 states for compliance with

Maryland, Michigan, Minnesota, Mississippi, Nebraska, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, West Virginia, and Wisconsin. As discussed in section III, in a separate notice, EPA is proposing to include Iowa, Kansas, Michigan, Missouri, Oklahoma, and Wisconsin in the ozone-season NO<sub>x</sub> requirements.

<sup>55</sup> Alabama, Arkansas, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana,

the SO<sub>2</sub> trading program. A source in a Group 2 state can only use SO<sub>2</sub> allowances allocated to Group 2 states for compliance with the SO<sub>2</sub> trading program. For compliance in the annual NO<sub>x</sub> and ozone-season NO<sub>x</sub> trading programs respectively, sources may use annual NO<sub>x</sub> and ozone-season NO<sub>x</sub> allowances allocated for any state, even if that state is in a different group for SO<sub>2</sub> than the source's state. Four sets of new emission allowances based on the new state-specific budgets without variability are allocated to sources, one set for each of the four trading programs. Each state has the option of replacing these FIPs with state rules. EPA believes that this remedy meets the concerns raised by the Court in the 2008 *North Carolina* decisions which remanded CAIR to EPA.

In the proposed rule, EPA took comment on all aspects of the preferred trading remedy and on two alternative regulatory options: (1) intrastate trading; and (2) direct control. EPA also took comment on a trading ratios approach.

**Comments on the Preferred Trading Remedy:** The great majority of public comments supported the preferred trading remedy. Most of these commenters voiced their support for the broadest possible trading mechanism because it allows for the most cost-effective implementation of any emission controls. Commenters noted that flexibility is always needed in the early years of new programs. Further, commenters favoring the preferred remedy agreed with EPA that, by using state-specific control budgets and allowing for interstate trading, the preferred remedy provided electricity generators the flexibility to undertake the most cost-effective reductions while assuring that the resulting reductions occur within the individual states.

Some commenters that supported the preferred remedy felt that, while not ideal, the interstate trading remedy was preferable to the alternative options of intrastate trading or direct control. Many commenters that supported the preferred remedy felt that the intrastate trading remedy and direct control remedy options offer minimal flexibility from a compliance perspective. They stated that this lack of flexibility would unnecessarily increase the cost of emission reductions.

Other commenters who generally support the preferred remedy cited concerns about the level of complexity in the assurance provisions. One commenter surmised that the preferred option creates significant risk where a company could unexpectedly find itself in a noncompliance situation due to the after-the-fact variability analysis.

Another said that the rule's features needlessly reduce the system's efficiency and increase complexity. These commenters generally preferred unlimited trading, noting that EPA has proven success with Title IV, the NO<sub>x</sub> SIP Call, and CAIR unlimited interstate trading programs and that allowing unrestricted interstate trading would increase flexibility to meet reduction goals and minimize increases in power costs.

EPA is finalizing the preferred trading remedy for the following reasons. EPA believes this approach is the most cost-effective and practical way to comply with the Court decision in *North Carolina* to ensure that all emissions in a given state that EPA has identified as significantly contributing to downwind nonattainment or interfering with maintenance are eliminated. The vast majority of public commenters agree. In addition, this approach provides the most flexibility for sources while meeting the Clean Air Act requirements and protecting public health. As a result, potential innovations and resulting cost savings are more likely to be found and implemented. Based on historical experience (see the Transport Rule proposal, 75 FR 45315), EPA has shown that the results offered by a flexible trading approach (e.g., flexible compliance choices, incentives to reduce emissions early and in the highest emitting areas, 100 percent compliance with requirements) are substantial. A large number of commenters have corroborated this assessment. As summarized in the proposal, EPA believes that the preferred trading remedy will allow source owners to choose among several compliance options to achieve required emission reductions in the most cost-effective manner, such as installing controls, changing fuels, reducing utilization, buying allowances, or any combination of these actions. Interstate trading with assurance provisions provides additional regulatory flexibility that promotes the power sector's ability to operate as an integrated, interstate system and to provide electric reliability.

**Comments on Intrastate Trading:** A few commenters favored the first alternative, intrastate trading. One commenter who favored intrastate trading stated that many power plants have avoided investment in pollution controls by buying allowances from other plants, affecting local air quality improvement. EPA notes that this Transport Rule aims to address emissions from one state that significantly contribute to nonattainment or interfere with

maintenance of certain NAAQS in other states. Local air quality issues are directly addressed by other provisions in the Clean Air Act.

Several commenters raised concerns about the intrastate trading approach. Some stated, as EPA noted in the proposal, that the intrastate trading option would be more resource intensive, more complex, less flexible, and potentially more susceptible to market manipulation than the other options. In addition, some commenters felt that this alternative would provide less flexibility to ensure electric reliability than the preferred approach, resulting in greater private costs to the power sector and greater social costs for consumers.

EPA is not finalizing the intrastate trading option for the following reasons. As EPA expressed in the proposal and as commenters have agreed, the intrastate trading option would be more resource intensive (both for EPA and for sources), more complex, less flexible, and potentially more susceptible to market manipulation than the preferred trading approach that EPA is finalizing. The intrastate trading option would be more costly and less transparent due to the large number of trading programs that would be operated simultaneously and the large number of annual auctions that would be held every year to address the issues of market power within states. This option would also result in a greater burden for participants operating EGUs in multiple states.

**Comments on Direct Control Option:** Several commenters favored the second alternative, direct control. One commenter stated that direct control—allowing no trading—was the option best aligned with the 2008 Court decisions. EPA disagrees with this comment for the reasons given below and because, as explained in this rule, EPA believes the air quality-assured trading remedy finalized today is consistent with the decisions of the DC Circuit in *North Carolina*.

Some commenters, who support direct control, voiced concerns that the other emission trading approaches would disadvantage poor and minority communities or allow increased emission impacts in neighborhoods near power plants. EPA notes that a direct control approach would not require controls on all plants in a state, but only on a sufficient number to address the transport requirements under section 110(a)(2)(d)(i)(I) that this rule addresses, and therefore would not necessarily mandate controls on each neighborhood power plant.

In addition, EPA has conducted an analysis of the effects of the Transport

Rule on environmental justice and other vulnerable communities. We concluded that, similar to our experience with the Acid Rain Program,<sup>56</sup> many environmental justice communities are expected to see large health benefits, and none are expected to experience any disbenefits, from implementing an air quality-assured trading program. The results of this analysis are presented in section XII of this preamble and Chapter 5 of the RIA for this rule. In addition, the CAA provides flexibility for state and local authorities to impose stricter limits on sources to address specific local air quality concerns. Such limits are independent of the requirements in this rule, and compliance with Transport Rule requirements in no way excuses a source from complying with other CAA or state law requirements.

Several commenters raised concerns with the direct control approach. One commenter felt that issues with electricity market reliability could occur during high electricity demand periods if sources ceased operations due to approaching their emission rate limitations under a direct control remedy. Another commenter was concerned that applying emission rates under a direct control remedy to small municipal units would cause disproportionate impacts on power plants where pollution control is more expensive. Other commenters cited concerns that EPA's proposed within-state company-wide averaging provision in the direct control proposed alternative (designed to allow some flexibility for sources) would place companies with fewer units at a disadvantage compared to companies with more units. EPA generally agrees with the commenters concerns and has decided not to finalize the direct control remedy for the following reasons. EPA modeling projects that the direct control alternative would result in fewer emission reductions and higher costs compared to the air quality-assured trading remedy. EPA analysis indicates that it is not necessary to implement a direct control approach in order to protect vulnerable and sensitive populations or environmental justice communities. Also, the direct control approach would result in fewer compliance options because a direct control approach would directly regulate individual sources by setting unit-level emission rate limits. This lack of flexibility could lead to potential

increases in reliability risks in the electric power system and fewer opportunities for potential technological innovations that reduce emissions further and/or lower costs. For these reasons, EPA believes that this approach is inferior to the air quality-assured trading remedy.

Other Comments: A handful of commenters mentioned the trading ratios approach, though none favored it as a viable alternative. One commenter said the trading ratios approach was not consistent with CAA section 110(a)(2)(D) requirements that reductions in emissions occur in particular geographic locations. Other commenters agreed that it was administratively unworkable and would be difficult to implement due to the complexity and variety of meteorological conditions. EPA generally concurs with the commenters. In the proposal, EPA noted that it would not be possible under this approach, as contemplated, to include enforceable legal requirements to ensure that a specific state's emissions remain below a specified level or to ensure that a specific amount of reductions occur within a particular state. EPA specifically requested comment on whether a ratios trading program could be designed to provide such legal assurances. Of the few comments received, none offered such a solution. For these reasons, EPA is not finalizing this approach.

Some commenters offered additional suggestions, such as: unrestricted trading; using different authorities in the CAA to address interstate transport such as section 110(k)(5) and section 126; and an approach that would replace the assurance provisions by a system using both emission allowances usable (as well as bankable) in any state and assurance allowances usable (but not bankable) in only the state for which they would be issued. While EPA appreciates the thoughtful and constructive comments, we did not find any of these suggestions improved our ability to address interstate transport under CAA section 110(a)(2)(D)(i)(I), in line with the Court decision, in an administratively practical way.

Several commenters liked the idea of establishing unit-by-unit short-term and long-term performance standards/ emission rates but suggested adding an overlaid cap and trade program. EPA believes the air quality-assured trading remedy finalized today is consistent with the decisions of the Court in *North Carolina* and will ensure the reductions necessary to meet statutory requirements.

For the 2012–2013 period, EPA took comment on whether the assurance provisions are needed, since the state-specific budgets would be based on known air pollution controls and the penalty provisions would be adequate to ensure that the budget, including a variability limit, would not be exceeded. Further, EPA proposed to use two variability limits: a 1-year limit, based on the year-to-year variability in emissions relative to the proposed budgets; and a 3-year limit based on the variability in a 3-year average relative to the proposed budget.

Based on comments on the assurance provisions (*see* section VII.E of this preamble) and variability limits (*see* section VI.E.2 of this preamble), EPA is finalizing the Transport Rule with state budgets plus variability limits and assurance provisions starting in 2012 for all of the trading programs. EPA sees an immediate need to ensure that emissions within a state do not exceed the state budget plus the variability limitation in order to comply with the Court's opinion. Further, commenters stated that the 3-year variability limit increased costs and unnecessarily complicated the trading programs. As explained in section VI.E.2, EPA is finalizing the 1-year variability limit starting in 2012, but not the 3-year limit.

#### B. Applicability

The applicability provisions in the final rule are, except as discussed herein, essentially the same as in the proposed rules and for each of the Transport Rule trading programs.

Under the general applicability provisions of the proposed rule, the Transport Rule trading programs would cover fossil-fuel-fired boilers and combustion turbines serving—on any day starting November 15, 1990 or later—an electrical generator with a nameplate capacity exceeding 25 MWe and producing power for sale, with the exception of certain cogeneration units and solid waste incineration units.

EPA requested comment on whether a more recent year should be used instead. The proposed use of the November 15, 1990 date was consistent with the use of 1990 as the beginning of the historical period for which owners and operators would generally be required to have information about their units for purposes of determining whether the units were covered by the Transport Rule trading programs. Because unit information is generally compiled and retained on a calendar year basis, EPA believes that, for the general applicability provisions, it is preferable to use January 1, rather than November 15. In determining which

<sup>56</sup> See <http://www.epa.gov/airmarkets/resource/docs/ejanalysis.pdf> and Ringquist, Evan J. 2011. "Trading Equity for Efficiency in Environmental Protection? Environmental Justice Effects from the SO<sub>2</sub> Allowance Trading Program." *Social Science Quarterly* 92(2):297–323

year should be used as the reference year in the general applicability provisions, EPA considers several factors.

First, in order for owners and operators, and EPA, to be able to determine which units are subject to the Transport Rule trading programs, EPA believes that the reference year should not be so far in the past that the unit information necessary to make applicability determinations is not readily available. This particularly becomes an issue in cases of older units that have changed ownership over time. EPA found, in making some applicability determinations under the CAIR trading programs, that some older units with ownership changes had difficulty obtaining information back as far as twenty or more years. Using January 1, 1990 as the reference date in the general applicability provisions could effectively require some owners and operators to retain unit information going back as far as 20 years. As a point of contrast, under the title V permitting rules, owners and operators are generally required to retain data for 5 years. *See* 40 CFR 70.6(a)(3)(B).

Second, EPA also believes that the reference year used in the applicability provisions should be far enough in the past that the unit information on which applicability determinations are based provides a full picture of the nature of the unit and its operations over time, such as the types of fuels combusted at the unit and whether the unit has produced electricity for sale.

Third, EPA considers whether selecting a different reference year for the applicability provisions than the one in the proposed rule dramatically changes what units will be covered by the Transport Rule trading programs. In this case, EPA believes, based on available information about the units potentially subject to the Transport Rule, that using a somewhat later year than the one in the proposed rule will likely have little effect on what units are covered. Balancing these factors, EPA concludes that it is reasonable to use January 1, 2005, rather than November 15, 1990, in the general applicability provisions in the final rule.

In the final rule, EPA is taking the same approach with regard to defining whether a boiler or combustion turbine is considered to be “fossil-fuel-fired” as the one used in the proposal. Under the proposed rule, a unit was considered to be “fossil-fuel-fired” if it combusts any amount of fossil fuel at any time in 1990 or later. For the same reasons that EPA decided to use January 1, 2005 in the general applicability provisions, and in order to have a consistent reference year

in all applicability-related provisions, the final rule defines a “fossil-fuel-fired” unit as one that combusts any amount of fossil fuel in 2005 or later.

EPA notes that the final Transport Rule allows a state to submit a SIP revision (an abbreviated or full SIP) under which the state may—in addition to making certain types of changes concerning allowance allocations in the Transport Rule trading programs—expand the general applicability provisions of the Transport Rule NO<sub>x</sub> Ozone Season Trading Program to cover fossil-fuel-fired boilers and combustion turbines serving—at any time starting January 1, 2005 or later—a generator with a nameplate capacity as low as 15 MWe producing power for sale. The exemptions, discussed below, for cogeneration units and solid waste incineration units still will continue to apply.

**Cogeneration unit exemption.** Under the final rule (as well as the proposed rule) certain cogeneration units or solid waste incinerators are exempt from the FIP requirements. In particular, the final rule includes an exemption for a unit that qualifies as a cogeneration unit throughout the later of 2005 or the first 12 months during which the unit first produces electricity and continues to qualify through each calendar year ending after the later of 2005 or that 12-month period and that meets the limitation on electricity sales to the grid. In order to meet the definition of “cogeneration unit” in the final rules, a unit (*i.e.*, a fossil-fuel-fired boiler or combustion turbine) must be a topping-cycle or bottoming-cycle that operates as part of a “cogeneration system,” which is defined as an integrated group of equipment at a source (including a boiler, or combustion turbine, and a steam turbine generator) designed to produce useful thermal energy for industrial, commercial, heating, or cooling purposes and electricity through the sequential use of energy. A topping-cycle unit is a unit where the sequential use of energy results in production of useful power first and then, through use of reject heat from such production, in production of useful thermal energy. A bottoming-cycle unit is a unit where the sequential use of energy results in production of useful thermal energy first and then, through use of reject heat from such production, in production of useful power. In order to qualify as a cogeneration unit, a unit also must meet certain efficiency and operating standards.

In the proposed rule, a unit would have to qualify as a cogeneration unit and meet the limitation on electricity sales starting the later of 1990 or the

year when the unit begins operating. EPA requested comment on whether a more recent year should be used. For the reasons discussed above concerning the reference year used in the general applicability provisions and in order to have a consistent reference year in all applicability-related provisions, EPA concludes that it is reasonable to use 2005, rather than 1990, in the cogeneration unit exemption provisions in the final rule. Consequently, the final rule provides that the requirements to qualify as a cogeneration unit and to meet the electricity sales limitation start no earlier than 2005.

In the final rule, EPA also clarifies that the electricity sales limitation under the exemption is applied in the same way whether a unit serves only one generator or serves more than one generator. In both cases, the total amount of electricity produced annually by a unit and sold to the grid cannot exceed the greater of one-third of the unit’s potential electric output capacity or 219,000 MWhr. This is consistent with the approach taken in the Acid Rain Program (40 CFR 72.7(b)(4)), where the cogeneration unit exemption originated. EPA believes that this clarification is needed to ensure that a unit serving, for example, two generators would not have a limit on sales of electricity to the grid that would be different (*i.e.*, twice as high) from the limit for a unit serving only one generator with the same total nameplate capacity as the first unit’s two generators.

EPA also took comment on whether efficiency standards should be applied on a system-wide basis to bottoming-cycle units (where useful thermal energy is produced before useful power is produced), as they are for topping-cycle units (where useful thermal energy is produced after useful power) and whether to exclude, from the requirement to meet the operating and efficiency standards, calendar years during which a cogeneration unit does not operate at all. Several commenters argued EPA should apply efficiency standards to both types of units. EPA agrees that applying efficiency standards on a system-wide basis to both bottoming-cycle and topping-cycle units is reasonable because EPA sees no technical reason to distinguish between the two types of units in this instance. EPA further agrees with commenters that excluding calendar years in which the cogeneration unit does not operate at all, *i.e.*, does not combust any fuel, from the requirements to meet operating and efficiency standards is also reasonable. For such a year, the unit would not produce any useful thermal

energy or useful power and therefore could not meet the minimum output requirements in the operating and efficiency standards, but the unit also would not have any emissions. For these reasons, the final rule expressly provides that the operating and efficiency standards do not have to be met for a calendar year throughout which a unit did not operate at all.

Solid waste incineration unit exemption. The final rule also includes an exemption for a unit that qualifies as a solid waste incineration unit during the later of 2005 or the first 12 months during which the unit first produces electricity, that continues to qualify throughout each calendar year ending after the later of 2005 or that 12-month period each year thereafter, and that meets the limitation on fossil-fuel use. In contrast, the exemption for solid waste incineration units in the proposed rule distinguished between units commencing operation before January 1, 1985 and those commencing operation on or after that date. A unit commencing operation before January 1, 1985 would be exempt if it qualified as a solid waste incineration unit starting the later of 1990 or the year when it began producing electricity and its average annual fuel consumption of non-fossil fuels exceeded 80 percent of total heat input during 1985–1987 and during any three consecutive calendar years after 1990. A unit commencing operation on or after January 1, 1985 would be exempt if it qualified as a solid waste incineration unit starting the later of 1990 or the year when it began producing electricity and its average annual fuel consumption of non-fossil fuel exceeded 80 percent of total heat input for the first 3 calendar years of operation and for any 3 consecutive calendar years thereafter.

In the proposal, EPA requested comment on whether it would be problematic to obtain sufficiently detailed information about unit operation potentially as far back as 1985–1987 and 1990, and whether the fuel consumption standard for each unit should be limited to more recent years. For the reasons discussed above concerning the reference year used in the general applicability provisions and in order to have a consistent reference year for all applicability-related provisions, EPA concludes that it is reasonable to use 2005, rather than 1990, in the solid waste incineration unit exemption in the final rule. In particular, EPA notes that the proposed provisions for units commencing operation before January 1, 1985 and for units commencing operation on or after January 1, 1985 could require some

owners and operators to retain unit information going back more than 20 years before the promulgation of this final rule. Further, EPA believes that removing the distinction between units commencing operation during these two periods, and referencing somewhat later years as the earliest years for which information on fossil-fuel consumption is required, will result in the exemption still being based on sufficient data to provide a full picture of the nature and operation of the units involved. EPA also believes, based on available information about the units potentially subject to the Transport Rule, that this approach will not significantly change which units qualify for the exemption. Consequently, the final rule removes the distinction based on whether a solid waste incineration unit commences operation before January 1, 1985 or on or after January 1, 1985. In order to be exempt, the unit must qualify as a solid waste incineration unit during the later of 2005 or the first 12 months during which the unit first produces electricity, must continue to qualify throughout each calendar year ending after the later of 2005 or that 12-month period, and must meet the limitation on fossil-fuel use on a 3-year average basis during the first 3 years of operation starting no earlier than 2005 and every 3 years of operation thereafter.

Opt-in units. EPA is not finalizing the opt-in provisions that were discussed in the Transport Rule proposal. EPA proposed opt-in provisions to allow non-covered units to voluntarily opt in to any of the proposed Transport Rule trading programs and receive allocations reflecting 70 percent of the unit's emissions before opting in. These allowances were above the state-specific budgets developed under the Transport Rule to eliminate a state's significant contribution to nonattainment and interference with maintenance. In theory, an opt-in unit that makes reductions below its baseline and sells the freed-up allowances is effectively substituting its new, lower-cost reductions for higher-cost reductions otherwise required by a covered EGU, with the result that the state's significant contribution is still eliminated but at a lower total program cost.

EPA notes that theoretical benefits anticipated from allowing opt-ins did not materialize in prior trading programs with opt-in provisions. The Acid Rain Program has about 23 opt in units; the NO<sub>x</sub> Budget Trading Program had five opt-in units; and no units opted into the CAIR programs. As a group, these opt-in units neither eased the achievement of required emission

reductions in past trading programs, nor reduced overall program costs.

In the proposal, EPA requested comment on the opt-in provisions, specifically regarding: What are the benefits of and concerns about including opt-in provisions; how to ensure units are not credited for emission reductions the units would have made anyway; whether the proposed 30 percent reduction (*i.e.*, application of the 70 percent multiplier to baseline emissions) or some other percentage reduction, or no reduction, should be applied to the baseline emission rate used in determining allocations; and whether any additional percentage reduction (such as 45 percent) should be applied to SO<sub>2</sub> Group 1 opt-in units in Phase II to reflect the stricter limits for covered units.

Some commenters argued that increasing the Transport Rule budgets for opt-ins would undermine the goal of CAA section 110(a)(2)(D)(i)(I) to eliminate a state's significant contribution to nonattainment and interference with maintenance. One commenter stated that it does not favor allowing sources that are not subject to the emission reduction requirements to be issued allowances that would increase the overall state emission budgets, due to the uncertainty that any reductions made by such units would be surplus, verifiable, permanent and enforceable. This could compromise the integrity of the EGU emission reduction requirements of the Transport Rule and jeopardize assurance that a state's significant contribution would be eliminated, as required by the Court in *North Carolina*. Other commenters claim that, while no cheap tons are available from non-EGUs and EPA is right not to require non-EGU reductions, EPA should nonetheless allow non-EGUs to choose voluntarily to be covered by opting in.

As mentioned previously, the final Transport Rule does not include any opt-in provisions either in the FIPs or in the provisions allowing modification or replacement of the FIPs through submission of trading program provisions in SIPs. EPA has several reasons for not adopting provisions to allow opt-in units. First, as mentioned above, historically, very few units have opted in. As of 2010, 28 units out of more than 4,700 covered units (23 units out of a total of about 3,600 covered units in the Acid Rain Program and 5 units out of a total of about 2,600 covered units in the NO<sub>x</sub> SIP Call) have opted in to EPA trading programs over the past 15 years. In the Acid Rain Program, 3 of the units opted in and

then, effective for 2005, opted out. Four of the units opted in, immediately shut down, and continue to receive allowance allocations. Four of the units opted in and continue to operate and receive allowance allocations. Finally, 12 of the units opted in, after CAIR was finalized, in order to receive allowances usable for compliance in the CAIR SO<sub>2</sub> trading program. Because CAIR will be replaced by this Transport Rule, EPA anticipates that these 12 units will opt out of the Acid Rain Program. In the NO<sub>x</sub> Budget Trading Program, 3 plants with 5 opt-in units received allocations between 2003 and 2008.

Moreover, EPA has determined that the inclusion of opt-in units in the Transport Rule trading programs would undermine the rule's objective of addressing emissions in each state that significantly contribute to nonattainment or interfere with maintenance in other states. As explained above, EPA has established budgets plus variability limits that states must meet to ensure that the significant contribution to nonattainment and interference with maintenance identified by EPA is addressed. If EPA were to allow opt-ins, and if any opt-in unit were to receive an allocation of allowances for emissions that would be reduced even if the units did not opt in, then the inclusion of that opt-in unit in the program would allow the sources covered by the Transport Rule to emit in excess of the budget plus variability limit with no new, offsetting reduction in emissions. For example, after a unit would opt in, process or fuel changes made for economic reasons (rather than due to any regulatory requirements), or installation of new emission controls or fuel-switching conducted to meet future, non-Transport Rule regulatory requirements, could result in emission reductions that would have occurred "anyway" (*i.e.*, even if the unit had not opted in), and the opt-in unit would be allocated allowances for the portion of its baseline emissions that would be removed by these "anyway" reductions. Allocations above the cap to opt-in units making "anyway" emission reductions would convert these reductions into extra allowances (*i.e.*, authorizations to emit) usable by covered EGUs to meet their requirements to hold allowances for emissions. Because the extra EGU emissions authorized by these extra allowances would not be offset by any new emission reductions by the opt-in units, this could threaten a state's ability to eliminate the significant contribution to nonattainment and interference with maintenance identified by EPA in the final rule. Also, opt-in units, which are

allocated allowances outside the state budget for covered units, could increase the possibility that a state's total emissions would exceed the state budget plus variability and thus that the assurance provisions would be triggered.

This problem of allocating allowances for emissions that would have been reduced anyway is illustrated by the recent promulgation of the final rule, National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters (76 FR 15608 (March 21, 2011)) ("final Boiler MACT rule"), which requires certain industrial, commercial, and institutional boilers to meet maximum achievable control technology (MACT) standards for emissions of specified hazardous air pollutants, such as hydrogen chloride (HCL) and mercury (Hg). Some of the control technologies that can be used to meet these standards will also provide significant reductions of SO<sub>2</sub> emissions. For example, a boiler may use a wet scrubber or the combination of a dry sorbent injection system and a fabric filter (among other options) to meet the applicable HCL standard or may use a wet scrubber or a combination of activated carbon injection and a fabric filter (among other options) to meet the applicable Hg standard. See 76 FR 15614 (describing testing and compliance requirements when such controls are used to meet these standards); and Memo from Brian Shrager to Amanda Singleton and Graham Gibson, *Revised Methodology for Estimating Cost and Emissions Impacts for Industrial, Commercial and Institutional Boilers and Process Heaters National Emissions Standards for Hazardous Air Pollutants—Major Source* (February 11, 2011), Document ID EPA-HQ-OAR-2009-0491-4036 (section 3.1, describing control options for HCL and Hg control). In fact, EPA estimated that the new standards would result in emission reductions of not only the hazardous air pollutants directly subject to the standards, but also in other air pollutants such as SO<sub>2</sub>. Specifically, EPA projected that compliance with the final Boiler MACT rule standards will result in about 431,000 tons of annual SO<sub>2</sub> reductions from existing boilers subject to the final Boiler MACT rule. This will comprise on average about a 46 percent reduction in SO<sub>2</sub> emissions for this group of boilers. Coal- and oil-fired boilers—which are the boilers likely to have the most uncontrolled SO<sub>2</sub> emissions and so would be the most likely types of units to consider opting into the Transport

Rule trading programs if opting-in were allowed—are projected to reduce about 409,000 tons of annual SO<sub>2</sub> as a result of complying with the final Boiler MACT rule, or about a 50 percent reduction in SO<sub>2</sub> emissions. See Memo from Brian Shrager to Amanda Singleton and Graham Gibson, Appendix B-1, (where column CE represents baseline SO<sub>2</sub> emissions and column CH represents SO<sub>2</sub> reductions resulting from the final Boiler MACT rule compliance). The amount of offsetting SO<sub>2</sub> increases projected to result from final Boiler MACT rule compliance, *e.g.*, from additional fuel being combusted to generate electricity to operate emission controls, is minor. See 76 FR 15651 (Table 4) and 15653 (showing projected total SO<sub>2</sub> reductions for all boilers and process heaters of about 442,000 tons and net SO<sub>2</sub> reductions of about 440,000 tons).

Consequently, a boiler subject to the final Boiler MACT rule may install a wet acid gas scrubber or a bag house in order to meet the HCL or Hg standard applicable to boilers under the final Boiler MACT rule and thereby achieve SO<sub>2</sub> emission reductions. If that boiler were to opt in to one of the Transport Rule SO<sub>2</sub> trading programs during the year before installing these controls to comply with the final Boiler MACT rule, then the boiler would be allocated allowances for the unit's current tons of SO<sub>2</sub> emissions and would not need to use these allowances for compliance under the Transport Rule once the final Boiler MACT-related controls were installed. The allowances allocated to the boiler would be additional allowances above the Transport Rule trading budget for the state where the boiler was located. As a result, the boiler would have freed-up allowances above the state trading budget that represent reductions that the boiler would have made anyway (*i.e.*, even if the boiler had not opted in) and that could be sold to EGUs covered by the Transport Rule. In effect, the opting-in of the boiler would result in the conversion of the boiler's SO<sub>2</sub> reductions from the final Boiler MACT rule into increased emissions above the state trading budget from EGUs subject to the Transport Rule.

Commenters addressed this issue. For instance, one commenter suggested that SO<sub>2</sub> reductions made by a boiler under the final Boiler MACT rule should be eligible for opt-in provision allowances under the Transport Rule trading programs. Another commenter stated that, given the uncertainty that reductions made by opt-in units would be surplus, verifiable, permanent, and enforceable, opt-in provisions could

compromise the integrity of the EGU emission reductions.

For the reasons explained above, EPA agrees with the latter commenter. Further, EPA notes that none of the commenters supporting adoption of the opt-in provisions suggested any revision to the proposed opt-in provisions that would address this problem. While the proposed opt-in provisions would limit an opt-in unit's allocation for a control period by calculating the allocation using the lesser of the unit's pre-opt-in SO<sub>2</sub> emission rate or the most stringent SO<sub>2</sub> emission rate applicable in that control period, this would not address SO<sub>2</sub> rate reductions that are not directly required by the final Boiler MACT rule but that are a secondary result of using and operating certain emission controls installed to comply with the HCL or Hg standards under the final Boiler MACT rule. Because the secondary SO<sub>2</sub> reductions will vary depending on the type of controls installed and on the extent to which the controls are used, and a boiler may use a combination of emission controls and other approaches to reduce HCL or Hg emissions (such as fuel switching), EPA believes that it is highly unlikely that opt-in provisions could prevent allocation for "anyway" emission reductions resulting from compliance with the final Boiler MACT rule. EPA therefore believes that the final Boiler MACT rule provides a concrete example of why adoption of opt-in provisions could undermine the rule's objective of addressing emissions in each state that significantly contribute to nonattainment or interfere with maintenance in other states. EPA notes that the final Boiler MACT rule, of course, is simply one example of how allocations for "anyway" reductions could occur and undermine the statutory requirements of the Transport Rule.

### C. Compliance Deadlines

#### 1. Alignment With NAAQS Attainment Deadlines

The compliance dates in the final Transport Rule are aligned with the attainment deadlines for the relevant NAAQS and consistent with the charges given to EPA by the Court in *North Carolina*. EPA proposed to require, and the final rule requires, compliance by 2014 with an initial phase of reductions in 2012.<sup>57</sup> Sources are required to

<sup>57</sup> For the annual programs, sources are required to have, by March 1, 2013, sufficient allowances in their accounts to cover their 2012 emissions. For the ozone-season program, they must have allowances in their accounts by December 1, 2012 to cover 2012 ozone-season emissions. The state budgets which determine the number of allowances

comply with annual SO<sub>2</sub> and NO<sub>x</sub> requirements by January 1, 2012 and January 1, 2014 for the first and second phases, respectively. Similarly, sources are required to comply with ozone-season NO<sub>x</sub> requirements by May 1, 2012, and by May 1, 2014. In selecting these dates, EPA was mindful of the NAAQS attainment deadlines which require reductions as expeditiously as practicable and no later than specified dates (see 42 U.S.C. 7502(a)(2)(A) (general attainment dates); 42 U.S.C. 7511(a)(1) (attainment dates for ozone nonattainment areas)), and also mindful of the court's instruction to "decide what date, whether 2015 or earlier, is as expeditious as practicable for states to eliminate their significant contributions to downwind nonattainment." *North Carolina*, 531 F.3d at 930.

**1997 PM<sub>2.5</sub> NAAQS Attainment Deadlines.** For all areas designated as nonattainment with respect to the 1997 PM<sub>2.5</sub> NAAQS, the deadline for attaining that standard is as expeditious as practicable but no later than April 2010 (5 years after designation), with a possible extension to no later than April 2015 (10 years after designation).<sup>58</sup> Many areas have already come into attainment by the April 2010 deadline due in part to reductions achieved under CAIR. The fact that the 2010 deadline will have passed before the Transport Rule is finalized emphasizes the importance of obtaining reductions as expeditiously as practicable. In addition, reductions achieved in upwind states by the 2014 emissions year will help downwind states demonstrate attainment by the April 2015 deadline.

**2006 PM<sub>2.5</sub> NAAQS Attainment Deadlines.** For all areas designated as nonattainment with respect to the 2006 24-hour PM<sub>2.5</sub> NAAQS, the attainment deadline must be as expeditious as practicable but no later than December 2014. Areas that fail to meet that deadline can request an extension to as late as December 2019.

Upwind emission reductions achieved by the 2014 emissions year

allocated to units in each state become more stringent for some states in 2014.

<sup>58</sup> Section 172(a)(2) of the Clean Air Act provides that the attainment dates for areas designated nonattainment with a NAAQS shall be the date by which attainment can be achieved as expeditiously as practicable, but no later than 5 years from the date of designation. This section also allows the Administrator to extend the attainment date to the extent she determines appropriate, for a period no greater than 10 years from the date of designation as nonattainment, considering the severity of nonattainment and the availability and feasibility of pollution control measures. Designations for the 1997 PM<sub>2.5</sub> NAAQS became effective on April 5, 2005. Designations for the 2006 24-hour PM<sub>2.5</sub> NAAQS became effective on December 14, 2009.

will help meet the December 2014 attainment deadline. In addition, the first phase of reductions in 2012 will help many areas attain in a more expeditious manner.

Further, a deadline of January 1, 2014 also provides adequate and reasonable time for sources to plan for compliance with the Transport Rule and install any necessary controls. EPA believes that this deadline is as expeditious as practicable for the installation of the controls, if any, needed for compliance with the 2014 state emission budgets. (See further discussion in section V.C.2.)

**1997 Ozone NAAQS Attainment Deadlines.** Ozone nonattainment areas must attain permissible levels of ozone "as expeditiously as practicable," but no later than the date assigned by EPA in the ozone implementation rule. 40 CFR 51.903. The areas designated nonattainment in 2004 with respect to the 1997 8-hour ozone NAAQS in the eastern United States were assigned maximum attainment dates effectively corresponding to the end of the 2006, 2009, and 2012 ozone seasons. The maximum attainment deadlines for the 1997 standard run from the June 15, 2004 effective date of designation for that standard. The time periods are based on the time periods provided for these classifications in section 181 of the Act, 45 U.S.C. 7511(a). However, instead of running from the 1990 date of enactment of the CAA as specified in section 181, our regulation provides that they run from the date of designation. An area's maximum attainment date is based on its nonattainment classification—that is, whether it is classified as a marginal, moderate, serious, severe, or extreme ozone nonattainment area. Marginal areas have three years from designation to attain the standard. Moderate, serious, severe, and extreme areas have 6, 9, 15, and 20 years, respectively. The maximum attainment deadlines associated with the 1997 ozone standards are June 15, 2007 for marginal areas, June 15, 2010 for moderate areas, and June 15, 2013 for serious areas. Because the actual deadline occurs in the middle of an ozone season, data from that ozone season is not considered when determining whether the area has attained by the deadline. Thus, these maximum attainment deadline dates effectively correspond with the end of the 2006, 2009, and 2012 ozone seasons. Reductions achieved or air quality improvements realized after those dates will not help the areas meet their maximum attainment deadlines.

Many areas have already attained the standard due in part to CAIR, federal

mobile source standards, and other local, state, and federal measures. Other areas, however, have been reclassified to a higher classification either because they failed to attain by their attainment date or because the state requested reclassification to avoid missing an attainment date. Those that have not yet attained the standard now have maximum attainment dates ranging from June 2011 (these are the moderate areas that have been granted a 1-year extension due to clean data for the 2009 ozone season) to June 2024. The areas classified as “serious” nonattainment areas have a June 2013 maximum attainment deadline. Areas that missed their earlier deadlines and have been reclassified as “severe” or “extreme” nonattainment areas now have maximum nonattainment deadlines of June 2019 and June 2024 respectively. As explained above, an area with a June 2013 deadline would need to attain based on ozone data from the 2010–2012 ozone seasons, an area with a June 2019 deadline would need to attain based on ozone data from the 2016–2018 ozone seasons, and an area with a June 2024 deadline would need to attain based on ozone data from the 2021–2023 ozone seasons.

The Transport Rule’s first phase of reductions in 2012 will help the remaining areas with June 2013 maximum attainment deadlines attain the 1997 8-hour ozone NAAQS by their deadline. If EPA determines that an area failed to attain by the 2013 deadline, the area would be reclassified to severe and would be subject to the more stringent emission control requirements that apply to the severe classification. The reductions will also help areas with later deadlines attain as expeditiously as practicable and improve air quality in those areas.

2012 Interim Compliance Deadline. EPA is requiring an initial phase of reductions starting in 2012. These reductions are necessary to ensure that significant contribution to nonattainment and interference with maintenance are eliminated as expeditiously as practicable and in time to help states meet their attainment deadlines. As the court emphasized in *North Carolina*, the significant contribution to nonattainment and interference with maintenance from upwind states must be eliminated as expeditiously as practicable to help downwind states to achieve attainment as expeditiously as practicable as required by the CAA. Further, reductions are needed by 2012 to help states attain before the June 2013 maximum attainment date for “serious” ozone nonattainment areas, to ensure

states attain as soon after the original April 2010 attainment deadline for the 1997 PM<sub>2.5</sub> NAAQS, and to help states attain before the December 2014 attainment deadline for the 2006 PM<sub>2.5</sub> NAAQS.

In addition, because this final rule will replace CAIR, EPA could not assume that after this rule is finalized, EGUs would continue to emit at the reduced emission levels achieved by CAIR. Instead, it is the emission reduction requirements in the proposed FIPs that will determine the level of EGU emissions in the eastern United States. For this reason also, EPA concludes that it is appropriate to require an initial phase of reductions by 2012 to ensure that existing and planned SO<sub>2</sub> and NO<sub>x</sub> controls operate as anticipated.

Addressing the Court’s Concern about Timing. As directed by the Court in *North Carolina*, 531 F.3d 896, and as described previously, EPA established the compliance deadlines in the Transport Rule based on the respective NAAQS attainment requirements and deadlines applicable to the downwind nonattainment and maintenance sites.

The 2012 deadline for compliance with the limits on ozone-season NO<sub>x</sub> emissions is necessary to ensure that states with June 2013 maximum attainment deadlines get the assistance needed from upwind states to meet those deadlines. The 2012 deadline for compliance with the limits on annual NO<sub>x</sub> and annual SO<sub>2</sub> emissions is necessary to ensure attainment as expeditiously as practicable in areas which failed to attain by the 2010 attainment deadline for the 1997 PM<sub>2.5</sub> NAAQS and had to request an extension to 2015.

Similarly, the 2014 deadline for compliance with the limits on annual NO<sub>x</sub> and annual SO<sub>2</sub> emissions is necessary to ensure that downwind states get the benefit of upwind reductions prior to the December 2014 maximum attainment deadline for the 2006 PM<sub>2.5</sub> NAAQS. It is also necessary to ensure reductions occur in time to assist with attainment in downwind areas that received the maximum 5-year extension of the 5-year attainment deadline for the 1997 PM<sub>2.5</sub> NAAQS (taking into account the need for reductions by 2014 to demonstrate attainment by April 2015).

The 2012 compliance deadline for the first-phase of annual NO<sub>x</sub> and annual SO<sub>2</sub> emission reductions will assure the reductions are achieved as expeditiously as practicable. A significant amount of the emissions identified as significantly contributing to nonattainment or interfering with

maintenance in other states can be eliminated by 2012. EPA believes it is appropriate to do so in light of the court’s direction to EPA to ensure states eliminate such emissions as expeditiously as practicable. *North Carolina* 531, F.3d at 930. Given the time needed to design and construct scrubbers at a large number of facilities, EPA believes the 2014 compliance date is as expeditious as practicable for the full quantity of SO<sub>2</sub> reductions necessary to fully address the significant contribution to nonattainment and interference with maintenance. Requiring reductions in transported pollution as expeditiously as practicable, as well as within maximum deadlines, helps to promote attainment as expeditiously as practicable. This is consistent with statutory provisions that require states to adopt SIPs that provide for attainment as expeditiously as practicable and within the applicable maximum deadlines.

#### b. Public Comments and EPA Responses

EPA received numerous comments on the proposed compliance dates. A number of commenters supported EPA’s compliance schedule and rationale. Other commenters supported extending the compliance deadlines to later dates.

Many commenters questioned the technical feasibility of achieving the required reductions by the 2012 and 2014 dates. EPA’s responses to those comments are discussed below in section VII.C.2.

Other commenters provided policy and legal arguments for allowing states to develop SIP alternatives to the FIP, and to build time for that SIP development and review process into the compliance schedule. For example, some commenters asserted that the requirement in the CAA for providing reductions “as expeditiously as practicable” must be balanced with CAA provisions allowing states to develop state implementation plans prior to EPA imposing FIPs. EPA responses to those comments are discussed in section X.

Some commenters suggested that EPA had the ability to leave CAIR in place for a transition period, and by doing this EPA could allow for a longer compliance period for this rule. EPA does not believe it would be appropriate, in light of the Court’s decision in *North Carolina*, to establish a lengthy transition period to the rule that will replace CAIR. Although the Court decided on rehearing to remand CAIR without vacatur, the Court stressed its prior decision that CAIR was deeply flawed and EPA’s obligation to remedy those flaws. *North Carolina*, 550



F.3d 1176. Although the Court did not set a definitive deadline for corrective action, the Court took care to note that the effectiveness of its opinion would not be delayed “indefinitely” and that petitioners could bring a mandamus petition if EPA were to fail to modify CAIR in a manner consistent with its prior opinion. *Id.* Given the Court’s emphasis on remedying CAIR’s flaws expeditiously, EPA does not believe it would be appropriate to establish a lengthy transition period to the rule which is to replace CAIR.

As relates to PM<sub>2.5</sub>, EPA received a number of comments on its proposal to include a 2012 deadline to ensure that emission reductions needed to reduce PM<sub>2.5</sub> be achieved “as expeditiously as practicable.” Some commenters supported EPA’s 2012 deadline. Other commenters believed that it was unnecessary and unwarranted for EPA to impose emission reduction requirements in advance of the 2014 attainment date. In light of the 2014 five-year attainment date for the 2006 PM<sub>2.5</sub> NAAQS (with a possible extension to 2019), and the possible extension to April 2015 for the 1997 PM<sub>2.5</sub> NAAQS, these commenters believed EPA’s 2012 emission reduction requirements for annual PM<sub>2.5</sub> and NO<sub>x</sub> were not necessary. EPA disagrees with these commenters, for a number of reasons. First, EPA notes (supported by commenters) that there is a clear statutory obligation to attain “as expeditiously as practicable.” Second, EPA notes that there are feasible reductions available by 2012. Third, EPA believes that the substantial health and environmental benefits achieved by the rule underscore the importance of achieving the reductions as soon as possible.

With respect to ozone, some commenters noted that the proposed rule required ozone reductions by 2012 for states impacting areas which EPA’s analysis shows will attain the 1997 ozone NAAQS by 2014 without further controls. Those commenters questioned the importance of getting reductions in such states and whether the 2012 deadline is necessary. EPA disagrees with those comments. Except for Houston, all ozone areas within the region addressed by this rule have attainment dates no later than 2013. In effect, this means that emission reductions needed to attain the 1997 ozone NAAQS must be in place by the 2012 ozone season. EPA believes that if there are reductions available by 2012, and those emission reductions have in fact been identified, it is appropriate and necessary to ensure that those reductions are in place.

2. Compliance and Deployment of Pollution Control Technologies

The power industry will undertake a diverse set of actions to comply with the Transport Rule at the start of 2012 and another set of actions when companies in Group 1 states comply with more stringent SO<sub>2</sub> budgets at the start of 2014. In 2012, the industry will largely meet the rule’s NO<sub>x</sub> requirements by: Operating an extensive existing set of combustion and post-combustion controls on fossil fuel-fired generators; dispatching lower emitting units more often; and installing and operating a limited amount of relatively simple NO<sub>x</sub> pollution controls in states not previously subject to CAIR. For the SO<sub>2</sub> requirements, EPA anticipates at a minimum that coal-fired generators will operate the substantial capacity of advanced pollution controls already in place or scheduled for 2012 use; some

units will also elect to burn lower-sulfur coals; and the fleet will increase dispatch from lower-sulfur-emitting units as well as from natural gas-fired generators. EPA provides a more detailed explanation below of how fuel switching to lower sulfur coals factored in to the design of the final Transport Rule.

By 2014, EPA’s budgets under the Transport Rule will sustain previous NO<sub>x</sub> and SO<sub>2</sub> reductions as well as account for reductions from additional advanced NO<sub>x</sub> and SO<sub>2</sub> controls that are driven by other state and federal requirements. In addition to these reductions, companies in Group 1 states are also projected to add a limited amount of advanced SO<sub>2</sub> controls in 2014 that will be discussed below.

EPA’s expectations are supported by the IPM analysis reported in this rule’s RIA (see Chapter 7). Notably, since EPA has established a cap and trade control system for lowering NO<sub>x</sub> and SO<sub>2</sub> emissions, individual owners and operators of covered units have some flexibility in meeting the program’s requirements as needed and are free to find alternative ways to comply. The RIA clearly shows a viable known pathway for owners and operators to comply at reasonable costs, although it is not the only compliance pathway possible under this flexible regulation that could deliver the emission reductions required under the rule. Notably, by 2014 and beyond, the power industry may also augment the projected compliance efforts with programs aimed at improving energy efficiency.

Table VII.C.2–1—shows EPA’s projection of the amount of existing coal-fired generating capacity in gigawatts (GW) that may retrofit various systems for compliance with this rule.

TABLE VII.C.2–1—PROJECTED POTENTIAL AIR POLLUTION CONTROL (APC) RETROFITS FOR TRANSPORT RULE<sup>59</sup>

Capacity retrofitted by	Wet FGD	Dry FGD	DSI	SCR	LNB/OFA improvements
January 1, 2012 .....	.....	.....	.....	.....	10 GW
January 1, 2014 .....	5.7 GW .....	0.2 GW .....	3.0 GW .....	0 GW.	

EPA received proposal comments expressing a concern about the feasibility of deploying retrofit air pollution control (APC) technologies in the time frames available between the final date of this rule and the

compliance dates. As discussed below, EPA believes that it is feasible for the electric power sector and its APC supply chain to either make most of the projected retrofits in time to meet the 2012 and 2014 compliance deadlines, or to comply by other means.

pollution controls in states covered for PM<sub>2.5</sub> and ozone-season operation of NO<sub>x</sub> post-combustion controls in states covered for ozone. EPA also modeled emission reductions available in 2012 at the \$500/ton threshold for SO<sub>2</sub>, \$500/ton for annual NO<sub>x</sub>, and \$500/ton for ozone-season NO<sub>x</sub>.

<sup>59</sup> GW: Gigawatts of capacity retrofitted; FGD: Flue gas desulfurization (SO<sub>2</sub> control); DSI: Dry sorbent injection (SO<sub>2</sub> control); SCR: Selective catalytic reduction (NO<sub>x</sub> control); LNB/OFA: Low-NO<sub>x</sub> burner and/or overfire air (NO<sub>x</sub> controls).

a. 2012 Power Industry Compliance

EPA’s analysis of emission reductions available in 2012 assumes year-round operation of existing post-combustion

For SO<sub>2</sub>, EPA believes that reductions associated with the following methods of control are available and will be used

as compliance strategies to meet the 2012/2013 budgets: (1) Operation of existing controls year-round in PM<sub>2.5</sub> states, (2) operation of scrubbers that are currently scheduled to come online by 2012, (3) some sources switching to lower-sulfur coal (see section VII.C.2.c that follows), and (4) changes in dispatch and generation shifting from higher emitting units to lower emitting units. EPA modeling and selection of a \$500/ton cost threshold includes all existing and planned controls operating year round (items 1 and 2). It also reflects an amount of coal switching and generation shifting that can be achieved for \$500/ton. This set of expected actions was confirmed in the detailed modeling of EPA's final remedy in the RIA and can be reviewed there.

The power sector is already strongly positioned to achieve the Transport Rule state budgets presented in section VI.D through at least three distinct strategies. First, the sector will optimize its use of the large proportions of advanced pollution controls already present throughout the fleet. Second, the sector will take advantage of the substantial new pollution control technology that is already on the way for deployment by 2012. Third, the remainder of the fleet will flexibly adopt the most economic low-emitting fuel mix available at each unit to deliver cost-effective emission reductions complementing the reductions achieved from optimized use of the fleet's pollution control technology. The state maps in Chapter 7 of this rule's Regulatory Impact Analysis demonstrate how these emission reduction strategies for 2012 will build off of the sector's historic trend toward cleaner generation profiles. Also, the detailed unit-level projection files from EPA's IPM power sector modeling of the Transport Rule remedy (found in the docket for this rulemaking) show how EGUs adopt these strategies to not only reach the 2012 budgets, but in fact in many states overcomply with the budgets and build up a bank of allowances under the programs for future flexibility.

The following paragraphs illustrate the degree to which the existing fleet is already prepared to adopt these emission reductions in 2012 in order to attain the required emission reductions for SO<sub>2</sub>, annual NO<sub>x</sub>, and ozone-season NO<sub>x</sub> under the Transport Rule. More specifically, the illustrative paragraphs demonstrate emission reduction pathways for coal capacity to optimize or increase operation of existing control technology, timely implement existing

plans to bring additional control technology on line, and to cost-effectively make use of lower-emitting fuel alternatives.

Of the 240 GW of coal capacity in the Transport Rule region covered for fine particles, approximately 110 GW—more than 45 percent—had existing advanced pollution control for SO<sub>2</sub> already in place in 2010, including scrubbers (FGD), dry sorbent injection (DSI), or circulating fluidized bed boilers. Of this controlled coal capacity, EPA expects a significant portion will improve emission rates through either increased use of control technology and/or additional fuel switching. EPA notes that an additional 39 GW of advanced SO<sub>2</sub> controls in the region are scheduled to come online over the 2010–2012 timeframe and will also assist in meeting 2012 emission reduction requirements. Thus, by 2012 more than half of affected coal capacity—152 GW—will be operating with advanced SO<sub>2</sub> control equipment. Additionally, EPA expects approximately 40 GW of uncontrolled coal capacity in the region to take advantage of the existing coal supply infrastructure, possibly switching coal use or coal blending behaviors to make cost-effective reductions in SO<sub>2</sub> emission rates where economic to respond to the Transport Rule 2012 emission reduction requirements.

EPA notes that approximately 136 GW of the 240 GW—more than 56 percent—of coal capacity in the Transport Rule region covered for fine particles had existing advanced pollution control for NO<sub>x</sub> already in place in 2010, including selective catalytic reduction (SCR), selective non-catalytic reduction (SNCR), or circulating fluidized bed boilers. Of this capacity, EPA anticipates a significant portion will improve their NO<sub>x</sub> emission rate through increased operation of these existing controls. Additionally, EPA notes that an additional 21 GW of SCR and 4 GW of enhanced combustion controls (including low-NO<sub>x</sub> burners and overfire air) are scheduled to come online in the region during the 2010–2012 timeframe, bringing the total region's coal capacity operating with NO<sub>x</sub> emission reduction technology to 158 GW (more than 65 percent of total coal capacity in the Transport Rule fine particle region). EPA also projects that approximately 13 GW of coal capacity will make some reduction in their NO<sub>x</sub> emission rates by enhancing performance of existing combustion controls or SNCR, or by fuel switching.

In the Transport Rule states covered under the ozone-season program, approximately 145 GW of the 260 GW (more than 55 percent) of coal capacity had existing NO<sub>x</sub> control technology in place in 2010. EPA expects a significant portion of that capacity to achieve emission reductions during the 2012 ozone-season through improved operation of SCR. Additionally, in the Transport Rule ozone region there will be approximately 21 GW of additional advanced NO<sub>x</sub> control installations and 7 GW of additional combustion control improvements or installations coming online during the 2010 to 2012 time frame. EPA projects that 17 GW of coal capacity in the Transport Rule ozone region will reduce NO<sub>x</sub> emission rates by enhancing performance of existing combustion controls or SNCR or by fuel switching.

For NO<sub>x</sub>, EPA has also concluded that it is appropriate to require reductions through a limited amount of combustion control improvements, and in some cases, retrofits such as low-NO<sub>x</sub> burners (LNB) and/or overfire air (OFA). EPA recognizes that the 6-month time frame between rule finalization and start of the first compliance period would not allow for the installation of a major post-combustion NO<sub>x</sub> control such as SCR. Assumed improvements and retrofits for the January 1, 2012 deadline for annual NO<sub>x</sub> reductions therefore only involve the much simpler LNB/OFA control modifications or installations. Alternatively, some plant owners might choose to achieve NO<sub>x</sub> reductions in a similar time period through an even simpler retrofit—SNCR.<sup>60</sup>

Although the improvements, and in some cases, installation of combustion controls would be an economic means of achieving emission reductions, these specific controls are not required for compliance purposes under the final Transport Rule remedy. Individual sources may comply through other measures (such as purchasing additional allowances) in the event that it takes more than 6 months for installation of a given combustion control. The vast majority of covered sources already have combustion controls installed; therefore, the NO<sub>x</sub> reductions associated with these incremental control improvements and installations are small.

<sup>60</sup> David L. Wojichowski, SNCR System—Design, Installation, and Operating Experience <http://www.netl.doe.gov/publications/proceedings/02/scr-sncr/wojichowski-1.pdf>.

Based on the Transport Rule's geography, EPA estimates that approximately 10 GW of coal-fired units may improve, and in some cases, install LNB/OFA specifically in reaction to the Transport Rule NO<sub>x</sub> caps. EPA reflects the effects of these installations in the 2012 annual and ozone-season NO<sub>x</sub> budgets, which would yield reductions of approximately 28,000 tons of annual NO<sub>x</sub> and 14,000 tons of ozone-season NO<sub>x</sub>. EPA assumes these controls are cost effective at \$500/ton and that they should be incentivized through budgets given the 2013 attainment deadline for ozone areas classified as "serious." Once installed, LNB/OFA operates any time the boiler is fired and thus yields NO<sub>x</sub> reductions beyond the ozone season alone.

In the proposal's LNB technical support document,<sup>61</sup> EPA observes that LNB and/or OFA installations, burner modifications, or other NO<sub>x</sub> reduction controls would likely have to be installed during fall 2011 or spring 2012 outages in order to achieve significant reductions for 2012. While this 6-month schedule is aggressive, industry has shown that it can be met. For example,

Limestone Electric Generating Station Unit 2, an 820 MW tangentially-fired lignite unit, was retrofitted with Foster Wheeler's Tangential Low NO<sub>x</sub> (TLN3) system in less than six months, including engineering, fabrication, delivery and installation.<sup>62</sup> Harlee Branch Unit 4, a 535 MW cell-fired unit, was retrofitted with Riley Power's low-NO<sub>x</sub> Dual Air Zone CCV burners on a similar schedule.<sup>63</sup> These are tangentially-fired and wall-fired units, respectively, representative of the unit types that might make LNB/OFA improvements for compliance with this rule. Although such 6-month schedules can be achieved on some units, under favorable circumstances, historical projects suggest a more typical schedule would be 12 to 16 months for the contractor's portion of the work.<sup>64</sup> A plant owner's project planning and procurement work in advance of a contract award would typically involve several additional months. On the other hand, there are other approaches that can also be implemented in a short time frame to achieve significant NO<sub>x</sub> reduction. As mentioned above, relatively simple SNCR systems can be

installed quickly; and the re-tuning or upgrading of existing combustion control systems can often provide significant NO<sub>x</sub> reductions and can be performed quickly.<sup>65</sup>

As stated above, EPA believes that LNB/OFA modifications or retrofits would be possible during the 6-month interim between rule signature and the start of the first compliance period, particularly for those "early movers" who have initiated LNB projects based on the proposed rule. However, as shown in Table VII.C.2-2, below, even if all LNB modifications or installations are delayed until the beginning of the 2012 ozone season, the reductions only represent 1 percent of most covered states' annual NO<sub>x</sub> budgets, and no more than 11 percent of any affected state's annual NO<sub>x</sub> budget. Under such a scenario, these delayed reductions would still be well within the 18 percent variability limit applied to each state's annual NO<sub>x</sub> budget. In light of this limited consequence and the supporting material above, EPA includes LNB-driven NO<sub>x</sub> reductions in both annual and ozone-season NO<sub>x</sub> budgets for 2012.

TABLE VII.C.2-2—EARLIEST REDUCTIONS ASSUMED FROM LNB INSTALLATIONS IN THE TRANSPORT RULE STATES SUBJECT TO THE ANNUAL NO<sub>x</sub> PROGRAM \*

	NO <sub>x</sub> reductions from LNB operation from January–April (tons)	Annual NO <sub>x</sub> state budget (tons)	Percent of budget met by earliest LNB reductions (percent)
Georgia .....	646	62,010	1
Iowa .....	567	38,335	1
Kansas .....	2,131	30,714	7
Minnesota .....	2,303	29,572	8
Nebraska .....	3,008	26,440	11
Region-wide Total .....	8,656	1,245,869	1

\* Based on EPA IPM Analysis of Final Transport Rule.

b. 2014 Power Industry Compliance

EPA projects that compliance with 2014 requirements for NO<sub>x</sub> will result largely from operation of existing and future controls required by state and other federal requirements, as well as the appropriate dispatch of the electric generation fleet. EPA does not project additional NO<sub>x</sub> pollution control retrofits aside from about 10 GWs of combustion control improvements or retrofits projected for the 2012

compliance period. To comply with the rule's SO<sub>2</sub> requirements, EPA projects that the power industry will rely on existing controls, operate newly installed advanced controls necessary for other binding state and federal requirements, rely more on relatively lower sulfur coals, and dispatch lower-emitting generation units. In Group 1 states, industry is projected to increase switching to lower sulfur coals and install a limited amount of additional scrubbers and other advanced pollution

control technology. EPA's assessment of the industry's ability to install SO<sub>2</sub> pollution controls in 2014 and undertake the projected coal switching follows below.

EPA's modeling of least-cost compliance with the state budgets under the Transport Rule projects approximately 5.9 GW of FGD systems and lesser amounts of other technologies will be retrofitted by 2014

<sup>61</sup> Technical Support Document (TSD) for the Transport Rule, Docket ID No. EPA-HQ-OAR-2009-0491, Installation Timing for Low NO<sub>x</sub> Burners (LNB).

<sup>62</sup> R. Pearce, J. Grusha, Reliant Energy Tangential Low NO<sub>x</sub> System at Limestone Unit 2 Cuts Texas Lignite, PRB and Pet Coke NO<sub>x</sub>, [http://www.fwc.com/publications/tech\\_papers/files/tp\\_firsys\\_01\\_02.pdf](http://www.fwc.com/publications/tech_papers/files/tp_firsys_01_02.pdf).

<sup>63</sup> B. Courtemanche, et al., Reducing NO<sub>x</sub> Emissions and Commissioning Time on Southern Company Coal Fired Boilers With Low NO<sub>x</sub> Burners and CFD Analysis, <http://www.babcockpower.com/pdf/t-182.pdf>.

<sup>64</sup> M. O'Donnell, Babcock & Wilcox Company, (personal communication with EPA staff, February 22, 2011).

<sup>65</sup> N.C. Widmer, et al., Coal Power, October 8, 2009, [http://www.coalpowermag.com/ops\\_and\\_maintenance/Zonal-Combustion-Tuning-Systems-Improve-Coal-Fired-Boiler-Performance\\_226.html](http://www.coalpowermag.com/ops_and_maintenance/Zonal-Combustion-Tuning-Systems-Improve-Coal-Fired-Boiler-Performance_226.html).

for compliance with the Transport Rule.<sup>66, 67</sup> EPA's schedule assumptions for these larger more complex projects were developed in an earlier study and mentioned in the proposal: 27 months for retrofitted wet FGD and 21 months for SCR.<sup>68</sup> Note that a dry FGD system, due to its relatively simpler configuration and lesser cost, would typically take somewhat less time to retrofit than wet FGD.

As discussed below, EPA believes that its schedule assumptions remain reasonable expectations for sources that have completed most of their preliminary project planning and can quickly make commitments to proceed. These schedules do not include the extensive time that some plant owners might spend in making a decision on whether or not to retrofit. They do include the time needed to make a final confirmation of the type of technology to be used at a particular site, to prepare bid requests, award contracts, perform engineering, obtain construction and operating permits (in parallel with project activities), perform construction, tie-in to the existing plant systems, and perform integrated systems testing.

EPA received comments on the proposed rule indicating that some past single-unit APC retrofits had considerably longer schedules, with a few exceeding 48 months. EPA engineering staff have extensive experience with power plant and APC system design, construction, and operation. Based on that experience, EPA can observe that in the absence of a compelling deadline or major economic incentive, many large project schedules are considerably longer than necessary. Given further observations as explained below, EPA believes it is

reasonable to expect that almost all future APC retrofits can be completed far more quickly than they were in recent history. EPA's perspective on this matter derives in part from a comparison of longer APC schedules (as provided by some commenters) to the project schedule for an entire new coal-fired unit, including its APC systems. Springerville Unit 3, for example, is a new 400 MW subbituminous coal-fired unit with SCR and dry FGD that became operational in July 2006, some 33 months after the turnkey engineering-construction contractor was given a notice to proceed with engineering.<sup>69</sup> Springerville was clearly on an accelerated schedule, as its original planned schedule was about 38 months. Another example is Dallman Unit 4, a high-sulfur bituminous coal-fired 200 MW unit with SCR, fabric filter, wet FGD, and wet ESP. Dallman Unit 4 was first synchronized in May 2009, several months ahead of schedule, and about 36 months after its turnkey contractor placed initial major equipment orders.<sup>70</sup> The main point here is that recent APC project schedules, and those of large complex power projects, can be significantly accelerated. Because the scope and complexity of the work involved for an entire new coal unit and its APC systems is perhaps five times greater than that of a retrofit wet FGD system alone, EPA believes it is reasonable to expect that even the most complex retrofit APC project can be significantly accelerated as well. Additional factors are discussed below that further support the feasibility of installing by 2014 the 5.9 GW of FGD retrofits projected for this rule.

Although IPM modeling provides reliable estimates on a regional basis, and cannot be as accurate at the level of individual plants or units, it is informative and relevant to consider IPM's plant level projections in this case. Although the IPM-projected retrofits named below may not actually occur, IPM projects that they would be economic and would allow industry to meet the tighter SO<sub>2</sub> emission standards in Group 1 states in 2014. EPA notes that the owners of the particular plants mentioned below (Duke Energy, AEP, Edison International) are large, experienced, versatile utilities that have done considerable advance planning

and should also have above-average flexibility to comply with state budgets across their fleets. EPA would expect such owners to have relatively little difficulty in permitting and financing FGD retrofits.

Of the Transport Rule-related FGD retrofits, 0.2 GW is projected to use dry FGD, which EPA expects to be simpler and quicker to install than wet FGD. Half of the 5.9 GW (Muskingum, Rockport) has already been committed under consent decrees to add controls or retire;<sup>71</sup> and EPA reasonably believes that significant preliminary project planning work has already been done for those projects. An additional 1,200 MW (Homer City) had completed project planning and was ready to proceed in 2007, before putting the project on hold.<sup>72</sup> The latter plant is now facing EPA legal action and the possibility of a required expeditious FGD retrofit.<sup>73</sup> Thus, of the 5.9 GW of projected FGD retrofits resulting from this rule, nearly 75 percent appears to be in good position for an early start of construction, and over 3 GW of that would be bringing forward already committed compliance start dates.

Any of the above mentioned potential retrofits or any other unit that might choose to retrofit FGD for a January 2014 compliance date will likely have to use various methods to accelerate the project schedule. Such methods could include the use of parallel permitting, overtime and/or two-shift work schedules during construction, and 5- or 6-day work weeks instead of the 4-day × 10-hour schedules often used to minimize cost when time is not of the essence. Increased use of offsite modularization and pre-fabrication of APC components could also shorten schedules and reduce job hours.

EPA believes that the January 1, 2014 compliance date is as expeditious as practicable for the sources installing large, complex control systems. The following additional observations support EPA's expectation that the limited 5.9 GW of FGD retrofits can be realized in the 30 month interim between rule signature and the start of 2014:

- There are documented instances of large, complex wet FGD retrofits being deployed in less than 30-months (excluding the time for owners' project

<sup>66</sup> Nearly all of the 5.9 GW of FGD retrofits are comprised by some 12 units at 7 plants (Beckjord, Muskingum River, Homer City, Rockport, Kammer, Danskammer, and Will County).

<sup>67</sup> As noted elsewhere in this preamble, the projected impacts of this final rule presented in the preamble do not reflect minor technical corrections to SO<sub>2</sub> budgets in three states (KY, MI, and NY) and assumed preliminary variability limits that were smaller than the variability limits finalized in this rule. EPA conducted sensitivity analysis factoring in these corrections; the results of this analysis include a small increase of about 700 MW of additional wet FGD retrofit projected for 2014. This projected additional retrofitting capacity is already required to retrofit under a consent decree and should therefore have already conducted advanced retrofit planning. EPA therefore believes that this incremental projected retrofit behavior (factoring in the technical corrections made after the main impact analyses were conducted) is feasible by 2014 for the same reasons presented in this section regarding the projected retrofit behavior from the main analysis of the final rule.

<sup>68</sup> EPA, Engineering and Economic Factors Affecting the Installation of Control Technologies for Multipollutant Strategies; EPA-600/R-02/073 October 2002.

<sup>69</sup> Best Coal-fired Projects, Springerville Unit 3 Expansion Project, Power Engineering, November 2006, <http://www.powergenworldwide.com/index/display/articledisplay/282547/articles/power-engineering/volume-111/issue-1/features/projects-of-the-year.html>.

<sup>70</sup> [http://www.cwlp.com/electric\\_division/generation/Dallman%204%20Power%20Plant%20of%20the%20Year.pdf](http://www.cwlp.com/electric_division/generation/Dallman%204%20Power%20Plant%20of%20the%20Year.pdf).

<sup>71</sup> <http://www.epa.gov/compliance/resources/decrees/civil/caa/americanelectricpower-cd.pdf>.

<sup>72</sup> <http://www.businesswire.com/news/home/20060731005193/en/Contractors-Selected-Install-Emissions-Control-System-Pennsylvania>.

<sup>73</sup> <http://www.epa.gov/Compliance/resources/complaints/civil/caa/homercity-cp.pdf>.

planning). Examples are Killen Station Unit 2,<sup>74</sup> and Asheville Unit 1.<sup>75</sup>

- In 2009 the APC supply chain deployed more than six times more GW capacity of FGD and SCR controls than the 5.9 GW of FGD that would be deployed by 2014 under this Rule.

- The APC supply chain has seen a 2-year decline in deployments since its peak in 2009, but in 2011 is nonetheless putting into service about three times more GW capacity of FGD and SCR controls than the 5.9 of FGD that would be deployed under this Rule.

- Because the supply chain has been in decline, but remains quite active, there are now adequate supply chain resources available that can be quickly reengaged to support a rapid deployment of 5.9 GW of FGD.

EPA recognizes that the installation of any amount of scrubbers in this short time frame will require aggressive action by plant owners and that the owners who can meet this schedule will already have done their project planning and will be ready to place orders. An example of such “early movers” was seen in the power sector’s anticipation of CAIR. EPA data indicate that solely CAIR-driven FGD and SCR deployments of about 6 GW occurred within two and one-half years after CAIR’s finalization in mid-2005, showing that at least 20 percent of the total CAIR-only controls effort through a 2010 compliance date was sufficiently planned for installation to start before or immediately upon finalization of the rule. EPA reasonably expects that similar advance planning has already been done for units that would retrofit under this rule.

In the event that a particular control installation requires additional time into 2014 to come online, EPA believes compliance would not be jeopardized given the ability of sources to purchase allowances during that time. This approach could be supported by some sources with FGD that have the ability to increase their SO<sub>2</sub> removal above historic rates, perhaps through relatively low cost upgrades to improve scrubber effectiveness, or by operating scrubbers at higher chemistry ratios. The ability of sources to temporarily or permanently substitute dry DSI for FGD serves as another backstop for any feasibility issues regarding FGD. Note that the updated modeling for this rule projects

the addition by 2014 of about 3 GW of DSI for SO<sub>2</sub> control using trona or other sorbent. DSI is a relatively low capital cost technology that readily can be installed in the time frame available for compliance.<sup>76 77</sup>

It should also be noted that most APC retrofits will involve a source outage for final “tie-in” of retrofitted systems to existing systems, during which time emissions from the affected units are zero. For some sources, the duration of this tie-in outage may effectively extend the deadline by which all of the projected emission reductions need to occur.

Although EPA believes that installation of 5.9 GW of FGD at facilities by January 1, 2014 is feasible, EPA also conducted an IPM sensitivity analysis to examine a scenario in which FGD retrofitting by 2014 is not allowed. Results of EPA’s “no FGD build in 2014” analysis indicate that if the power industry were subjected to the requirements of this rule without an FGD retrofit option for compliance until after 2014, covered units would still be able to meet the Transport Rule requirements in every state while respecting each state’s assurance level. (See the docket to this rulemaking for the IPM run titled “TR\_No\_FGD\_in2014\_Scenario\_Final.”)

In this scenario without the availability of new FGD by 2014, sources in covered states complied with the Transport Rule budgets by using moderate additional amounts of DSI retrofits, switching to larger shares of sub-bituminous coal, and dispatching larger amounts of natural gas-fired generation in lieu of the FGD retrofits that are projected as being most economic under modeling of the Transport Rule remedy. Because new FGD capacity is included in EPA’s projection of the least-cost set of SO<sub>2</sub> emission reductions required in Group 1 states, the “no FGD” sensitivity scenario did project higher system costs, although these costs were still substantially lower than the remedy EPA modeled in the Transport Rule proposal.

The “no FGD” analysis indicates that while the ability of Group 1 states to meet their 2014 SO<sub>2</sub> budgets is facilitated by FGD retrofits, they are by no means required, nor is Transport Rule compliance jeopardized by their

absence. Even under a scenario in which sources fail to complete FGD retrofits by 2014, sources in the affected states would have other compliance options available at reasonable cost to meet the state’s budget requirements. This analysis shows that Group 1 states would be able to comply with their 2014 SO<sub>2</sub> budgets by relying on other emission reduction opportunities that do not require FGD retrofits. EPA analysis confirms that those alternatives are feasible both in terms of cost and timing.

Finally, EPA recognizes that, when finalized later this year as currently scheduled, the Mercury and Air Toxics Standards (MATS) will require significant retrofit activity at covered sources in the power sector with a 2015 compliance date for that rule. EPA’s projections of retrofit activity under the final Transport Rule are highly compatible with its projections of retrofit activity under the proposed MATS (which included the proposed Transport Rule in its baseline). EPA therefore anticipates that the Transport Rule’s projected retrofit activity will not only be the least-cost compliance pathway to meeting state budgets in 2014 but will also accelerate emission reductions subsequently required by the effective date of MATS. The final Transport Rule’s projected 2014 retrofit installations will also further incentivize the power sector to ramp up its retrofit installation capabilities to achieve broader deployment of the projected pollution control retrofits under the proposed MATS.

Considering all the reasons given above, EPA has concluded that the 2014 requirements for SO<sub>2</sub> emissions in the states covered by the Transport Rule are reasonable and can be met by the power industry by a variety of means.

#### c. Coal Switching for SO<sub>2</sub> Compliance in 2012 and 2014

Coal switching is another mechanism which can be used along with operating pollution controls in 2012 for compliance. It will be a complementary activity by many coal-fired units alongside of operating pollution controls and the addition of more scrubbers and DSI in 2014.

In the proposal, EPA noted that coal switching could serve as a compliance mechanism for 2012. EPA requested comment on the reasonableness of EPA’s assumption that coal switching will have relatively little cost or schedule impact on most units. EPA received substantial comment suggesting that the coal switching and coal blending projected by EPA modeling are not feasible for all units,

<sup>74</sup> Black & Veatch, [http://www.bv.com/News\\_3\\_Publications/News\\_Releases/2005/0503.aspx](http://www.bv.com/News_3_Publications/News_Releases/2005/0503.aspx) (start), [http://www.bv.com/wcm/press\\_release/07252007\\_9767.aspx](http://www.bv.com/wcm/press_release/07252007_9767.aspx) (completion).

<sup>75</sup> PowerGenWorldwide, Projects of the Year, January 1, 2007, <http://www.powergenworldwide.com/index/display/articledisplay/282547/articles/power-engineering/volume-111/issue-1/features/projects-of-the-year.html>.

<sup>76</sup> ICAC letter to Senator Carper, November 3, 2010, [http://www.icac.com/files/public/ICAC\\_Carper\\_Response\\_110310.pdf](http://www.icac.com/files/public/ICAC_Carper_Response_110310.pdf).

<sup>77</sup> Assessment of Technology Options Available to Achieve Reductions of Hazardous Air Pollutants, URS Corporation, April 5, 2011, <http://www.supportcleanair.com/resources/studies/file/4-8-11-URSTechnologyReport.pdf>.

and that, if feasible, would often incur a cost through the derating of the unit associated with the switch to a lower sulfur coal or coal blend. Additionally, sources indicated that coal switching by 2012 would not always be possible in the six month window between final rule signature and start of compliance. These feasibility concerns stemmed from restrictions included in existing coal supply contracts and from boiler design constraints that may hinder coal switching within a 6 month window.

EPA agrees with these concerns and revised its IPM modeling to limit coal switching capability in 2012 for particular units that may have trouble switching coals or coal blends in a six month time frame. A cost adder was also included in the IPM modeling for coal switching to capture the potential cost burden of deratings that might accompany switching to a very low sulfur subbituminous coal or coal blend.

A particular commenter concern regarding switching to lower sulfur within the eastern bituminous coals related to a possible impact on the performance of a cold-side electrostatic precipitator (ESP). Some ESPs that operate at acceptably high collection efficiency when using a high- or medium-sulfur bituminous coal may experience some loss in collection efficiency when a lower sulfur coal is used. Whether this occurs on a specific unit, and the extent to which it occurs, would depend on the design margins built into the existing ESP, the percentage change in coal sulfur content, and other factors. In any case, industry experience indicates that relatively inexpensive practices to maintain high ESP performance on lower sulfur bituminous coals are available and can be used successfully where necessary. These include a range of upgrades to ESP components and flue gas conditioning.<sup>78</sup> EPA therefore assumes that it will not be necessary for units that switch from higher to lower sulfur bituminous to make a costly replacement of the ESP.

Coal switching as a SO<sub>2</sub> compliance option might also include switching from bituminous to subbituminous coal. EPA's analysis does not assume that a unit designed for bituminous can switch to (very low sulfur) subbituminous coal unless the unit's historical data demonstrate that capability in the past. EPA assumes that units with that demonstrated capability have already made any investments needed to handle

a switch back to the use of subbituminous coal at a similar percentage of its heat input as in the past. For IPM analysis in the final rule EPA also introduced a coal switching option that assumes that units can increase a historically low percentage use of subbituminous to a "maximum" level, if economic. This option includes an appropriate derate in output, increase in heat rate, and additional capital and operating costs. Details of this and other IPM updates for this rule are provided in the IPM Modeling Documentation in the docket for this rulemaking ("Documentation Supplement for EPA Base Case v.4.10\_FTtransport—Updates for Final Transport Rule").

Some commenters also expressed concern with the assumption that coal-switching from lignite to subbituminous is a cost-effective or feasible emission reduction strategy, particularly at Texas EGUs. EPA carefully considered these comments and adjusted its modeling of cost-effective reductions to address this concern. Specifically, EPA made adjustment in the model so that it assumes coal-switching is not a compliance option at the specific units where commenters identified technical barriers to subbituminous coal consumption. The Transport Rule emission budgets are based on this adjusted modeling which does not assume any infeasible coal-switching from lignite to subbituminous. In addition, EPA's analysis of cost-effective reductions in each state presented in section VI.B shows that Texas is capable of cost-effectively meeting its Transport Rule emission budgets; however, EPA also conducted sensitivity analysis that shows Texas can also achieve the required cost-effective emission reductions even while maintaining current levels of lignite consumption at affected EGUs. More details regarding this analysis, including a table comparing key parameters between the main Transport Rule remedy analysis and this Texas lignite sensitivity, can be found in the response to comments document and the IPM model output files included in the docket for this rulemaking.

#### *D. Allocation of Emission Allowances*

Under the final rule, EPA distributes a number of SO<sub>2</sub>, annual NO<sub>x</sub>, and ozone-season NO<sub>x</sub> emission allowances to covered units in each state equal to the SO<sub>2</sub>, annual NO<sub>x</sub>, and ozone-season NO<sub>x</sub> budgets for those states. These budgets are addressed in section VI.D of this preamble. This section discusses the methodology EPA uses to allocate

allowances to covered units in each state.

As discussed later in section VII.D.2, EPA is setting aside a base 2 percent of each state's budgets for allowance allocations for new units, with 5 percent of that 2 percent, or 0.1 percent of the total state budget being set aside for new units located in Indian country. To this base 2 percent, EPA is setting aside an additional percentage on a state-by-state basis, ranging from 0 to 6 percent (yielding total set asides of 2 percent to 8 percent), for units planned to be built. The remainder of the state budget is allocated to existing units. Tables VI.D.–3 and VI.D.–4 in this preamble show the SO<sub>2</sub>, annual NO<sub>x</sub>, and ozone-season NO<sub>x</sub> budgets for each covered state (without the variability limits). In allocating allowances to existing and new units, EPA distributes four discrete types of emission allowances for four separate programs: SO<sub>2</sub> Group 1 allowances, SO<sub>2</sub> Group 2 allowances, annual NO<sub>x</sub> allowances, and ozone-season NO<sub>x</sub> allowances.

In the SO<sub>2</sub> Group 1 and SO<sub>2</sub> Group 2 programs, each SO<sub>2</sub> allowance authorizes the emission of one ton of SO<sub>2</sub> in that vintage year or earlier and is usable for compliance only in the program for which the allowance was issued. In the annual NO<sub>x</sub> program, each annual NO<sub>x</sub> allowance authorizes the emission of one ton of NO<sub>x</sub> in that vintage year or earlier in that program. In the ozone-season NO<sub>x</sub> program, each ozone-season NO<sub>x</sub> allowance authorizes the emission of one ton of NO<sub>x</sub> during the regulatory ozone season (May through September for this final rule) in that vintage year or earlier for that program.

In each of the four trading programs, a covered source is required to hold sufficient allowances (issued in the respective trading program) to cover the emissions from all covered units at the source during the control period. EPA assesses compliance with these allowance-holding requirements at the source (*i.e.*, facility) level.

This section explains how, in this final rule, EPA allocates a state's budget to existing units and new units in that state. This section also describes the new unit set-asides and Indian country new unit set-asides in each state, allocations to units that are not operating, and the recordation of allowance allocations in source compliance accounts.

#### 1. Allocations to Existing Units

This subsection describes the methodology EPA will use in the FIPs finalized in this action to allocate to

<sup>78</sup> Assessment of Technology Options Available to Achieve Reductions of Hazardous Air Pollutants, URS Corporation, April 5, 2011, <http://www.supportcleanair.com/resources/studies/file/4-8-11-URSTechnologyReport.pdf>.

existing units.<sup>79</sup> The same methodology will be used to allocate allowances to existing units for all four trading programs.

For the reasons explained below, EPA has decided to base allocations made under the FIPs on historic heat input, subject to a maximum allocation limit to any individual unit based on that unit's maximum historic emissions. This methodology gives each existing unit an allocation equal to its share of the state's historic heat input for all the covered units in the program, except where that allocation would exceed its maximum historic emissions; this methodology constrains the heat input-based allocations from exceeding any unit's maximum historic emissions. Further detail on the implementation of this approach is provided in section VII.D.1.c below as well as in the Allowance Allocation Final Rule TSD in the docket for this rulemaking. All existing-unit allocations for 2012 will be made pursuant to the FIPs. However, as described in section X, states may submit SIPs or abbreviated SIPs to use different allocation methodologies for allowances of vintage year 2013 and later.

#### a. Summary of Allocation Methodologies and Comments

EPA took comment on three distinct allocation methodologies for existing units. The first—an emissions-based option—was presented in the original Transport Rule proposal (75 FR 45309). The second and third—heat input option 1 and heat input option 2—were presented in a Notice of Data Availability (76 FR 1113). EPA received numerous comments on all three options.

##### i. Emission-Based Allocation Methodology

The emission-based option presented in the original Transport Rule proposal would base allowance allocations to existing units on each covered unit's calculated emission "share" of that state's budget for a given pollutant under the Transport Rule. The proposed rule stated that "for 2012, each existing unit in a given state receives allowances commensurate with the unit's emissions reflected in whichever total emissions amount is lower for the state, 2009 emissions or 2012 base case emissions projections. In either case, the allocation

is adjusted downward, if the unit has additional pollution controls projected to be online by 2012. \* \* \* For states with lower SO<sub>2</sub> budgets in 2014 (SO<sub>2</sub> Group 1 states), each unit's allocation for 2014 and later is determined in proportion to its share of the 2014 state budget, as projected by IPM" (75 FR 45309).

Many commenters objected to this projected emission allocation methodology. Commenters offered two principle objections. First, they argued EPA should not use unit-level model projections to allocate allowances. Second, they argued the use of any emission-based allowance methodology is improper. Many of these commenters argued that instead of an emission-based allocation methodology, EPA should use a heat-input-based allocation methodology.

Commenters' objections to the use of unit level model projections focused primarily on the accuracy of such projections. While many commenters supported the use of modeling projections in determining state emission budgets, they argued that the unit-level model projections were not sufficiently accurate to use as a basis for allocating allowances to individual units. Among other things, they argued that the modeling used for the proposal did not recognize certain non-economic factors that may cause individual units to operate differently than the model projects. Commenters also argued that EPA's modeling does not capture all up-to-date contracts and other economic arrangements made at the unit-level which may affect operational decision-making. Some of these commenters continued to support the use of an emission-based allocation approach, but urged EPA to use more up-to-date and specific unit-level data in its modeling projections. Others opposed the use of any emission-based allocation approach.

EPA acknowledges that the model may not, at this time, capture all relevant operational decision factors for each individual unit. EPA also recognizes that there are unit-level details of operational decision-making and economic arrangements (such as certain contracts for electricity sales) that are private and thus unavailable to EPA on an ongoing basis for modeling purposes. EPA believes these potential omissions would not have a significant impact on EPA's determination of significant contribution at the state level; however, EPA recognizes they could conceivably have a significant impact on projections at the individual unit level. EPA thus agrees with commenters that the unit-level emission projections from its modeling may not

reflect all possible operational decisions at a given unit and are therefore not an appropriate proxy measure to use as a basis for allocating allowances to individual units.

Many commenters also argued that, even if the emission projections could be adjusted to capture all known and up-to-date unit-level operational factors, EPA should not use any emission-based allocation approach. They argued that an emission-based approach should not be used because it is not fuel-neutral. That is to say, the type of fuel consumed significantly affects the emissions from, and therefore the allocation to, a given unit under an emission-based approach. Commenters argued that an approach that is not fuel-neutral effectively awards higher-emitting units.

Commenters also argued that a projected emission-based approach should not be used because it is not control-neutral. In other words, whether or not a unit has installed controls would significantly affect the allocation for a given unit under an emission-based approach. Under an emission-based approach, controlled units receive significantly fewer allowances than uncontrolled units. Such an approach, commenters pointed out, effectively penalizes sources who have taken action to reduce emissions.

EPA acknowledges that an emission-based approach would not be fuel-neutral or control-neutral. EPA notes that the DC Circuit rejected the fuel adjustment factors that were used in CAIR to adjust state budgets based on the type of fuel burned at each covered unit. *North Carolina*, 531 F.3d 918–21 (rejecting use of fuel adjustments in setting state NO<sub>x</sub> budgets). While the proposal's allocation methodology did not explicitly adopt "fuel adjustment factors" for allocation purposes, EPA recognizes that an emission-based allocation methodology effectively advantages or disadvantages units based on the type of fuel they combust.

In addition, several commenters argued that the proposal's emission-based methodology would inappropriately reward the highest emitters under the program with more allowances than their lower-emitting counterparts would receive. EPA acknowledges that such a methodology would allocate more allowances to units whose emissions make up a larger share of the proposed Transport Rule programs' state budgets. EPA notes that because any allocation patterns under the Transport Rule FIPs would be established in advance of covered sources' compliance decisions (*i.e.*, decisions regarding how much to emit under the programs), covered sources

<sup>79</sup>In this rule, existing units are defined as covered units that commenced commercial operation prior to January 1, 2010. As explained in greater detail in Section VII.B. of this preamble, EPA decided to use this definition to ensure that EPA would have at least 1 full year of quality-assured data on which to base a unit's allocation.

cannot be “rewarded” by adjusting their future emissions. However, EPA notes commenters’ observations that the proposal’s methodology would reduce allocations to units that previously installed pollution control technology or invested in cleaner forms of generation in anticipation of CAIR. EPA concluded in review of these comments that the proposed Transport Rule’s allocation methodology unintentionally yielded this distributional outcome. EPA therefore considered alternative allocation methodologies described below.

A substantial portion of the commenters who objected to the proposal’s emission-based allocation option urged EPA to consider historic heat input based approaches. EPA agreed it should accept comment on the use of historic heat input-based approaches and published a NODA to provide an opportunity for comment on two specific heat input options and the allocations that would result from application of those options to the proposed Transport Rule state budgets.

#### ii. Heat Input Allocation Option 1

The first heat input option presented by EPA in the NODA (“Option 1”) allocates allowances to units based solely on their historic heat input. Under this option, EPA would establish a 5-year historic heat input baseline for each covered unit and allocate allowances to sources at levels proportional to the each unit’s share of the total historic heat input at all covered units in that state.

Numerous commenters supported the use of a heat-input based allocation methodology. These commenters stated that basing allocations on historic heat input has the following advantages over the proposal’s emission-based allocation methodology:

(A) For certain types of units, historic heat input data may offer a better representation of unit-level operation than model projections of unit-level emissions; furthermore, for all units, historic heat input is typically represented by quality-assured data reported by sources from continuous emission monitoring systems, which strengthens its accuracy.

(B) Historic heat input data are generally fuel-neutral in that they do not generally yield higher allocations for units burning or projected to burn higher emitting fuels.

(C) Historic heat input data are generally emission-control-neutral in that they do not generally yield reduced allocations for units that installed or are projected to install pollution control technology.

Many commenters also argued that a heat input-based allocation methodology should be used because, unlike the proposal’s emission-based methodology, a heat-input based methodology would be generally fuel-neutral and control-neutral and would rely on unit-level quality-assured data instead of on modeling projections.

Several commenters expressed support for specific aspects of heat input option number one. From a technical standpoint, commenters noted that heat input option 1 relied on the highest-quality and most transparent data EPA had provided as a basis for allocating allowances under the Transport Rule programs. They argued that the calculation methodology for heat input option 1 is more readily re-created and understood by sources than either the proposal’s methodology or EPA’s application of the “reasonable upper-bound capacity utilization factor and a well-controlled emission rate” in heat input option 2 (described in greater detail below). They also pointed out that it is similar to methodologies used in previous trading programs, such as the NO<sub>x</sub> Budget Trading Program (see 40 CFR 96.42(a) & (b) (calculating each existing EGU’s allocation by multiplying each unit’s historic heat input by 0.15 lb/mmBtu)). In addition, commenters supported the reliance of heat input option 1 on continuous emission monitoring system (CEMS) data that are reported to EPA and certified by the source’s designated representative (DR) as accurate and complete. In addition, many commenters supported EPA’s use of historic data without further transformation by any calculation factors created by EPA.

From a policy perspective, commenters highlighted the fuel neutrality and emission-control neutrality aspects of heat input option 1. They noted that this option does not, in contrast to the proposal’s emission-based methodology, penalize a source, through a reduced allowance allocation, for having chosen a generation technology or emission control technology that was more favorable to public health and the environment. EPA agrees with these observations. The allocation pattern associated with this option does not advantage or disadvantage units based on either the fuel consumed or the presence or absence of a pollution control technology. In this respect, it is a neutral approach that does not “reward” high-emitting units or “penalize” low-emitting units, including, for example, those units on which pollution control technology was installed in anticipation of CAIR.

EPA agrees with the aforementioned arguments from these commenters regarding the technical and policy merits of this heat input-based allocation methodology. EPA believes that the quality-assured heat input data reported by EGUs under its programs are among the most detailed and sound unit-level data accessible by EPA. EPA believes the calculation of any individual unit’s share of this historic heat input data is a straightforward, clear, and simple calculation to perform, such that EPA’s calculated allowance allocations under this approach can be relatively easily replicated.

EPA also agrees with commenters that such data has previously supported allowance allocation procedures for highly successful program implementation of the ARP and the NO<sub>x</sub> Budget Trading Program (NBP). Notably, Congress chose a heat input-based allocation approach when authorizing the ARP in title IV of the Clean Air Act, suggesting that Congress viewed heat input as a reasonable basis for allocation. Additionally, EPA’s selection of a heat input-based approach for the NBP was not legally challenged, implying that stakeholders generally saw a heat input-based approach as reasonable.

EPA also agrees with comments observing that allocations made under this heat input approach do not advantage or disadvantage units based on their choice of fuel combustion or pollution control technology, and that allocations under this approach would thus be “fuel-neutral” and “control-neutral.” EPA also agrees with commenters that unlike the proposed rule’s emission-based methodology, this heat input methodology does not yield lower allocation to units that reduced emissions in advance of the Transport Rule relative to units that did not make such emission reductions.

Other commenters objected to the use of a heat-input based allocation methodology. These commenters argued that the allocation pattern associated with a heat-input allocation methodology would yield “windfall profits”—in the form of allowance allocations greatly in excess of likely emissions—for certain units, particularly with regard to SO<sub>2</sub> allowance allocations for units combusting natural gas. EPA disagrees with the characterization of the excess allowances as “windfall profits.” Allocations based on heat-input alone are fuel-neutral and control-neutral. The characterization of the heat-input allocation methodology as creating “windfall profits” for any unit is based on the assumption that all units should



be allocated allowances based on emissions, not heat input. In arguing the heat-input approach creates a “windfall” for some units, commenters are assuming that the allocation of allowances above a unit’s projected emissions constitutes a “windfall”—a conclusion EPA does not accept. EPA believes that under market-based regulatory programs, it is appropriate to base initial allowance allocations on a neutral factor and allow the market to determine the least-cost pattern of emission reductions in each state to achieve the reductions that address the state’s significant contribution and interference with maintenance under the final Transport Rule programs. EPA disagrees that future allowance transactions (following a neutral-factor initial allocation) in response to these market forces can be characterized as “windfall profits.” As explained above, EPA believes it is appropriate to allocate allowances based on a neutral factor. Commenters appear to ask EPA, instead of allocating based on a neutral factor, to consider the unit-level distributional impacts of each allocation methodology and to select an allocation methodology on the basis of equity. EPA does not believe it would be appropriate for the agency to pick an allocation methodology to achieve any particular distributional outcome as such considerations are not related to the statutory mandate of CAA section 110(a)(2)(D)(i)(I). Instead, EPA believes it is appropriate to allocate allowances to sources covered by its trading programs based on a neutral factor. Furthermore, CAA section 110(a)(2)(D)(i)(I) requires prohibition of certain emissions within a state (*i.e.*, a state’s significant contribution and interference with maintenance). It does not direct EPA to use any particular methodology for allocating allowances under a trading program designed to ensure all such emissions are prohibited. As such, EPA believes it is appropriate to allocate allowances based on a neutral factor representing fossil energy content used to produce electricity. Detailed considerations of equity, as the DC Circuit reminded EPA, are not related to the statutory mandate of section 110(a)(2)(D)(i)(I). *North Carolina*, 531 F.3d 921.

Some commenters objected to the use of a heat input-based approach by arguing that higher-emitting units would not receive an initial allocation sufficient to cover their emissions. EPA does not believe it is reasonable to expect initial allocations to cover each unit’s emissions under a trading program aimed at producing meaningful

emission reductions. In its administration of prior trading programs such as the ARP and the NBP, EPA has made initial allowance allocations using a heat input-based approach, and virtually all covered sources have successfully complied at the end of each compliance period by making cost-effective emission reductions, purchasing additional allowances through robust markets to cover emissions, or undertaking both types of activities. EPA disagrees with commenters’ arguments that allowance allocations should be used to compensate units with higher emissions.

### iii. Heat Input Allocation Methodology Option 2

The second heat input option presented by EPA for public comment also would use historic heat input but would apply a constraint to unit-level allocations under certain circumstances. Specifically, under this option unit-level allocations would not be allowed to exceed what EPA determines, based on historic emissions and other factors, to be the units’ “reasonably foreseeable maximum emissions.”

To apply this constraint, EPA first would determine whether the allocation to a unit under an unconstrained heat-input methodology would exceed that unit’s maximum historic emissions of the relevant pollutant since 2003 “in order to reflect unit-level emissions before and after the promulgation of the CAIR” (76 FR 1115). Using this baseline would enhance the neutrality of the maximum historic emissions data because it would capture the highest emissions of the unit during that period regardless of what fuels it combusted or what pollution control devices were installed and used at any particular time during that period. In other words, a unit’s allocation would not be reduced due to a recent decision to switch fuels or install pollution controls.

Second, for this option, EPA then would adjust that maximum historic emissions data by applying a “well-controlled rate maximum,” designed to place “a reasonably foreseeable maximum emissions level reflecting a reasonable upper-bound capacity utilization factor and a well-controlled emission rate that all units (regardless of the type of fuel they combust) can meet for the pollutant” (76 FR 1115). This option would constrain certain units’ allocations that, if based solely on historic heat input, would be determined by EPA to be “in excess of their reasonably foreseeable maximum emissions” under the Transport Rule programs (76 FR 1115).

As noted above, commenters offered numerous arguments in favor of using a historic heat input approach. These arguments apply equally to heat input option 1 and heat input option 2. EPA also received numerous comments comparing the two heat input options presented.

Many commenters preferred heat input option 1’s reliance purely on historic data as compared with heat input option 2’s reliance on that data modified by the application of EPA-determined “reasonable upper bound capacity factors” and “well-controlled emission rates.” Commenters also criticized the complexity of these modification factors in heat input option 2. While EPA believes both options represent viable approaches, the Agency agrees with commenters that the application of these factors increase the complexity of allocation determinations and would adjust unit-specific historic data by applying EPA-created factors generically determined for broad categories of units.

Some commenters suggested that EPA’s application of these modification factors could also represent legal vulnerabilities for the Transport Rule. In particular, they were concerned that the capacity factors and well controlled emission rates presented as part of heat input option 2 could be perceived as arbitrary. While EPA does not agree that these modification factors are arbitrary, the Agency does recognize that application of such EPA-created generic factors in determining unit-specific allocations increases the complexity of the allocation approach and raises issues regarding whether such generic factors are appropriately applied to each individual unit.

### iv. General Comments on EPA’s Authority To Allocate Allowances

Numerous commenters also noted that EPA has generally broad authority in selecting an allocation methodology under CAA sections 110(a)(2)(D)(i)(I) and 302(y).<sup>80</sup> EPA agrees with commenters that the Agency has broad discretion in this area. Neither the CAA nor the D.C. Circuit Court’s opinion in *North Carolina* specifies a particular methodology that EPA must use to allocate allowances to individual units.

<sup>80</sup>CAA section 302(y) defines the term “Federal implementation plan” as “a plan (or portion thereof) promulgated by the Administrator to fill all or a portion of a gap or otherwise correct all or a portion of an inadequacy in a State implementation plan, and which includes enforceable emission limitations or other control measures, means or techniques (including economic incentives, such as marketable permits or auctions of emissions allowances), and provides for attainment of the relevant national ambient air quality standard.”

CAA section 110(a)(2)(D)(i)(I) requires prohibition of emissions “within the state” that significantly contribute to nonattainment or interfere with maintenance and gives states broad discretion to develop a control program in a SIP that achieves this objective. EPA has similarly broad discretion when issuing a FIP to realize this objective. Moreover, while the definition of FIP in CAA section 302(y) clarifies that a FIP may include “enforceable emission limitations or other control measures, means or techniques (including economic incentives, such as marketable permits or auctions of emissions allowances),” this section does not require EPA to use any particular methodology to allocate allowances under a FIP trading program. In light of this lack of direction in the CAA concerning allowance allocation, EPA has broad discretion to select an allocation methodology that is reasonable and consistent with the goals of CAA section 110(a)(2)(D)(i)(I).

The body of public comment makes it clear that no allocation option could be deemed satisfactory from the perspective of all stakeholders. Public comments from most states and industrial stakeholders with a substantial interest in how EPA allocates allowances under the Transport Rule FIPs expressed support for an historical heat input-based approach as opposed to the proposal’s emission-based approach. Most commenters favored this historical heat input data basis as the most sound and offered technical data corrections, which EPA considered and generally used in the final rule. EPA believes it is reasonable to select a heat input-based approach for the final Transport Rule because this approach is consistent with the rule’s statutory objectives and has been found, when implemented in prior trading programs, to be a credible, workable allocation approach.

#### b. Final FIP Allocation Methodology

After consideration of all comments, EPA decided to allocate allowances to individual units based on that units’ share of the state’s historic heat-input, but to ensure that no unit’s allocations exceed that unit’s historic emissions. EPA decided to use the allocation methodology originally presented as heat input option 2, modified in response to public comments. EPA decided to use heat input option 2 but without the application of the “reasonable upper-bound capacity utilization factor and a well-controlled emission rate” factors. This allocation approach reflects the Agency’s response to extensive public comment on the

options presented in the proposed Transport Rule and subsequent NODAs and is a logical outgrowth of those actions. EPA is using this approach to allocate allowances under the FIPs for all four trading programs. Further details on the calculation and implementation of this approach are provided below in section VII.D.1.c and can also be found in the Allowance Allocation Final Rule TSD in the docket for this rulemaking.

The principal reasons for this decision are:

- EPA believes that existing-unit allowance allocation under the Transport Rule should not generally advantage or disadvantage units based on the selection of fuels consumed or of pollution controls installed at a given unit in anticipation of either the Clean Air Interstate Rule or the Transport Rule, *i.e.*, fuel or control decisions taken from 2003 onward. An approach that does not advantage or disadvantage units in this way avoids allocating in a way that would effectively penalize units that have already invested in cleaner fuels or other pollution reduction measures that will continue to deliver important emission reductions under this rulemaking. The approach selected in the final rule generally does not penalize such units and is thus generally fuel-neutral and control-neutral in its allocation determinations.

- EPA finds that the selected approach maximizes transparency and clarity of allowance allocations. EPA has already made public the historic heat input and historic emissions data on which this approach is based, and its application to calculate unit-level allocations in each state under that state’s emission budgets finalized in this Transport Rule can be relatively easily replicated.

- EPA finds that quality-assured historic CEMS-quality data used to implement this approach represent the most technically superior data available to EPA at the time of this rulemaking for calculating unit-level allocations. The selected approach relies on unmodified historic data reported directly by the vast majority of covered sources, whose designated representatives have already attested to the validity and accuracy of this data. EPA agrees with commenters that allowance allocations should be based on quality-assured data to the maximum extent possible. This approach uses the most accurate data currently available to EPA.

- Heat-input based approaches were used to allocate allowances under both the NO<sub>x</sub> Budget Trading Program and the Acid Rain Program. Allocation under these programs was readily and

easily administered, and the programs achieved or exceeded their environmental goals. The selected approach’s use of heat input as a basis for allocations builds on prior legislative and administrative approaches to allowance allocations for trading programs.

- EPA also finds that the selected approach’s addition of a constraint to heat input-based allocations where such allocations would otherwise exceed a unit’s maximum historic emissions is a reasonable extension of a heat input-based allocation approach. The Transport Rule trading programs are established to achieve overall emission reductions in each covered state. As a group, covered sources within each state must make the necessary reductions under these programs. In light of each program’s goal to reduce each state’s overall emissions, it is logical and consistent with that goal that the starting point for each source under these programs—*i.e.*, the initial allocations of shares of the state budget to covered units—be an amount of allowances no greater than each unit’s maximum historic emissions. Under the trading programs, any source may emit a ton of SO<sub>2</sub> or NO<sub>x</sub> for which it holds a corresponding allowance, which it may acquire either by initial allocation or by subsequent purchase, to the extent consistent with the assurance provisions (discussed elsewhere in this preamble) that ensure achievement of the requisite overall reductions in each state. Consequently, the initial allocations to the units at each source are the starting point for each source’s efforts to comply with the allowance-holding and assurance provision requirements, but do not determine the source’s strategies for compliance and ultimate level of emissions. EPA believes that a starting point of unit-level heat input-based allocations constrained not to exceed each specific units’ maximum historic emissions is reasonable and consistent with the program goals of reducing overall emissions in each state: Each existing unit is allocated an amount that either reflects reduced unit emissions or does not exceed historic emissions, and, from that starting point, the units, as a group, reduce overall emissions to the level required for each state. Conversely, EPA believes that a starting point allocating some units more than they have ever emitted would be illogical in programs aimed at reducing overall emissions.

EPA believes that this selected allocation methodology for the final Transport Rule FIPs is within its authority under the Clean Air Act. Section 110(a)(2)(D)(i)(I) of the CAA

requires that emissions “within a state” that significantly contribute to nonattainment or interfere with maintenance in another state be prohibited. In the final Transport Rule, EPA analyzed each individual state’s significant contribution and interference with maintenance and calculated budgets that represent each state’s emissions after the elimination of prohibited emissions in an average year. The methodology used to allocate allowances in a state budget to individual units in the state has no impact on that state’s budget or on the requirement that the state’s emissions not exceed that budget plus variability. Regardless of the allocation methodology used, the state’s responsibility for eliminating its significant contribution and interference with maintenance remains unchanged. This is reflected by the fact that allocations under each state’s budget, regardless of how they are made, cannot change that state’s budget. In sum, the allocation methodology has no impact on the final rule’s ability to satisfy the statutory mandate of CAA section 110(a)(2)(D)(i)(I) to eliminate significant contribution to nonattainment and interference with maintenance.

Consistent with its broad authority in CAA sections 110(a)(2)(D)(i)(II) and 302(y), EPA believes that data quality, fuel-neutrality, control-neutrality, transparency, clarity, consistency with program goals, and successful experience in previous trading programs are reasonable factors on which to base the selection of an allowance allocation methodology for existing units for the final Transport Rule. EPA believes that the transparency and clarity of this allocation approach builds credibility with the public that the government is distributing a public resource—*i.e.*, allowances—precisely as stated in this rulemaking, with clear execution that can be relatively easily verified.

EPA also believes that the final Transport Rule’s heat input-based approach for existing units is consistent with the goals of the Clean Air Act because it allocates allowances to existing units on the basis of a neutral factor that does not advantage or disadvantage a unit based on what fuel the unit burns or whether or not a unit has installed controls in anticipation of these regulations. In contrast, allocations under the proposal’s emission-based methodology would give a greater share of allowances to units with higher emission rates, which are generally responsible for a greater share of a state’s total emissions. Because these higher-emitting rate units are generally responsible for a greater

share of emissions, it follows that they are also responsible for a greater share of a state’s significant contribution to nonattainment and interference with maintenance. The proposal’s emission-based allocation methodology would disadvantage one of two otherwise identical existing units if it invested in emission reductions in anticipation of the Clean Air Interstate Rule or this final Transport Rule.

The heat-input allocation methodology selected for the final Transport Rule does not have this flaw. In contrast to the proposal’s emission-based allocation approach, the heat input allocation methodology selected by EPA yields a smaller proportion of allowances relative to emissions to higher-emission-rate units and a higher proportion of allowances relative to emissions to lower-emission-rate units. For example, assume that in a state with two units and in a baseline year, Unit A combusts 100 mmBtu of heat input and emits 1,000 tons while Unit B combusts 100 mmBtu of heat input and emits only 500 tons. Assume also that this state’s future Transport Rule emissions budget for this pollutant is only 500 tons. Because Units A and B each make up an even share of historic heat input for the state, the final rule’s heat input-based approach would allocate the same share of allowances (250 tons) to each unit. In this example, Unit A’s initial allocation of 250 is a smaller proportion of its historic emissions (25 percent of its baseline 1,000-ton emissions), while Unit B’s initial allocation of 250 is a larger proportion of its historic emissions (50 percent of its baseline 500-ton emissions). Therefore, Unit B’s ability to emit fewer tons per mmBtu of heat content used for generating electricity (as compared with Unit A) results in Unit B receiving a larger proportion of its historic emissions as an initial allocation share than Unit A receives.

This relative distributional pattern yielded is consistent with the goals of CAA section 110(a)(2)(D)(i)(I) because under this distribution, higher-emitting units, which are responsible for a greater share of the state’s significant contribution to nonattainment and interference with maintenance, would require relatively more allowances in order to cover their pre-existing emissions than would lower-emitting units. EPA believes this initial allocation pattern is an appropriate reflection of the goals of CAA section 110(a)(2)(D)(i)(I).

The heat input-based allowance methodology selected by EPA is fuel-neutral, control-neutral, transparent, based on reliable data, and similar to the

allocation methodologies used in the NO<sub>x</sub> SIP Call and Acid Rain Program. For all these reasons, EPA determined that it is appropriate to use a heat input-based allocation methodology in this rule.

In addition, this allocation methodology is similar to an output-based allocation approach, which would base allocations on the quantity of electricity generated (rather than energy content combusted) and would also be fuel-neutral, control-neutral, and able to reward generation units that operate the most efficiently. Many state and industry commenters advocated using an output-based approach due to its reported strong value in promoting efficiency. However, at this time EPA does not have access to unit-level output data that is as quality-assured or comprehensive as its data sets on heat input across the units considered. Therefore, EPA is using a heat input-based approach under the Transport Rule in part due to its ability to serve as a reasonable proxy for an output-based standard using the most quality-assured data that EPA has to date.

In the NODA, EPA noted that final state budgets and allocations may differ from the proposed budgets and allocations because EPA was still in the process of updating its emission inventories and modeling in response to public comments, including comments on IPM. Thus, unit-level allocations in the NODA provided an indication of the proportional share of a state’s budget that would be allocated to individual existing units if the alternative methodologies were used. The allocations made final today are based on budgets that reflect the updated modeling and comments received during the comment period.

#### c. Calculation of Existing Unit Allocations Under the Final Transport Rule FIPs

Allocations under this final methodology for each existing unit are determined by applying the following steps.

1. For each unit in the list of potential existing Transport Rule units, annual heat input values for the baseline period of 2006 through 2010 are identified using data reported to EPA or, where EPA data is unavailable, using data reported to the Energy Information Administration (EIA). For a baseline year for which a unit has no data on heat input (*e.g.*, for a baseline year before the year when a unit started operating), the unit is assigned a zero value. (Step 2 explains how such zero values are treated in the calculations.) The allocation method uses a 5-year

baseline to approximate a unit’s normal operating conditions over time.

2. For each unit, the three highest, non-zero annual heat input values within the 5-year baseline are selected and averaged. Selecting the three highest, non-zero annual heat input values within the five-year baseline reduces the likelihood that any particular single year’s operations (which might be negatively affected by outages or other unusual events) would determine a unit’s allocation. If a unit does not have three non-zero heat input values during the 5-year baseline period, EPA averages only those years for which a unit does have non-zero heat input values. For example, if a unit has only reported data for 2008 and 2009 among the baseline years and the reported heat input values are 2 and 4 mmBtus, respectively, then the unit’s average heat input used to determine its pro-rata share of the state budget is  $(2+4)/2 = 3$ .

3. Each unit is assigned a baseline heat input value calculated as described in step 2, above, referred to as the “3-year average heat input.”

4. The 3-year average heat inputs of all covered existing units in a state are summed to obtain that state’s total “3-year average heat input.”

5. Each unit’s 3-year average heat input is divided by the state’s total 3-year average heat input to determine that unit’s share of the state’s total 3-year average heat input.

6. Each unit’s share of the state’s total 3-year average heat input is multiplied by the existing-unit portion of the state budget (*i.e.*, the state budget minus the state’s new unit set-aside and, if applicable, minus the Indian country new unit set-aside) to determine that unit’s initial allocation.

7. An 8-year (2003–2010) historic emissions baseline is established for SO<sub>2</sub>, NO<sub>x</sub>, and ozone-season NO<sub>x</sub> based on data reported to EPA or, where EPA data is unavailable, based on EIA data. This approach uses this 8-year historic emissions baseline in order to capture the unit-level emissions before and after the promulgation of CAIR.

8. For each unit, the maximum annual historic SO<sub>2</sub> and NO<sub>x</sub> emissions are identified within the 8-year baseline. Similarly, the maximum ozone season

NO<sub>x</sub> emissions from the 8-year baseline for each unit are identified. These values are referred to as the “maximum historic baseline emissions” for each unit.

9. If a unit has an initial historic heat-input based allocation (as determined in step 6) that exceeds its maximum historic baseline emissions (as determined in step 8), then its allocation equals the maximum historic baseline emissions for that unit.

10. The difference (if positive) under step 9 between a unit’s historic heat-input-based allocation and its “maximum historic baseline emissions” is reapportioned on the same basis as described in steps 1 through 6 to units whose historic heat-input-based allocation does not exceed its maximum historic baseline emissions. Steps 7, 8, and 9 are repeated with each revised allocation distribution until the entire existing-unit portion of the state budget is allocated. The resulting allocation value is rounded to the nearest whole ton using conventional rounding.

Table VI.D–1 below provides an illustrative application of the steps 1–10 in a hypothetical state.

TABLE VI.D–1—DEMONSTRATION OF ALLOCATIONS USING FINAL ALLOCATION METHODOLOGY IN A THREE-UNIT STATE WITH AN 80-TON STATE BUDGET

	Steps 1–6	Steps 7, 8, 9	Steps 1–9 reiterated	Step 10
	Initial historic heat input-based allocation	Maximum historic baseline emissions	Revised historic heat input-based allocation	Final allocation
Unit A .....	20	16	N/A	16
Unit B .....	30	50	32	32
Unit C .....	30	50	32	32

2. Allocations to New Units

EPA is finalizing—similar to the proposal (75 FR 45310)—an approach to allocate emission allowances to new units from new unit set-asides in each state. A “new unit” may be any of the following: (1) A covered unit commencing commercial operation on or after January 1, 2010; (2) any unit that becomes a covered unit by meeting applicability criteria subsequent to January 1, 2010; (3) any unit that relocates into a different state covered by the Transport Rule;<sup>81</sup> and (4) any existing covered unit that stopped operating for 2 consecutive years but

resumes commercial operation at some point thereafter.

The proposed Transport Rule would have required that owners and operators initially request allowances from the new unit set-aside when the unit first became eligible for an allocation. EPA now believes that it can identify which units become eligible and when they become eligible, based on information provided in other submissions (*e.g.*, certificates of representation, monitoring system certifications, and quarterly emissions reports) that the final rule already requires such units to make to EPA. EPA concludes that requiring owners and operators to submit requests of new unit set-aside allocations would impose an unnecessary burden on the owners and operators, as well as on EPA, and therefore EPA has removed this requirement in the final rule.

The following sections describe the methodology in the final Transport Rule for allocating to new units, how EPA determined the size of new unit set-asides in the final rule, and how EPA has provided for allocations to new units that locate in Indian Country.

a. New Unit Allocation Methodology

The proposal’s new unit allocation methodology did not provide any allocation for a new unit’s first control period of commercial operation. Some commenters expressed concern about the lack of new unit allocations the first year of commercial operation. In order to address this concern, EPA is modifying the new unit allocation methodology in this final rule to include allocations to new units for the first control period in which the units are in commercial operation, as well as for control periods in subsequent years.

<sup>81</sup> Existing- or new-unit allocations drawn from the budget of the relocated unit’s original state are replaced by new unit set-aside allocations from the budget of the unit’s relocation state in order to generally ensure that allocations are drawn from the correct state budget.

The final rule's allocation to new units is performed in two "rounds." The first round is the same as the new unit allocation procedures in the proposal (except for elimination of the requirements that owners and operators request the allocations) and occurs during the control period for which the allocations are made. These first round allocations are based on new unit emissions during the prior control period and are recorded in allowance accounts in the Allowance Management System for the units by August 1 of each control period. For example, for the 2012 vintage year, "first-round" allocations would be made to new units by August 1, 2012 based on their emissions in the 2011 control period (as monitored and reported in accordance with Part 75 of the Acid Rain Program regulations). If the new unit set-aside is insufficient to accommodate first round allocations reflecting all new units' prior control period emissions, the first round allocations are made pro rata to new units based on their share of total new unit emissions in the prior control period.

The second round of allocations accommodates new units that come online during the control period for which the allocations are made and did not therefore receive any allocation in the first round. The second round also accommodates new units that come online partway into the prior control period and therefore received an allocation in the first round that did not extend to cover operations in a full control period. This second round of new unit allocation is therefore applicable only to new units coming online either during the control period of the allocation or during the control period immediately prior. New units coming online earlier than the previous control period only receive first-round allocations from the new unit set-asides, as first-round allocations to those units are based on operational data spanning an entire control period.

Second-round allocations are based on new unit emissions during the same control period as the vintage year of the allowances allocated. For example, for the 2012 vintage year, "second-round" allocations are based on the difference between the new unit's emissions in the 2012 control period and the new unit allocation (if any) that the unit received in the first round of allocations. For a unit coming online in 2012, this amount equals its total emissions during the 2012 control period. For a unit coming online in 2011, this amount equals its incremental emissions in 2012 beyond

its emissions in 2011, as such a unit would have already received a first-round allocation from the new unit set-aside based on its emissions in 2011. Second-round allocations are recorded in allowance accounts by November 15 for the NO<sub>x</sub> ozone season trading program (ahead of the December 1 compliance deadline) and by February 15 of the following calendar year for NO<sub>x</sub> and SO<sub>2</sub> annual trading programs (ahead of the March 1 compliance deadline).

This methodology only allocates in the second round whatever allowances remain in the new unit set-asides after the first-round allocations have been recorded. If the new unit set-aside available for second round allocations is insufficient to accommodate allocations based on the difference between control period emissions and any first round allocations for the units involved, then the second round allocations are made pro rate to the new units based on their share of the total of such differences.

#### b. Determination of New Unit Set-Asides

The proposed Transport Rule identified new units using a threshold online date of January 1, 2012, whereas the final Transport Rule uses a threshold online date of January 1, 2010. As explained above, EPA adjusted this cutoff date because the final Transport Rule's allocation methodology for existing units requires that EPA possess at least 1 full year of historic data in order to calculate allocations. As a consequence, EPA recognizes that the proposal's methodology to determine the size of the new unit set-asides based only on new EGUs forecast by the model would fail to account for known EGUs that have come online, or are planned to come online, after January 1, 2010. Therefore, EPA has modified its approach to determining the size of the new unit set-asides in the final rule to account for both "potential" units (*i.e.*, those that are not yet planned or under construction but are projected by modeling to be built) and "planned" units (*i.e.*, those that are known units with planned online dates after January 1, 2010). EPA uses the distinction between "potential" and "planned" new units to determine the ultimate size of each state's new unit set-aside (as a percentage of that state's budgets for each pollutant covered); however, the new unit allocation methodology described above applies the same to "potential" and "planned" new units.

The first step of EPA's analysis to determine the new unit set-asides accounts for likely future emissions

from potential units, and its methodology is taken directly from the Transport Rule proposal but reflects updated modeling (see "Allowance Allocation to Existing and New Units Under the Transport Rule Federal Implementation Plans" TSD for detailed findings). This analysis informed EPA's decision to establish a minimum new unit set-aside size of 2 percent of each state's budget for each pollutant that is configured to accommodate future emissions from potential units.

For the final rule, EPA augmented its new unit set-aside determination to account for "planned" units through an additional step. Because the location of these "planned" units is known and identified in EPA modeling, this second step is a state-specific modification of the size of the new unit set-asides. That is, EPA only increased new unit set-asides above the 2 percent minimum established in the first step for states that had additional known units coming online between January 1, 2010, and January 1, 2012.

The increases made to the new unit set-asides for these planned units reflect the projected emissions from these units. Therefore, if the expected emissions of a given pollutant from all "planned" new units in a given state were equal to 3 percent of that state's budget for that pollutant, then EPA added that amount to the base 2 percent new unit set-aside (creating a hypothetical new unit set-aside of 5 percent for that pollutant in that state). See "Allowance Allocation to Existing and New Units Under the Transport Rule Federal Implementation Plans" TSD for detailed results showing how EPA determined the size of each new unit set-aside reflecting the application of both of the steps described above. This approach to determining the size of state new unit set-asides is a logical outgrowth of the proposal, the NODA on allowance allocations, and updated modeling results. In fact, EPA received comments that using a January 1, 2010 cutoff date for distinguishing between existing and new units would result in the new unit set-aside, as proposed, being insufficient to meet the needs of units already under construction. EPA believes that the approach adopted in the final rule results in new unit set-asides that reasonably accommodate the foreseeable emissions from both planned and potential new units in each state.

The new unit allocation percentages for each state are shown in Table VII.D.2-1.

TABLE VII.D.2-1—PERCENTAGE OF STATE EMISSION BUDGETS FOR ALLOWANCES IN STATE NEW UNIT SET-ASIDES

	Annual SO <sub>2</sub>	Annual NO <sub>x</sub>	Ozone-season NO <sub>x</sub>
Alabama	2%	2%	2%
Arkansas			2%
Florida			2%
Georgia	2%	2%	2%
Illinois	5%	8%	8%
Indiana	3%	3%	3%
Iowa	2%	2%	
Kansas	2%	2%	
Kentucky	6%	4%	4%
Louisiana			3%
Maryland	2%	2%	2%
Michigan	2%	2%	
Minnesota	2%	2%	
Mississippi			2%
Missouri	2%	3%	
Nebraska	4%	7%	
New Jersey	2%	2%	2%
New York	2%	3%	3%
North Carolina	8%	6%	6%
Ohio	2%	2%	2%
Pennsylvania	2%	2%	2%
South Carolina	2%	2%	2%
Tennessee	2%	2%	2%
Texas	5%	3%	3%
Virginia	4%	5%	5%
West Virginia	7%	5%	5%
Wisconsin	5%	6%	

c. Procedures for Allocating New Unit Set-Asides

For the first round of new unit set-aside allocations, the Administrator will promulgate a notice of data availability informing the public of the specific new unit allocations and provide an opportunity for submission of objections on the grounds that the allocations are not consistent with the requirements of the relevant final rule provisions. A second notice of data availability will subsequently be promulgated in order to make any necessary corrections in the specific new unit allocations. As discussed elsewhere in this preamble, the final rule establishes a different schedule for promulgation of these notices of data availability than the proposed rule. In particular, a single set of deadlines (*i.e.*, for the first notice in the first round of allocations, June 1 of the year for which the new unit allocations are described in the notice and, for the second notice of the first round, August 1 of that year) for promulgation of the notices is established for all of the Transport Rule trading programs. EPA believes that these deadlines will provide sufficient time for EPA to obtain final emissions data for the prior year for the units involved and to calculate the allocations and promulgate the notices. Further, the approach of using the same deadline for all of the Transport Rule trading programs will simplify EPA's

implementation and reduce the complexity of the process for source owners and operators.

For the second round of new unit set-aside allocations, the Administrator will also promulgate two notices of data availability. However, the deadlines for the notices differ for the NO<sub>x</sub> ozone season trading program and for the SO<sub>2</sub> and NO<sub>x</sub> annual trading programs because control period emissions data (used in making second round allocations) become available sooner, and the compliance deadline for holding allowances covering emissions is sooner, in the NO<sub>x</sub> ozone season trading program. The control period in the NO<sub>x</sub> ozone season program ends on September 30, and fourth quarter emissions reports must be submitted to EPA by October 30, while the control periods in the SO<sub>2</sub> and NO<sub>x</sub> annual programs end on December 31 and fourth quarter emission reports are due by January 30. Further, in order for the second round allocations to be available to be used for compliance with the allowance-holding requirement, the second round needs to be completed before the compliance dates, which are December 1 in the NO<sub>x</sub> ozone season program and March 1 in the SO<sub>2</sub> and NO<sub>x</sub> annual programs. Consequently, for the NO<sub>x</sub> ozone season program the Administrator will promulgate by September 15 a notice of data availability identifying the units eligible

for second round allocations and by November 15 a second NODA of the list of eligible units and their second round allocations, which will also be recorded in the allowance accounts by that date. The comparable deadlines for the SO<sub>2</sub> and NO<sub>x</sub> annual programs are December 15 and February 15. EPA believes that these deadlines will provide sufficient time for EPA to identify the units and obtain their needed emissions data and to calculate the allocations and promulgate the notices.

d. Addition of Allowances to New Unit Set-Asides

As discussed elsewhere in this preamble, EPA proposed that, if a unit with an existing-unit allocation does not operate for 3 consecutive years, the allowances that would otherwise have been allocated to that unit, starting in the seventh year after the first year of non-operation, would be allocated to the new unit set-aside for the state in which the retired unit is located. EPA is retaining this provision in the final rule but is changing the time of non-operation to 2 years and the time of allowance allocation to a non-operating unit to 4 years. Starting in the fifth year of non-operation, allowances will be allocated to the new unit set-aside for the state in which the non-operating unit is located.

EPA received comments that the new unit set-asides were not sufficient to

encourage the operation of new units. One commenter suggested that allowance allocations should cease after 3 years of non-operation because the financial incentive gained from receiving allowances beyond the 3-year period is insignificant relative to operating and fuel costs. Another commenter said that providing allowances to non-operating units is unnecessary and distorts the market.

In addition to increasing the size of the new unit set-aside in this final rule, as described above, EPA is terminating existing unit allocations starting in the fifth year after the unit does not operate for 2 consecutive years and reallocating to the new unit set-aside the allowances that the unit otherwise would have received for the fifth and subsequent years in order to make them available for new units in the state. This approach allows the new unit set-asides to grow over time.

e. Allocations to New Units Locating in Indian Country

EPA received several comments on the proposed rule that it did not explicitly address the distribution of allowances to potential new units built in Indian country. EPA recognized this concern and requested comment on this topic in the January 7, 2011 NODA.

In the final rule, EPA is providing a mechanism to make allowances available in the future for new units built in Indian country. The final rule establishes an Indian country new unit set-aside for each pollutant in each state whose borders encompass Indian country (*i.e.*, Florida, Iowa, Kansas, Louisiana, Michigan, Minnesota,

Mississippi, Nebraska, New York, North Carolina, South Carolina, Texas, and Wisconsin). EPA will retain administration of these Indian country new unit set-asides as part of the Transport Rule trading programs whether or not a Transport Rule state elects to modify or replace the Transport Rule FIPs through approved SIP revisions. EPA does not create Indian country new unit set-asides for states lacking Indian country within their borders.

EPA determined the size of each Indian country new unit set-aside by calculating the ratio of square mileage of Indian country to the square mileage of the state within whose borders Indian country is located. This calculation yielded a maximum percentage of 5 percent when assessing all of the states encompassing Indian country subject to the final Transport Rule; this is referred to as the “5 percent Indian country factor” below. To determine the maximum percentage, EPA used the American Indian Reservations/Federally Recognized Tribal Entities dataset, which contains data for the 562 federally recognized tribal entities in the contiguous U.S. and Alaska. EPA accessed the data to analyze the Transport Rule region and compare the square miles of Indian country with the square miles of the Transport Rule state that includes the Indian country. EPA then took the highest percentage as the number to be applied across all states with Indian country to determine the size of the Indian country new unit set-aside pertinent to that state’s budgets under the Transport Rule. EPA chose to use the maximum percentage (5 percent)

from the Indian country analysis to determine the Indian country set-aside for each state on the basis that this approach would reserve a reasonable number of allowances from each state’s budget for potential allocation to new units that may locate in Indian country within that state’s borders. Any allowances from the Indian country new unit set-aside that are not allocated in a given control period are redistributed into the state’s new unit set-aside. As discussed above, any allowances not allocated from that new unit set-aside are redistributed to existing units based on the existing units’ share of the total existing unit allocations.

To calculate the size of each tribal new unit set-aside, EPA applied this 5 percent Indian country factor to the portion of the state’s new unit set-aside originally determined by accounting for “potential” new units, which as described above was set at 2 percent of each pollutant’s budget in each state. Therefore, the Indian country new unit set-aside is 5 percent of 2 percent of a state’s budget, or 0.1 percent of that total state budget. EPA did not apply the 5 percent Indian country factor to the state-specific planned unit portion of each state’s new unit set-aside because the planned unit portion is determined using projected emissions from specific, known units coming online after January 1, 2010, and none of these known units are located in Indian country.

The Indian country new unit set-asides in the following Transport Rule states with Indian Country are shown in Table VII.D.2–2.

TABLE VII.D.2–2—NEW UNIT SET-ASIDE ALLOWANCES FOR INDIAN COUNTRY  
[Tons]

	SO <sub>2</sub> 2012– 2013	SO <sub>2</sub> 2014 and beyond	Annual NO <sub>x</sub> 2012– 2013	Annual NO <sub>x</sub> 2014 and beyond	Ozone- season NO <sub>x</sub> 2012– 2013	Ozone- season NO <sub>x</sub> 2014 and beyond
Florida .....					28	28
Iowa .....	107	75	38	38		
Kansas .....	42	42	31	26		
Louisiana .....					13	13
Michigan .....	229	144	60	58		
Minnesota .....	42	42	30	30		
Mississippi .....					10	10
Nebraska .....	65	65	26	26		
New York .....	27	19	18	18	8	8
North Carolina .....	137	58	51	42	22	18
South Carolina .....	89	89	32	32	14	14
Texas .....	244	244	134	134	63	63
Wisconsin .....	80	40	32	30		

Under the FIPs, EPA allocates allowances from Indian country new unit set-asides in essentially the same manner as it allocates allowances from state new unit set-asides. The approach for identifying, and determining the number of allowances allocated to, new units in Indian country is the same as the approach for identifying and determining allocations for non-Indian country new units covered by the state new unit set-aside, and allocations are made in two rounds using the same schedules for promulgation of notices of data availability. However, as discussed above, unallocated allowances in the Indian country set-asides are handled differently from unallocated allowances in the state new unit set-asides in that unallocated Indian country new unit set-aside allowances are first transferred back into the state new unit set-aside and then, if still not allocated to new units, are distributed to existing units in the state. EPA believes that the above-described approach in establishing and handling the Indian country new unit set-asides and state new unit set-asides is a reasonable way of making a sufficient amount of allowances available for new units in the state and Indian country located in the state and ensuring that the entire state budget is available to either new or existing units in the state and Indian country. EPA retains administration of these Indian country new unit set-asides (and, of course, the portions of state budgets that comprise these set-asides) as part of the Transport Rule trading programs even if a state elects to modify or replace the Transport Rule FIPs through approved SIP revisions. EPA continues to manage and distribute the Indian country new unit set-aside allowances in the same manner as under the FIPs. Unallocated allowances in the Indian country new unit set-aside will be returned to the portion of the state budget allocated under the approved SIP's allocation provisions. EPA believes that this approach is reasonable because EPA, rather than the states, has the authority and responsibility of administering the Transport Rule with regard to new units that locate in Indian country.

#### *E. Assurance Provisions*

To ensure that the FIPs require the elimination of all emissions that EPA has identified that significantly contribute to nonattainment or interfere with maintenance within each individual state, the Agency is adopting assurance provisions in addition to the requirement that sources hold allowances sufficient to cover their emissions. These assurance provisions limit emissions from each state to an

amount equal to that state's trading budget plus the variability limit for that state (*i.e.*, the state assurance level). As discussed in section VI of this preamble, this variability limit takes into account the inherent variability in baseline EGU emissions and recognizes that state emissions may vary somewhat after all significant contribution to nonattainment and interference with maintenance are eliminated. This approach also provides sources with flexibility to manage growth and electric reliability requirements, thereby ensuring the country's electric demand will be met, while meeting the statutory requirement of eliminating significant contribution to nonattainment and interference with maintenance.

Starting in 2012, EPA is establishing, as part of the FIPs, limits on the total emissions that may be emitted from EGUs at sources in each state. For any single year, the state's emissions must not exceed the state budget with the variability limit allowed for any single year for that state (*i.e.*, the state's 1-year variability limit). In other words, in addition to covered sources being required to hold allowances sufficient to cover their emissions, the total sum of EGU emissions in a particular state cannot exceed the state budget with the state's 1-year variability limit in any 1 year (*i.e.*, the state's assurance level). EPA is not finalizing 3-year variability limits that were included in the proposal for the reasons explained previously in section VI.E of this preamble. The state budgets, variability limits, and state assurance levels for each state are shown in Tables VI.F-1, VI.F-2 and VI.F-3 in section VI.F of this preamble. The basis for the variability limits is also described in section VI.E of this preamble. Additional details may be found in the Power Sector Variability Final Rule TSD in the docket to this rule.

To implement this requirement, EPA first evaluates whether any state's total EGU emissions in a control period exceeded the state's assurance level. If any state's EGU emissions in a control period exceed the state assurance level, then EPA applies additional criteria to determine which owners and operators of units in the state will be subject to an allowance surrender requirement. In applying the additional criteria, EPA evaluates which groups of units at the common designated representative (DR) level had emissions exceeding the respective common DR's share of the state assurance level (regardless of whether the source had enough

allowances to cover its emissions) during the control period.<sup>82</sup>

The requirement that owners and operators surrender allowances under the assurance provisions will be triggered only if two criteria are met: (1) The group of sources and units with a common DR are located in a state where the total state EGU emissions for a control period exceed the state assurance level; and (2) that group with the common DR had emissions exceeding the respective DR's share of the state assurance level. The share of the assurance penalty borne by the owners and operators will be based on the amount by which the total emissions for the units in the group exceed the common DR's share of the state assurance level as a percentage of the total calculated for all such groups of sources and units in the state. Thus, the owners and operators of each such group of sources and units must surrender an amount of allowances equal to the excess of state EGU emissions over the state assurance level multiplied by the owners' and operators' percentage and multiplied by two (to reflect the penalty of two allowances for each ton of the state's excess EGU emissions). See Table VII.E-1 below for an illustrative example.

This approach in the final rule of implementing the assurance provisions on a common designated representative basis contrasts with the approach in the proposed rule of implementing the assurance provisions on an owner basis. In the January 7, 2011 NODA, EPA requested comment on the alternative of basing the assurance provision penalty using common designated representatives, and some commenters supported this alternative. The common designated representative approach is simpler and avoids the need to collect information on percentage ownership (which information is not used in any other provisions of the Transport Rule trading programs).

In addition, the common designated representative approach provides additional flexibility to owners and operators who have only one or a few units in a given state but have the option of selecting a common designated representative with owners and operators of other units in the state. EPA expects companies in various states will readily be able to manage their

<sup>82</sup> A group of one or more sources and units in a state has a common designated representative where the same individual is authorized as the designated representative (not the alternate designated representative) for that group of sources and units as of April 1 immediately following the allowance transfer deadline for the control period involved.



emissions to stay collectively below their state's assurance levels as they track emissions quarterly throughout the year and manage their generation units and pollution control efforts accordingly. However, if the state appears to be approaching its assurance level, this final rule also gives companies the ability to further ensure that they will not have excess emissions by combining multiple units under a common DR. This flexibility allows utilities to re-balance allowances and emissions to mitigate penalty risk if the state violates its assurance level. In a state that does not appear to risk violating its assurance level in a given period, utilities would not need to consider the assurance aspect of selecting DRs. However, EPA anticipates that in the event utilities desire additional certainty or mitigation of assurance penalty risk, they will take advantage of this common DR provision or pursue similar private arrangements with each other to cover their emissions at the lowest possible cost.

While the DR provision could benefit utilities by allowing them to pool their penalty risk, the utilities would still be subject to the antitrust laws. As with any joint venture between competitors, the efficiency benefits of pooling risk would be weighed against any anticompetitive harm associated with DRs.

This new feature in the final rule, in conjunction with the simplifications to the final rule's variability limits described in section VI.E, will give companies under the air quality-assured trading program greater flexibility in each state to determine the most cost-effective pattern of emission reductions while EPA ensures each state meets its assurance level needed to address the significant contribution in each state.

In the January 7, 2011 NODA, EPA also requested comment on continuing to link allocations to assurance provision allowance surrender requirements. Even though the final rule uses a different allowance allocation methodology than the allocation methodology that was proposed, the final rule continues to treat the groups of units with greater emissions than their allocations plus share of state variability as responsible for the state's excess of emissions over the state assurance level. EPA believes that this approach is reasonable because any state that exceeds its state assurance level likely does so because not all units have made the reductions necessary to eliminate the state's contribution to nonattainment or interference with maintenance. Moreover, the groups of units with emissions exceeding their

allocations plus share of variability are the units most likely to have contributed to the state's exceedance of its state assurance level and thus to the state's triggering of the assurance provisions. Consequently, EPA concludes that it is reasonable to penalize owners and operators of those sources and units (grouped by common DR) for the state's exceedance through application of the assurance provision allowance surrender requirement. Some commenters stated that this is a reasonable approach.

While a few commenters suggested alternative approaches to the assurance provisions, EPA believes that the suggested alternatives are not workable and are likely to create implementation problems. These commenters suggested variations of approaches that would have created state-specific and vintage year-specific allowances that would have been traded independently of compliance allowances. These differentiated allowances would have fragmented the allowance markets and made the programs resemble the intrastate trading option that EPA rejected because of market power and other concerns described in the proposal.

The existence of the assurance provisions with significant penalties imposed if a state's emissions exceed the state budget with the variability limit, along with other features of the Transport Rule trading programs discussed below, will ensure that state emissions stay below the level of the budget with the variability limit. In making compliance decisions and determining to what extent to rely on purchased or banked allowances, owners and operators will have to take into account the risk of triggering the assurance provisions in the state involved and of incurring significant assurance provision penalties. The greater the extent to which units sharing a common DR have emissions exceeding the DR units' allocations plus share of the state variability limit, the greater the risk of being subject to the assurance provision penalties.

As discussed previously in section VII.D.2, EPA allocates allowances to a new unit for the control period during which the unit commences commercial operation from the new unit set-aside based on its emissions. In the case where assurance provisions for a state are triggered in the year that a new unit commences operation, the unit's share of the state assurance level is calculated using the unit's allocation from the new unit set-aside plus its proportional share of the variability limit. There is the possibility that a new unit would

receive no allocation for the control period during which the unit commences commercial operation. EPA sees no reasonable basis for disadvantaging owners and operators because they started up a new unit and EPA had no emissions data on which to base an allocation from the new unit set-aside or no allowances were available for the unit in the state's new unit set-aside.<sup>83</sup> For these new units, EPA would use a specific surrogate number to calculate the maximum amount of emissions that the unit would likely have had during that year. The surrogate emission number applies only if the state's assurance provisions are triggered and only in the first year of the new unit's commercial operation for a new unit that did not receive an allocation from the set-aside. The methodology for calculating the surrogate emission number is essentially unchanged from the proposal (75 FR 45313). For more details on capacity factors for new units, see "Capacity Factors Analysis for New Units Final Rule TSD."

These assurance provisions are above and beyond the fundamental requirement for each source to hold enough allowances to cover its emissions in the control period. Failure to hold enough allowances to cover emissions is a violation of the CAA, subject to an automatic penalty and discretionary civil penalties, as described in section VII.F of this preamble.

Several features of the air quality-assured trading programs work in conjunction with the assurance provisions to ensure state emissions do not exceed state assurance levels. The air quality-assured trading programs have: State-specific budgets that do not include the variability limits and that are the basis for allocating allowances in each state so that total allocations in a state cannot exceed the state budget; a requirement that owners and operators of each source hold enough allowances to cover source emissions for each control period; assurance provisions that require owners and operators to hold a significant amount of additional allowances in a state if the assurance provisions are triggered; and additional penalties for failing to hold sufficient allowances under the assurance provisions. The underlying mechanism of cap and trade—with a cap on allowances issued and a requirement to

<sup>83</sup> Some other units (e.g., those units with no data for the 2006–2010 base period) may have a zero allocation for a control period. However, those are highly likely to be units that will continue to operate rarely or not at all and so will incur little or none of the assurance provision penalties.

hold allowances covering emissions—has succeeded, even without assurance provisions, in broadly reducing emissions below allowance allocation levels. The accumulated data, history, and experience from cap and trade programs underscore that emission reduction requirements and environmental and public health goals of the programs have been met and, in many instances, exceeded. Additionally, EPA has now added assurance provisions to ensure that emissions within a state do not exceed the state budget with the variability limitation that eliminates the state’s significant contribution to nonattainment and interference with maintenance in downwind states.

Emissions from a common DR’s group of units in excess of the DR’s share of the state budget with the variability limit are not a violation of the rule or the CAA, but do lead to strict allowance surrender requirements. Specifically, the owners and operators with a common DR will be required to surrender two allowances for each ton of their proportional share of the

exceedance of the state budget with the variability limit. Failing to hold sufficient allowances to meet the allowance surrender requirement will be a violation of the regulations and the CAA and subject to discretionary civil penalties under CAA section 113. Allowances surrendered to meet an assurance provision penalty may be from the year immediately following the control period in which the state assurance level was exceeded (*i.e.*, the year during which the penalty is assessed) or any prior year. Any future vintage allowances beyond the year in which the penalty is assessed may not be used to meet an assurance provision penalty.

This penalty level is a change from the proposal, in which one allowance was to be surrendered for each ton of emissions over the state assurance level. EPA ran an IPM modeling scenario in order to assess the level of penalty that would be sufficient to deter sources from exceeding state assurance levels. According to the model, no state would exceed its assurance level and incur the two-for-one allowance penalty in either

2012 or 2014, although some states emit up to the assurance level. The two-for-one allowance surrender requirement is significant, and EPA believes that this penalty—along with the other elements of the Transport Rule discussed above—will be sufficient to ensure that the state emissions will not exceed the budgets plus the variability limits. See the Assurance Penalty Level Analysis Final Rule TSD for further details of the analysis.

Below are examples of how the penalty will be assessed for four common designated representatives in the same state if the assurance provisions are triggered. In the first case, DR1’s combined units were allowed to emit up to 71 tons of SO<sub>2</sub> (60 \* 118 percent), but actually emitted 75 tons during the control period, or 4 more than their share of the state assurance level. Since the state, as a whole exceeded the state assurance level by 15 tons, DR1’s share of the penalty is 25 percent of the total penalty, or 8 allowances (25 percent of 30).

FIGURE VII.E-1—ASSURANCE PROVISION ALLOWANCE SURRENDER EXAMPLE

	Allowances allocated	Allocation + share of variability	Total emissions	Emissions above allocation	Emissions above allocation + share of variability	Share of state exceedance (%)	Penalty (allowances surrendered)
DR1 .....	60	71	75	15	4	25%	8
DR2 .....	20	24	33	13	9	56%	17
DR3 .....	10	12	15	5	3	19%	6
DR4 .....	10	12	10	0	-2	0%	-
Total .....	100	118	133	33	15	100%	30

DR1, DR2, DR3, and DR4 are all in the same state.  
 State budget plus 18 percent variability limit is 118 tons (100 + 18 = 118).  
 State exceeded its assurance level by 15 tons (133 - 118 = 15).  
 Penalty is 2 allowances per ton over the assurance level (2 × 15 = 30).  
 Some numbers may not add up due to rounding.

In the proposal, EPA took comment on whether assurance provisions should be implemented starting in 2012 or 2014. While a number of commenters supported the proposal to start in 2014, EPA received several comments making the case that starting assurance provisions in 2012 would be more compatible with the Court’s opinion in *North Carolina*, which emphasized EPA’s obligation to require elimination of emissions within the states that significantly contribute to nonattainment or interfere with maintenance. In this final rule, EPA makes the assurance provisions effective starting in 2012 because this approach provides even further assurance, consistent with *North Carolina*, that each state’s prohibited emissions will be

eliminated from the start of the Transport Rule trading programs.

*F. Penalties*

Under the final Transport Rule FIPs (like under the proposed rule), the owners and operators of each covered source must hold, as of the allowance transfer deadline, an allowance for each ton of SO<sub>2</sub> or NO<sub>x</sub> emitted by the source and are subject to penalties if they fail to comply with this allowance-holding requirement.

In particular, the owners and operators must hold in the source’s compliance account in the Allowance Management System enough allowances issued for the respective Transport Rule annual trading program (SO<sub>2</sub> Group 1, SO<sub>2</sub> Group 2, or annual NO<sub>x</sub> program) to cover the annual emissions of the

relevant pollutant from all covered units at the source. The allowances must have been issued for the year in which the emissions occurred or a prior year. If the owners and operators fail to meet this allowance-holding requirement, they must provide—for deduction by the Administrator from the source’s compliance account—one allowance as an offset, and one allowance as an excess emissions penalty, for each ton of emissions (*i.e.*, excess emissions) in excess of the amount of allowances held. The allowances surrendered for the excess emissions penalty must be allocated for the control period in the year immediately following the year when the excess emissions occurred or for a control period in any prior year. The offset and the excess emissions penalty are automatic requirements in

that they must be met without any further action by EPA (e.g., any additional proceedings) regardless of the reason for the occurrence of the excess emissions. In addition, each ton of excess emissions, as well as each day in the averaging period (i.e., the control period of one calendar year), constitute a violation of the CAA, and the maximum discretionary civil penalty is \$25,000 (inflation-adjusted to \$37,500 for 2010) per violation under CAA section 113. This means that, if a source has emissions in excess of allowances held for the source as of the allowance transfer deadline for a control period, the number of tons of excess emissions multiplied by the total number of days in that control period and multiplied by \$25,000 (inflation adjusted) equals the maximum discretionary civil penalty for that occurrence of excess emissions.

For the ozone-season NO<sub>x</sub> trading program, the same provisions apply as for an annual program, except that the averaging period (i.e., the control period) is the ozone season, not a calendar year. Consequently, the relevant emissions are for an ozone season, the allowances usable to meet the allowance-holding requirement are allowances issued for Transport Rule ozone-season NO<sub>x</sub> trading program for the ozone season involved or a prior ozone season, and the number of days used in calculating the maximum civil penalty is the number in the ozone season.

Commenters expressed concern that the proposed FIPs expressly stated that, for purposes of determining the maximum discretionary civil penalty for failure to meet the allowance-holding requirement, each ton of emissions lacking a held allowance would be a violation and each day in the averaging period involved would be a violation. Some commenters compared the proposed penalty provisions for excess emissions with the excess emissions penalty provisions under the Acid Rain Program and claimed that the proposed penalty provisions differed from the Acid Rain Program provisions and were excessive.

In fact, however, the final FIP provisions concerning discretionary civil penalties are essentially the same as those under the Acid Rain Program, as well as those under the NO<sub>x</sub> Budget Trading Program and the CAIR trading programs. In particular, the Acid Rain Program regulations state that each ton of SO<sub>2</sub> excess emissions constitutes “a separate violation” of the CAA. 40 CFR 72.9(c)(2). Moreover, while the Acid Rain Program regulations do not expressly address that each day in the averaging period (i.e., a calendar year

control period under the Acid Rain Program) constitutes a separate violation when a unit has excess emissions for the calendar year, the courts have addressed this question. In decisions applying the discretionary civil penalty provisions in section 309(d) of the Clean Water Act, which are analogous to the civil penalty provisions in CAA section 113, the courts have interpreted the provisions to mean that, when a source violates the emission limitation for a multi-day control period, the source has a violation for each day in the control period, as well as for each ton of excess emissions on each such day. See, e.g., *Chesapeake Bay Foun. v. Gwaltney of Smithfield*, 791 F.2d 304, 313–15 (4th Cir. 1986), *Atlantic States Legal Foun. v. Tyson Foods*, 897 F.2d 1128, 1139–40 (11th Cir. 1990), and *U.S. v. Allegheny Ludlum Corp.*, 366 F.3d 164, 169 (3d Cir. 2004). As noted by the courts, the treatment of each ton and each day as a separate violation is used for purposes of setting the maximum discretionary civil penalty. Because CAA section 113 sets the maximum civil penalty, EPA, of course, has the discretion to tailor the penalty amount that it seeks in any specific occurrence of excess emissions to reflect the circumstances of that excess emission occurrence. See 42 U.S.C. 7413(b) (stating that the Administrator may commence a civil action “to assess and recover a civil penalty of not more than \$25,000 per day for each violation”). Moreover, when a district court imposes a civil penalty, the court “retains discretion to assess a penalty much smaller than the maximum, as the situation requires.” *Chesapeake Bay*, 791 F.2d at 316. In addition, the Acid Rain Program regulations state that any allowance deduction, excess emission penalty, or interest under the Acid Rain Program regulations “shall not affect liability” of the owners and operators “for any additional fine, penalty, or assessment, or their obligation to comply with any other remedy, for the same violation, as ordered under the [CAA],” including under CAA section 113 providing for discretionary civil penalties. 40 CFR 77.1(b). In summary, under the Acid Rain Program, each ton of excess emissions and each day in the averaging period (i.e., the calendar year) constitute a violation, the resulting number of violations times \$2,000 is the maximum civil penalty for violating owners and operators, and EPA has the discretion to impose a civil penalty at or below such maximum, in addition to the automatic requirement to surrender one allowance and pay \$2,000 (inflation adjusted) for each ton of excess emissions.

The final FIPs take an analogous approach to that under the Acid Rain Program. Specifically, the final FIPs state both that each ton of excess emissions is a violation of the CAA and that each day in the averaging period (i.e., a calendar year under the annual programs and the ozone season under the ozone-season program) is a violation. Moreover, the imposition of civil penalties at or below the maximum amount resulting from the maximum penalty calculation is in addition to the automatic allowance surrender and penalty totaling 2 allowances per ton of excess emissions. Thus, commenters’ assertion that the approach in the final FIPs is inconsistent with the approach in the Acid Rain Program is incorrect. Moreover, EPA has taken this same general approach in two other trading programs (i.e., the NO<sub>x</sub> Budget Trading Program and the CAIR trading programs), whose regulations explicitly state that each ton and each day of the averaging period constitute a violation. See 40 CFR 96.54(d)(3) (NO<sub>x</sub> Budget Trading Program); and 40 CFR 96.106(d) (CAIR).

In any event, EPA maintains that the approach of treating each excess emission ton and each day in the averaging period as a violation for purposes of calculating the maximum discretionary civil penalty is reasonable. Some commenters suggested that only the days on which a source’s cumulative control period emissions exceed the amount of allowances that the source then holds for that control period should be treated as a violation. However, this suggested approach makes little sense in the context of the Transport Rule trading programs.

In order to provide owners and operators compliance flexibility, the Transport Rule trading programs do not require source owners and operators to hold any amount of allowances to cover emissions until the allowance transfer deadline, no matter what the source’s cumulative control period emissions are before that deadline. The commenters’ approach of comparing—each day, cumulative emissions and allowances held—for purposes of calculating maximum civil penalties would be inconsistent with the flexibility that EPA intends to provide owners and operators. For example, under the commenters’ suggested approach, owners and operators that buy or sell allowances in the allowance market or hold allowances in a company-wide account, do not transfer allowances into their source’s compliance account until just before the allowance transfer deadline, and end up with some excess emissions for the calendar year would

face a significantly higher maximum civil penalty than owners and operators that every day increase the amount of allowances held in their source's compliance account as the source's cumulative emissions increase and end up with the same amount of excess emissions for the calendar year. In short, the commenters' approach would penalize owners and operators that use some of the compliance flexibility that the trading programs are intended to provide.

EPA also maintains that it is reasonable to both impose the automatic allowance surrender and penalty provisions and to retain the discretion to impose civil penalties for the same occurrence of excess emissions. This approach encourages compliance with the allowance-holding requirement by ensuring that violating owners and operators are penalized automatically (*i.e.*, without any further administrative or judicial proceedings, except for appeals) and that EPA can seek additional penalties where the circumstances warrant discretionary civil penalties. In fact, the Acid Rain Program, for which CAA Title IV mandated this approach, has achieved a very high level of compliance with the requirement to hold allowances covering SO<sub>2</sub> emissions and therefore resulted in major reductions in utility SO<sub>2</sub> emissions. *See* 42 U.S.C.7651j(a). Similarly, the NO<sub>x</sub> Budget Trading Program and CAIR trading programs, which took the same approach, also have achieved very high compliance levels and major utility emission reductions.

EPA notes that, in calculating maximum civil penalties when owners and operators fail to hold allowances required under the assurance provisions in the final FIPs, EPA takes a similar approach in determining the number of violations. Each ton for which an allowance is not held as required and each day in the control period involved constitute a violation of the CAA. As discussed elsewhere in this preamble, EPA believes that this calculation approach is also reasonable in the context of the assurance provisions and that taking an approach like the commenters' suggested approach described above would be inconsistent with some of the flexibility that the Transport Rule trading programs are intended to provide.

#### G. Allowance Management System

The final Transport Rule trading programs, like the proposed preferred remedy, utilize EPA's allowance management system (AMS), which currently supports allowance surrender,

transfer, and tracking activity under the Acid Rain Program and CAIR. EPA received no adverse comment on this aspect of the proposed rule.

The primary role of AMS is to provide an efficient, automated means for covered sources to comply and for EPA to determine whether covered sources are complying, with the emissions-related provisions of the Transport Rule trading programs. As was proposed, each of the final SO<sub>2</sub> trading programs and final NO<sub>x</sub> trading programs is separately handled in the AMS, which is used to track Transport Rule trading program SO<sub>2</sub> and NO<sub>x</sub> allowances held by covered sources, as well as such allowances held by other entities or individuals.

In addition, the AMS tracks: The allocation of all SO<sub>2</sub> and NO<sub>x</sub> allowances; holdings of SO<sub>2</sub> and NO<sub>x</sub> allowances in compliance accounts (*i.e.*, accounts for individual covered sources), general accounts (*i.e.*, accounts for other entities such as companies and brokers), and assurance accounts (*i.e.*, accounts for allowance surrender by owners and operators of groups of sources and units with common designated representatives under the assurance provisions); deduction of SO<sub>2</sub> and NO<sub>x</sub> allowances for compliance purposes (including deductions from assurance accounts where necessary); and transfers of allowances between accounts. The AMS also allows the public to see whether each source is in compliance and provides information to the allowance market and the public in general, including information on ownership of allowances, dates of allowance transfers, buyer and seller information, and the serial numbers of allowances transferred.

#### H. Emissions Monitoring and Reporting

Under the proposed rule, units subject to the Transport Rule trading programs would monitor and report NO<sub>x</sub> and SO<sub>2</sub> mass emissions in accordance with 40 CFR part 75, as incorporated in the proposed rule, and with certain other specified requirements, such as compliance deadlines.

In the final rule, like the proposed rule, covered units must comply with emissions monitoring and reporting requirements that are largely incorporated from Part 75 monitoring and reporting requirements.

Under the final rule and under Part 75, a unit has several options for monitoring and reporting, namely the use of: a CEMS; an excepted monitoring methodology (NO<sub>x</sub> mass monitoring for certain peaking units and SO<sub>2</sub> mass monitoring for certain oil- and gas-fired units); low mass emissions monitoring

for certain non-coal-fired, low emitting units; or an alternative monitoring system approved by the Administrator through a petition process. In addition, the Administrator can approve petitions for alternatives to Transport Rule and Part 75 monitoring, recordkeeping, and reporting requirements.

Further, the final rule and Part 75 specify that each CEMS must undergo rigorous initial certification testing and periodic quality assurance testing thereafter, including the use of relative accuracy test audits (RATAs) and 24-hour calibrations. In addition, when a monitoring system is not operating properly, standard substitute data procedures are applied and result in a conservative estimate of emissions for the period involved.

In addition, the final rule and Part 75 require electronic submission, to the Administrator and in a format prescribed by the Administrator, of a quarterly emissions report. The report must contain all of the data required concerning NO<sub>x</sub> annual and ozone-season and SO<sub>2</sub> annual emissions.

Most Transport Rule units are in states subject to CAIR and are already monitoring and reporting NO<sub>x</sub> and/or SO<sub>2</sub> under CAIR and the Acid Rain Program, which programs also use Part 75 monitoring and reporting. Units under the Transport Rule annual trading programs and in states subject to CAIR generally have no changes to their monitoring and reporting requirements. These units must continue to monitor and submit reports on a year-round basis as they have under CAIR. Therefore, units in the following states must monitor and report both SO<sub>2</sub> and NO<sub>x</sub> year-round under the Transport Rule: Alabama, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Michigan, Minnesota, Missouri, Nebraska, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, West Virginia and Wisconsin.

Some states (Kansas, Minnesota, and Nebraska) subject to the Transport Rule annual trading programs were not subject to CAIR. Transport Rule units in those states must meet monitoring and reporting requirements that are new except to the extent the units were subject to Part 75 under some other program (such as the Acid Rain Program).

Further, some states (Florida, Louisiana, and Mississippi) subject to the Transport Rule ozone-season trading program but not the Transport Rule annual trading programs were subject to the annual and ozone-season trading programs under CAIR. Transport Rule

units in those states must continue to monitor and report in accordance with Part 75 but have the option of monitoring and reporting on a year-round or ozone-season-only basis.

In addition, one state (Arkansas) subject to the Transport Rule ozone-season trading program but not to the Transport Rule annual trading program was similarly subject to only the ozone-season trading program in CAIR. Transport Rule units in that state continue to have the option of monitoring and reporting NO<sub>x</sub> on a year-round or ozone-season-only basis.

Finally, some states (Connecticut, Delaware, District of Columbia, and Massachusetts) that were subject to CAIR are not subject to the Transport Rule. Electric generating units in those states must continue to meet monitoring and reporting requirements only to the extent the units are subject to Part 75 under some other program (such as the Acid Rain Program or a state adopted program requiring such monitoring and reporting).

EPA is finalizing requirements for existing Transport Rule units in states covered by the Transport Rule annual trading programs to monitor and report SO<sub>2</sub> and NO<sub>x</sub> emissions by January 1, 2012 programs and for existing Transport Rule units in states covered by the Transport Rule ozone-season trading program to monitor NO<sub>x</sub> emissions by May 1, 2012. The use of Part 75 certified monitoring methodologies is required in both cases. As discussed previously, most covered existing units will generally have no changes to their monitoring and reporting requirements and will continue to monitor and submit reports under Part 75 as they have under CAIR. Existing units that have not been subject to Part 75 monitoring and reporting requirements in the past have less than 1 year to install, certify, and operate the required monitoring systems. EPA believes that these units will be able to comply with this requirement because the monitoring equipment needed is not extensive or is largely in place already for the purpose of meeting other requirements. Quality assurance and reporting provisions and data system upgrades may be necessary, but EPA believes that there is sufficient time to accomplish this by the deadline for existing units in the final rule.

In the proposed rule, the compliance deadline for installing, certifying, and operating the required monitoring systems at new units was based upon the date of commencement of commercial operation. A new unit would have to install and certify its monitoring system within 180 days of

the commencement of commercial operation. The final rule adopts this deadline, which is consistent with the approach recently adopted in Part 75 under the Acid Rain Program. See 76 FR 17288, 17289 (March 28, 2011).

Using this deadline (rather than a deadline, used previously in Part 75, of the earlier of the unit's 90th operating day or 180 days after the unit's commencement of commercial operation) ensures that new units have sufficient time to complete installation and certification of monitoring systems and facilitates units' compliance. Because of unit shakedown problems, some new units have had difficulty meeting a deadline earlier than 180 days after commencement of commercial operation. Further, using this deadline facilitates owners' and operators, and EPA's, ability to track important dates related to monitoring, reporting, and allowance holding. Under the final rule, the requirement that a unit hold enough allowances to cover its emissions starts on the later of the commencement of the Transport Rule trading program involved or the deadline for installation and certification of the monitoring system. Having a simple, easily determined deadline (180 days after the commencement of commercial operation) makes it easier for owners and operators and EPA to determine when allowance-holding requirements begin, as well as when monitoring and reporting requirements begin. In contrast, using a deadline involving determination of a unit's 90th operating day required keeping track of any days on which the unit did not operate (*e.g.*, due to problems associated with shakedown of the unit). EPA found that owners and operators have had more difficulty reporting the 90th operating day than in reporting the commencement of commercial operation, and once the latter date is reported, EPA can independently determine the 180th calendar day after the reported date.

### *I. Permitting*

#### 1. Title V Permitting

The final Transport Rule (like the proposed rule) does not establish any permitting requirements independent of those under Title V of the CAA and the regulations implementing Title V, 40 CFR Parts 70 and 71.<sup>84</sup> All major stationary sources of air pollution and certain other sources are required to apply for title V operating permits that include emission limitations and other

conditions as necessary to assure compliance with applicable requirements of the CAA, including the requirements of the applicable State Implementation Plan. CAA §§ 502(a) and 504(a), 42 U.S.C. 7661a(a) and 7661c(a). The "applicable requirements," that must be addressed in title V permits are defined in the Title V regulations (40 CFR 70.2 and 71.2 (definition of "applicable requirement")).

EPA anticipates that, given the nature of the units covered by the final Transport Rule, most of the sources at which they are located are already or will be subject to Title V permitting requirements. For sources subject to Title V, the requirements applicable to them under the final FIPs will be "applicable requirements" under Title V and therefore will need to be addressed in the Title V permits. For example, requirements under the final FIPs concerning designated representatives, monitoring, reporting, and recordkeeping, the requirement to hold allowances covering emissions, the assurance provisions, and liability will be "applicable requirements" to be addressed in the permits.

The Title V permits program includes, among other things, provisions for permit applications, permit content, and permit revisions that will address the applicable requirements under the final FIPs in a manner that will provide the flexibility necessary to implement market-based programs such as the Transport Rule trading programs. For example, the Title V regulations provide that a permit issued under Title V must include, for any "approved \* \* \* emissions trading and other similar programs or processes" applicable to the source, a provision stating that no permit revision is required "for changes that are provided for in the permit." 40 CFR 70.6(a)(8) and 71.6(a)(8). Consistent with this provision in the Title V regulations, the Transport Rule trading program regulations include a provision stating that no permit revision is necessary for the allocation, holding, deduction, or transfer of allowances. Consistent with the Title V regulations, this provision will also be included in each Title V permit for a covered source. As a result, allowances can be traded (or allocated, held, or deducted) under the final FIPs without a revision of the Title V permit of any of the sources involved.

As a further example of flexibility under Title V, the Title V regulations allow the use of the minor permit modification procedures for permit modifications "involving the use of economic incentives, marketable permits, emissions trading, and other

<sup>84</sup>Part 70 addresses requirements for state Title V programs, and Part 71 governs the federal Title V program.

similar approaches, to the extent that such minor permit modification procedures are explicitly provided for in an applicable implementation plan or in applicable requirements promulgated by EPA.” 40 CFR 70.7(e)(2)(i)(B) and 40 CFR 71.7(e)(1)(i)(B). The final FIPs set forth in detail, and reference relevant provisions in Part 75 concerning, the approaches that are available for covered units to use for monitoring and reporting emissions (*i.e.*, approaches using a continuous emission monitoring system, an excepted monitoring system under appendices D and E to Part 75, a low mass emissions excepted monitoring methodology under § 75.19, or an alternative monitoring system under subpart E of Part 75). The final FIPs also require unit owners and operators to submit monitoring system certification applications (or, for alternative monitoring systems, petitions) to EPA establishing the monitoring and reporting approach actually to be used by the unit and allow owners and operators to submit petitions for alternatives to any specific monitoring and reporting requirement. These applications and petitions are subject to EPA review and approval to ensure consistency in monitoring and reporting among all trading program participants, and EPA’s responses to any petitions for alternative monitoring systems or for alternatives to specific monitoring or reporting requirements are to be posted on EPA’s Web site. Moreover, EPA intends that each covered unit’s Title V permit will include a description of the general approach that the covered unit is required to use for monitoring and reporting emissions and that the description will reference the relevant sections of the Transport Rule trading program regulations and Part 75 and will state that the requirements may be modified through EPA approval of petitions for alternatives to specific requirements. Finally, consistent with §§ 70.7(e)(2)(i)(B) and 71.7(e)(1)(i)(B) of the Title V regulations, the final FIPs provide that a description of the general monitoring and reporting approach for a covered unit can be added to, or an existing description of a unit’s general monitoring and reporting approach can be changed, in a Title V permit, using minor permit modification procedures, provided that the approach being described in the changed or new general description and the requirements applicable to that approach are already incorporated elsewhere in the permit. As a result, minor permit modification procedures can be used to revise a covered unit’s Title V permit to be

consistent with the monitoring and reporting approach, or any changes in the approach, allowed for the unit by EPA through the monitoring system certification or petition process under the Transport Rule trading programs.

As new applicable requirements under Title V, the requirements for covered units under the final FIPs will be incorporated into covered sources’ existing Title V permits either pursuant to the provisions for reopening for cause (40 CFR 70.7(f) and 40 CFR 71.7(f)) or the permit renewal provisions (40 CFR 70.7(c) and 71.7(c)).<sup>85</sup> In contrast to the approach in CAIR of imposing permitting requirements and deadlines independent of those under Title V, the approach to permitting under the final FIPs of imposing no independent permitting requirements should reduce the burden on sources already required to be permitted under Title V and on permitting authorities. For sources newly subject to Title V that will also be covered sources under the final FIPs, the initial Title V permit issued pursuant to 40 CFR 70.7(a) will address the final FIP requirements.

In order to ensure that covered sources’ Title V permit provisions concerning the final FIPs will reflect the Transport Rule trading program requirements and flexibilities properly and in a manner consistent from permit to permit, EPA intends to issue guidance to assist permitting authorities. This guidance would include information on permit issuance and permit modification requirements, as well as a permit content template that will identify the applicable requirements under the applicable Transport Rule trading program and thereby ensure that they will be correctly and comprehensively reflected in each permit in a manner that will reduce the burden on sources and permitting authorities related to the issuance of the permit and will reduce the need for permit revisions.

## 2. New Source Review

### a. Background

EPA recognizes that, following the vacatur of the new source review (NSR) pollution control project exemption in *New York v. EPA*, 413 F.3d 3, 40–41 (D.C. Cir. 2005), pollution control projects, including pollution control projects constructed to comply with this

<sup>85</sup> A permit is reopened for cause if any new applicable requirements (such as those under a FIP) become applicable to a covered source with a remaining permit term of 3 or more years. If the remaining permit term is less than 3 years, such new applicable requirements will be added to the permit during permit renewal. See 40 CFR 70.7(f)(1)(i) and 71.7(f)(1)(i).

rule, have the potential to trigger NSR permitting.

This issue was previously addressed in the context of CAIR. On December 20, 2005, the EPA agreed to reconsider one specific aspect of CAIR. In that notice, EPA granted reconsideration and sought comment on the potential impact of the opinion in *New York v. EPA*, which vacated the previously existing NSR exemption for certain environmentally beneficial pollution control projects. For this reconsideration, EPA conducted an analysis which showed that the court decision did not impact the CAIR analyses. Details of this analysis can be found in a technical support document which is available on EPA’s Web site at: <http://epa.gov/cair/pdfs/0053-2263.pdf>

Because GHG emissions were not considered by EPA to be air pollutants within the meaning of the CAA at the time of CAIR, GHG emissions were not addressed in the 2005 analysis. GHG requirements related to the component of NSR concerning the Prevention of Significant Deterioration (“PSD”) program are addressed in EPA’s “Interpretation of Regulations that Determine Pollutants Covered by Clean Air Act Permitting Programs,” 75 FR 17004 (April 2, 2010), and “Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule,” 75 FR (June 3, 2010) (“Tailoring Rule”). Generally, as discussed in those actions, major stationary sources will be required to address GHG emissions as part of the PSD program if these sources emit GHG in amounts that equal or exceed the thresholds in the Tailoring Rule. Major sources that undergo a modification, including the addition of pollution control equipment, will trigger PSD requirements for their emissions of GHG if such emissions increase by at least 75,000<sup>86</sup> tons per year of CO<sub>2</sub> equivalent (CO<sub>2</sub>e).

### b. Proposed Rule

In the proposed rule, EPA presented the following conclusions:

(1) The 2005 analysis remains current and relevant for all pollutants except for GHG, and it shows that NSR requirements would not significantly impact the construction of controls that

<sup>86</sup> We note that, for sources that are modifying and are not subject to PSD for emissions of a non-GHG pollutant, in order to be subject to PSD for GHGs the source must not only have an emissions increase of 75,000 TPY CO<sub>2</sub>e, but must also have a PTE of at least 100,000 TPY CO<sub>2</sub>e and 100 TPY mass GHG. See 40 CFR 52.21(b)(49)(v)(b). However, since it is reasonable to assume that all sources that are potentially subject to the Transport Rule will have a PTE of at least 100,000 TPY CO<sub>2</sub>e and 100 TPY, for the purposes of discussions in this section we will only note the requirement to have an emissions increase of 75,000 TPY CO<sub>2</sub>e.

are installed to comply with the proposed Transport Rule.

(2) It is very unlikely that pollution control projects would cause GHG increases that would exceed the 75,000 tons per year threshold.

Consistent with these proposed conclusions, EPA also concluded that there would be no significant impacts from NSR for any pollution control projects resulting from the proposed rule such as low-NO<sub>x</sub> burners, SO<sub>2</sub> scrubbers, or SCR. EPA requested comment on this issue.

### c. Public Comments

EPA received a number of comments on the NSR issue, which can be divided into four types of comments: (1) Comments related to GHGs, (2) comments related to sulfuric acid mist, (3) comments related to CO emission increases from low-NO<sub>x</sub> burners, and (4) suggested changes to the EPA rules.

**Greenhouse Gases.** A number of commenters recommended that EPA should document and substantiate its conclusion that greenhouse gases would be unlikely to trigger NSR requirements. Other commenters suggested that some units installing a FGD scrubber could exceed the 75,000 ton threshold for GHGs in the Tailoring Rule by emitting CO<sub>2</sub> produced from the chemical reaction of SO<sub>2</sub> with limestone. Commenters also suggested that NSR applicability for GHGs would also need to consider that an FGD would consume 1–3 percent of a scrubbed unit's generation, referred to as "parasitic load," which (all else held equal) lowers that unit's net generation.<sup>87</sup> Commenters argued that any post-retrofit increase in generation to offset that "parasitic load" could lead to GHG increases potentially exceeding the 75,000 ton threshold.

**Sulfuric Acid Mist.** Two commenters noted that use of high sulfur fuels, in combination with SCR, can lead to increases in sulfuric acid mist, a pollutant regulated under NSR. One of these commenters noted that reagent injection was necessary to avoid triggering NSR for sulfuric acid mist when their SCR was installed.

**Carbon Monoxide (CO).** One commenter believed that EPA's 2005 analysis may not be adequate as it related to carbon monoxide emission increases that result from installation of low-NO<sub>x</sub> burners. The commenter noted EPA's statement in the 2005 analysis that read as follows: "Since the NO<sub>x</sub>

removal efficiencies used in EPA's analysis are not aggressive, it is believed that the units installing combustion controls can opt for moderate levels of overfire air flow rates and still achieve the NO<sub>x</sub> reduction levels projected in EPA's analysis, without causing significant increases in the CO and unburned carbon emissions." The commenter suggested that the transport rule NO<sub>x</sub> may be more aggressive than CAIR and thus EPA should conduct a review to determine whether EPA retains the same conclusion regarding CO emissions.

**Recommended Rule Changes.** Some commenters suggested changes to EPA rules to address their concerns that control equipment installed as a result of the Transport Rule could trigger NSR. Some commenters suggested that EPA craft an exclusion from NSR in the Transport Rule. One of these commenters suggested that EPA could do this by: (1) Providing special definition of baseline actual emissions; (2) a causation determination specifically tied to the Transport Rule; or (3) interpret the term "stationary source" in CAA 110(a)(4) in a way that doesn't impede Transport Rule compliance.

Other commenters expressed the concern that if NSR is triggered, the proposed Transport Rule did not allow enough time for compliance for sources needing to install control equipment. These commenters recommend that EPA should waive Transport Rule requirements or provide extra allowances until NSR review is complete.

### d. Final Rule and Responses to Comments

**Greenhouse Gases.** EPA has carefully reviewed relevant data in assessing the comments suggesting that NSR permitting would likely be triggered for facilities installing FGD scrubbers to comply with this rule. EPA believes that sources installing FGD to comply with the Transport Rule can achieve those installations without triggering NSR.

EPA notes that its forecast of the number and extent of FGD scrubber installations substantially decreased since the time of proposal. For the proposed rule, EPA modeled 14 GW of FGD retrofit installations by 2014. For the final rule, EPA models a total of 5.7 GW of wet FGD installations from 7 units at 5 plants.

There are two factors associated with wet FGD scrubbers that commenters suggested individually or in combination could lead to increases above the 75,000 tons per year threshold in the Tailoring Rule. The first is the

CO<sub>2</sub> chemically produced from the reaction of SO<sub>2</sub> with limestone in wet FGD scrubbers. The second is that owners or operators of the affected units may desire to increase coal usage after the retrofit is made to offset the "parasitic load" that is consumed on-site in order to operate the scrubber.

With respect to chemically produced CO<sub>2</sub>, EPA concludes that only in very limited circumstances when installation of a scrubber is coupled with a change to considerably higher sulfur coal could installation of a wet limestone scrubber be associated with a more than 75,000 ton increase in CO<sub>2</sub> emissions. EPA finds this possibility unlikely to occur. For example, EPA's acid rain emissions reporting system shows that the plant with the greatest emissions from unscrubbed units in 2009 emitted about 103,000 tons of SO<sub>2</sub> from those units. If this plant installed a wet limestone scrubber assumed to reduce those SO<sub>2</sub> emissions by 96 percent, EPA calculates that chemically produced CO<sub>2</sub> could increase emissions by:

$$103,000 \times (0.96) \times (44/64) = 67,980 \text{ tons CO}_2^{88}$$

Therefore, EPA finds that all currently uncontrolled units are technically capable of retrofitting with wet FGD without chemically produced CO<sub>2</sub> increases leading to a triggering of NSR. In limited circumstances, an owner or operator may elect to switch fuels to a significantly higher-sulfur coal subsequent to FGD installation and may risk an increase in chemically produced CO<sub>2</sub> emissions that would trigger NSR, but such a decision is not necessary in order to successfully install and operate the scrubber as a strategy for compliance with Transport Rule requirements.

With respect to the "parasitic load" issue, EPA estimates that today's wet FGD retrofit technology would consume typically about 1.7 percent of on-site generation.<sup>89</sup> If a facility made no other changes to its operation other than installing an FGD retrofit, that facility's CO<sub>2</sub> emissions from fuel combustion would remain constant. It is possible, however, that a source's owner or operator may elect to increase coal usage by some amount after retrofitting FGD, if for example the owner or operator desires to increase net generation after retrofitting. Under NSR, any such source would be able to

<sup>88</sup> The factor 44/64 reflects the relative molecular weight of CO<sub>2</sub> and SO<sub>2</sub>, respectively. A wet FGD's removal of one ton of SO<sub>2</sub> involves a chemical reaction that releases the equivalent molecular weight of CO<sub>2</sub> (thus equaling 44/64 of a ton of CO<sub>2</sub> emissions).

<sup>89</sup> Documentation Supplement for EPA Base Case v.4.10\_FTransport—Updates for Final Transport Rule.

<sup>87</sup> "Net generation" refers to total generation minus the amount of power consumed on-site for various purposes, including operation of pollution control equipment.

compare such a CO<sub>2</sub> emissions increase against the highest average annual emissions in any consecutive 24-month period from a 5-year historic baseline. Therefore, a unit retrofitting a scrubber under the Transport Rule may be able to increase its CO<sub>2</sub> emissions by more than 75,000 tons without triggering NSR if that increase would register as less than 75,000 tons against a higher emissions level in the aforementioned NSR baseline.

EPA also notes that scrubber installations provide facilities with the opportunity to make other capital improvements at the unit on which the scrubber is installed to improve the efficiency of boilers, steam turbines, motors, other auxiliary equipment, and plant control systems. Such improvements could allow a retrofitting unit to lower its CO<sub>2</sub> output rate such that a subsequent decision to increase net generation may not result in increased coal use, or may limit any CO<sub>2</sub> emission increase to less than the 75,000 tons per year threshold for triggering NSR.

As discussed in section VII.C, EPA notes that the Transport Rule does not mandate any specific control activity, including scrubber retrofitting, as a compliance strategy for units within a state to meet that state's SO<sub>2</sub> budget. As demonstrated by EPA's "no FGD" sensitivity analysis described in VII.C, covered sources within the Group 1 states are capable of meeting their emission reduction obligations through a variety of emission reduction strategies even if no unit is able to complete a scrubber installation by 2014. Therefore, EPA does not believe that NSR permitting presents an obstacle in any way to Transport Rule compliance, even if a given unit retrofitting with FGD triggers NSR for CO<sub>2</sub>.

For some plants, EPA's IPM modeling forecasts installation and operation of dry sorbent injection (DSI) systems. EPA does not believe any of these systems would result in CO<sub>2</sub> emission increases above the 75,000 ton threshold. Moreover, given the relatively short construction schedule for DSI systems, EPA believes that if any of the plants did require NSR permitting, installation of DSI could still be accomplished by 2014.

In summary, EPA believes that the operators of plants projected to install scrubbers for Transport Rule SO<sub>2</sub> reductions could readily develop workable compliance strategies whether or not such an installation would trigger NSR. Plant owners could readily develop strategies to avoid emission increases that would trigger NSR,

including but not limited to alternative SO<sub>2</sub> reduction strategies or technologies, efficiency improvements, or the ability to adjust net electricity generation to prevent a 75,000 ton increase in CO<sub>2</sub> emissions. EPA believes that projected scrubber installations under the Transport Rule are broadly unlikely to trigger NSR, but even in the limited conditions where such a triggering may occur, the NSR permitting process would not infringe on a state's ability to comply with its budgets under the Transport Rule. (See section VII.C for more details on EPA's analysis of a "no FGD" sensitivity supporting these points.)

*Sulfuric Acid Mist.* EPA continues to conclude that, consistent with the 2005 TSD, sulfuric acid mist increases due to compliance with this rule are very unlikely to trigger NSR permitting. Such increases are most commonly seen from installation of SCR units on facilities with relatively high sulfur coal. However, as acknowledged by one of the commenters, engineering solutions have been developed to prevent such increases, and EPA believes that facility owners would take this into account in designing such an SCR system. Moreover, EPA's IPM modeling of the NO<sub>x</sub> budgets in the final rule suggests that no new SCR units will result from the final rule.

*Carbon Monoxide.* EPA concludes that any NSR permitting required due to CO increases associated with NO<sub>x</sub> controls should not hinder the ability of sources to comply with Transport Rule requirements. For states that were included in the CAIR for either ozone, PM<sub>2.5</sub>, or both, EPA finds no evidence to suggest that the NO<sub>x</sub> control requirements of the Transport Rule would require more aggressive controls triggering NSR. As EPA's baseline analysis acknowledges, many sources in these states installed NO<sub>x</sub> controls to comply with CAIR. In addition, their historic emissions reflect operation of these controls and there is no evidence to suggest that the Transport Rule will require sources to operate these controls more aggressively, thereby increasing CO emissions above the relevant threshold and triggering NSR. In a few states that were not covered by CAIR, a limited number of facilities may install new combustion controls (such as low-NO<sub>x</sub> burners, overfire air, or other combustion controls or upgrades) as a result of the Transport Rule. EPA expects relatively few such installations, and believes that NSR permitting, if required, is not an obstacle to compliance with the rule. First, EPA believes that NSR permitting should be relatively straightforward for these

installations and that the BACT determination for CO will be very straightforward. EPA expects a relatively short time period for permitting, and as discussed later, EPA is planning to initiate actions that will further expedite any required permitting.

Second, EPA notes that the rule achieves reductions through a trading program rather than direct control requirements. Accordingly, even if a few installations do not have controls in place at the very beginning of the compliance period, this should not hinder the ability of states to meet their ozone-season NO<sub>x</sub> budgets. Covered sources have a suite of NO<sub>x</sub> pollution control strategies and technologies available to them, including coal selection, selective non-catalytic reduction, gas re-burn, low-NO<sub>x</sub> burner and overfire air installations or upgrades, and neural network optimization of combustion controls operation. Sources may consider all of these technologies and strategies, which can be designed and operated so as to minimize CO emission increases that may otherwise trigger NSR. EPA also notes that during the downtime for installation of the construction controls, there would be no NO<sub>x</sub> emissions, and thus the source's allowance holding requirements would also be lower for that period.

*Recommended Rule Changes.* EPA disagrees with commenters who suggested rule changes, either to the NSR program or to this rule, to account for installations triggering NSR. As noted above, EPA concludes that NSR would be triggered at most for just a few of the projected control installations. EPA believes, however, that even if required these NSR permits would likely be issued in a timely manner given the overall environmental benefits resulting from the control equipment installation. In addition, this rule's requirements are based on a flexible trading approach rather than a direct control approach. Accordingly, if this affect occurs for only a few installations, EPA believes that any extra emissions that occur during the relatively short time needed to obtain an NSR permit could be accommodated within the overall trading system.

*Expedited Permitting.* In the limited circumstances where pollution control installations under the Transport Rule may trigger NSR, we also note that an expedited permitting process can occur with sufficient time to obtain permits and achieve emission reductions under the Transport Rule programs. For this reason, we strongly encourage permitting authorities to expedite



permitting for any such projects, which are likely to be very limited in number. To ensure that the permitting decisions are expedited, separate from this rulemaking EPA will provide assistance and guidance in order to expedite issuance of any such permits. For example, we are considering assistance that would serve to expedite BACT reviews or required air quality analysis. EPA requests early notification of any specific cases where such guidance and assistance may be needed.

*J. How the Program Structure Is Consistent With Judicial Opinions Interpreting the Clean Air Act*

The air quality-assured trading programs established by this rule eliminate all of the emissions that EPA has identified as significantly contributing to downwind nonattainment or interference with maintenance<sup>90</sup> in a manner that is consistent with section 110(a)(2)(D)(i) of the CAA as interpreted by the DC Circuit in *North Carolina*, 531 F.3d 896. The FIPs finalized in this action require sources to participate in air quality-assured interstate emission trading programs that include provisions to ensure that no state's emissions exceed that state's budget with variability limit. These assurance provisions, combined with the requirement that all sources hold emission allowances sufficient to cover their emissions, effectuate the requirement that emission reductions occur within the state. See 42 U.S.C. 7410(a)(1)(2)(D).

The state budgets developed in this rule represent an estimate of the emissions that will remain in a given state after the elimination of all emissions in that state that EPA has determined must be prohibited pursuant to section 110(a)(2)(D)(i)(I). However, for the reasons explained above, the amount of emissions that remain after the requirements of 110(a)(2)(D)(i)(I) are satisfied may vary. EPA recognizes that shifts in generation due to, among other

things, changing weather patterns, demand growth, or disruptions in electricity supply from other units can affect the amount of generation needed in a specific state and thus baseline EGU emissions from that state. Because a state's significant contribution to nonattainment or interference with maintenance is defined by EPA as all emissions that can be eliminated for a specific cost (as explained above, using air quality considerations to identify this cost threshold), and because EGU baseline emissions are variable, the amount of emissions remaining in a state after all significant contribution or interference with maintenance is eliminated is also variable. In other words, EGU emissions in a state whose sources have installed all controls and taken all measures necessary to eliminate its significant contribution to nonattainment or interference with maintenance could exceed the state budget without variability.

For this reason, EPA determined that it is appropriate for the program to recognize the inherent variability in state EGU emissions. The program does so by identifying a variability range for each state in the program. The assurance provisions in the program, in turn, limit a state's emissions to the state's budget with variability limit.

In addition, the requirement that all sources hold emission allowances sufficient to cover their emissions (and the fact that the total number of emission allowances allocated will be equal to the sum of all state budgets without variability) ensures that the use of variability limits both takes into account the inherent variability of baseline EGU emissions in individual states (*i.e.*, the variability of total state EGU emissions before the elimination of significant contribution or interference with maintenance) and recognizes that this variability is not as great in a larger region. The variability of emissions across a larger region is not as large as the variability of emissions in a single state for several reasons. Increased EGU emissions in one state in one control period often are offset by reduced EGU emissions in another state within the control region in the same control period. In a larger region that includes multiple states, factors that affect electricity generation, and thus EGU emission levels, are more likely to vary significantly within the region so that resulting emission changes in different parts of the region are more likely to offset each other. For example, a broad region can encompass states with differing weather patterns, with the result that increased electricity demand and emissions due to weather in one

state may be offset by decreased demand and emissions due to weather in another state. By further example, a broad region can encompass states with differing types of industrial and commercial electricity end-users, with the result that changes in electricity demand and emissions among the states due to the effect of economic changes on industrial and commercial companies may be offsetting. Similarly, because states in a broad region may vary in their degree of dependence on fossil-fuel-based electric generation, the impact of an outage of non-fossil-fuel-based generation (*e.g.*, a nuclear plant) in one state may have a very different impact in that state than on other states in the region. Thus, EPA does not believe it is necessary to allow total regional allowance allocations for the states covered by a given trading program to exceed the sum of all state budgets without variability for these states.

For these reasons, the fact that the use of state budgets with variability limits may allow limited shifting of emissions between states is not inconsistent with the court's holding that emission reductions must occur "within the state." *North Carolina*, 531 F.3d at 907. Under the FIPs, no state may emit more than its budget with variability limit and total emissions cannot exceed the sum of all state budgets without variability. This approach takes into account the inherent variability of the baseline emissions without excusing any state from eliminating its significant contribution to nonattainment or interference with maintenance. It is thus consistent with the statutory mandate of section 110(a)(2)(D)(i)(I) as interpreted by the Court.

Most commenters voiced support for a remedy option that allows some degree of interstate trading. However, one commenter argued that the structure of the preferred trading remedy that EPA proposed is legally problematic. The program, the commenter argues, provides no legal assurance that the variability margins will be used by market participants to account for variability. The commenter does not suggest a solution, but instead says, if a solution cannot be found, EPA should not allow any amount of interstate trading.

EPA disagrees with the commenter that the structure of the preferred interstate trading program is legally problematic. In *North Carolina*, the Court held that the CAIR interstate trading programs were inconsistent with section 110(a)(2)(D)(i)(I), concluding that "EPA's apportionment decisions have nothing to do with each state's 'significant contribution'" (531 F.3d at

<sup>90</sup> As explained in greater detail in Section VI of this notice, for each covered state, EPA has identified emissions that must be prohibited pursuant to section 110(a)(2)(D)(i)(I). In most instances, EPA has determined that elimination of such emissions is sufficient to satisfy the requirements of that section. Thus, in these instances, the budgets represent an estimate of the emissions that will remain after the elimination of all emissions in that state that significantly contribute to nonattainment or interfere with maintenance of the NAAQS in another state. In a few limited instances, however, EPA determined that elimination of the emissions is necessary but may not be sufficient to satisfy the requirements of that section. In these instances, the budgets represent an estimate of the emissions that will remain after the elimination of all emissions that EPA, at this time, has determined must be eliminated.

907) and that “EPA is not exercising its section 110(a)(2)(D)(i)(I) duty unless it is promulgating a rule that achieves something measurable toward the goal of prohibiting sources ‘within the State’ from contributing to nonattainment or interfering with maintenance ‘in any other State.’” (531 F.3d at 908). It emphasized that “[t]he trading program is unlawful, because it does not connect states’ emission reductions to any measure of their own significant contributions. To the contrary, it relates their SO<sub>2</sub> reductions to their Title IV allowances. \* \* \* The allocation of NO<sub>x</sub> caps is similarly arbitrary because EPA distributed allowances simply in the interest of fairness.” 531 F.3d at 930. As explained in this rule, EPA has addressed these concerns by using source specific analysis to identify each individual state’s significant contribution to nonattainment and interference with maintenance, and including assurance provisions to ensure that the necessary reductions occur in each state. The Court did not go further to prohibit all interstate trading. In fact, it notes that “after rebuilding, a somewhat similar CAIR may emerge” (531 F.3d at 930). For all of these reasons, EPA does not believe the opinion in *North Carolina* can be read to stand for the proposition that no interstate trading can be allowed unless the specific reasons behind market participants’ decisions to purchase allowances can be ascertained. Because allowance purchase decisions are likely to be based on multiple factors, which can include the desire to hedge against potential emission variability as well as to address actually occurring variability,

requiring ascertainment of the specific reasons for allowance purchases would be tantamount to prohibiting all interstate trading.

Moreover, as discussed above, variability is inherent to the operation of the electric generation system and thus to emissions from this sector. In fact, variability in emissions occurs every year in every state and, like variability of year-to-year weather conditions (which is a major cause of emission variability), cannot be accurately predicted. See the Power Sector Variability Final Rule TSD in the docket for this rulemaking. EPA maintains that its approach of allowing state EGU emissions each year to vary by up to the historically representative, annual amount of inherent, emission variability reasonably reflects the realities of the electric generation system and is consistent with the *North Carolina* decision. In summary, the variability limits take into account inherent variability over time of emissions in each state from this sector while also ensuring that each state makes necessary emission reductions to eliminate significant contribution and interference with maintenance. EPA thus concludes that the commenter’s argument that the use of variability limits allows sources “within the state” to avoid eliminating their significant contribution or interference with maintenance is without merit.

**VIII. Economic Impacts of the Transport Rule**

*A. Emission Reductions*

The projected impacts of this final rule as presented throughout the

preamble do not reflect minor technical corrections to SO<sub>2</sub> budgets in three states (KY, MI, and NY) made after the impact analyses were conducted. These projections also assumed preliminary variability limits that were smaller than the variability limits finalized in this rule. EPA conducted sensitivity analysis confirming that these differences do not meaningfully alter any of the Agency’s findings or conclusions based on the projected cost, benefit, and air quality impacts presented for the final Transport Rule. The results of this sensitivity analysis are presented in Appendix F in the final Transport Rule RIA.

Table VIII.A–1 presents projected power sector emissions in the base case (*i.e.*, without the Transport Rule or CAIR) compared to projected emissions with the Transport Rule in 2012 and 2014 for all covered states. Table VIII.A–2 presents 2005 historical power sector emissions compared to projected emissions with the Transport Rule in 2012 and 2014. Note that for ozone-season emissions, these tables present results from a modeling scenario that reflects ozone-season NO<sub>x</sub> requirements in 26 states. This modeling differs from the final Transport Rule because it includes ozone-season NO<sub>x</sub> requirements for six states (Iowa, Kansas, Michigan, Missouri, Oklahoma, and Wisconsin) that the final Transport Rule does not cover (as discussed previously, EPA is issuing a supplemental proposal to request comment on inclusion of these six states).

**TABLE VIII.A–1—PROJECTED SO<sub>2</sub> AND NO<sub>x</sub> ELECTRIC GENERATING UNIT EMISSION REDUCTIONS IN COVERED STATES WITH THE TRANSPORT RULE COMPARED TO BASE CASE WITHOUT TRANSPORT RULE OR CAIR**

[Million tons]

	2012 Base case emissions	2012 Transport rule emissions	2012 Emission reductions	2014 Base case emissions	2014 Transport rule emissions	2014 Emission reductions
SO <sub>2</sub> .....	7.0	3.0	4.0	6.2	2.4	3.9
Annual NO <sub>x</sub> .....	1.4	1.3	0.1	1.4	1.2	0.2
Ozone-Season NO <sub>x</sub> .....	0.7	0.6	0.1	0.7	0.6	0.1

**Notes:** The SO<sub>2</sub> and annual NO<sub>x</sub> emissions in this table reflect EGUs in the 23 states covered by this rule for purposes of the 24-hour and/or annual PM<sub>2.5</sub> NAAQS (Alabama, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Michigan, Minnesota, Missouri, Nebraska, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, West Virginia, and Wisconsin).

The ozone-season NO<sub>x</sub> emissions reflect EGUs in the 20 states covered by this rule for purposes of the ozone NAAQS (Alabama, Arkansas, Florida, Georgia, Illinois, Indiana, Kentucky, Louisiana, Maryland, Mississippi, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, and West Virginia) and the six states that would be covered for the ozone NAAQS if EPA finalizes its supplemental

proposal (Iowa, Kansas, Michigan, Missouri, Oklahoma, and Wisconsin).

Tables VIII.A–3 through VIII.A–5 present projected state-level emissions with and without the Transport Rule in 2012 and 2014 from fossil-fuel-fired EGUs greater than 25 MW in covered states.

TABLE VIII.A-2—PROJECTED SO<sub>2</sub> AND NO<sub>x</sub> ELECTRIC GENERATING UNIT EMISSION REDUCTIONS IN COVERED STATES WITH THE TRANSPORT RULE COMPARED TO 2005 ACTUAL EMISSIONS

[Million tons]

	2005 Actual emissions	2012 Transport rule emissions	2012 Emission reductions from 2005	2014 Transport rule emissions	2014 Emission reductions from 2005
SO <sub>2</sub> .....	8.8	3.0	5.8	2.4	6.4
Annual NO <sub>x</sub> .....	2.6	1.3	1.3	1.2	1.4
Ozone-Season NO <sub>x</sub> .....	0.9	0.6	0.3	0.6	0.3

**Notes:** The SO<sub>2</sub> and annual NO<sub>x</sub> emissions in this table reflect EGUs in the 23 states covered by this rule for purposes of the 24-hour and/or annual PM<sub>2.5</sub> NAAQS (Alabama, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Michigan, Minnesota, Missouri, Nebraska, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South

Carolina, Tennessee, Texas, Virginia, West Virginia, and Wisconsin).

The ozone-season NO<sub>x</sub> emissions reflect EGUs in the 20 states covered by this rule for purposes of the ozone NAAQS (Alabama, Arkansas, Florida, Georgia, Illinois, Indiana, Kentucky, Louisiana, Maryland, Mississippi, New Jersey, New York, North Carolina, Ohio,

Pennsylvania, South Carolina, Tennessee, Texas, Virginia, and West Virginia) and the six states that would be covered for the ozone NAAQS if EPA finalizes its supplemental proposal (Iowa, Kansas, Michigan, Missouri, Oklahoma, and Wisconsin).

**Table VIII.A-3 - Projected State-level Annual SO<sub>2</sub> Emissions from Fossil-Fired Electric Generating Units Greater than 25 MW in Covered States in 2012 and 2014 in Base Case and with Transport Rule (tons)**

	Base Case		Transport Rule	
	2012	2014	2012	2014
Alabama	455,503	417,009	219,067	173,231
Georgia	405,933	169,702	158,581	92,605
Illinois	485,417	137,522	209,701	128,143
Indiana	776,359	711,265	241,258	177,222
Iowa	121,663	127,354	75,003	77,931
Kansas	68,490	69,767	41,433	45,681
Kentucky	520,531	487,990	146,133	116,912
Maryland	49,942	42,926	26,630	30,368
Michigan	252,411	265,611	190,274	158,394
Minnesota	64,524	66,268	42,862	45,143
Missouri	375,771	381,939	181,662	177,359
Nebraska	70,754	71,821	65,079	70,087
New Jersey	26,346	38,857	5,518	6,243
New York	51,243	40,416	20,378	12,689
North Carolina	144,554	120,441	117,383	63,382
Ohio	871,401	831,648	230,216	150,784
Pennsylvania	493,206	507,360	250,484	123,224
South Carolina	184,045	209,538	84,435	96,589
Tennessee	324,372	284,463	96,520	64,716
Texas	445,715	452,978	244,239	266,288
Virginia	80,889	64,917	66,640	38,562
West Virginia	535,586	497,398	119,174	83,235
Wisconsin	131,199	124,862	77,505	44,139
Total	6,935,853	6,122,051	2,910,173	2,242,927

**Table VIII.A-4 - Projected State-level Annual NO<sub>x</sub> Emissions from Fossil-Fired Electric Generating Units Greater than 25 MW in Covered States in 2012 and 2014 in Base Case and with Transport Rule (tons)**

	Base Case		Transport Rule	
	2012	2014	2012	2014
Alabama	82,005	74,937	73,600	68,119
Georgia	66,384	47,808	61,464	39,817
Illinois	51,969	54,661	47,635	48,533
Indiana	119,625	116,552	109,773	109,392
Iowa	42,563	44,614	36,953	38,302
Kansas	37,106	32,390	30,603	23,938
Kentucky	88,136	83,481	83,856	76,026
Maryland	16,602	17,444	15,665	17,061
Michigan	60,594	64,345	59,405	57,311
Minnesota	36,833	37,952	30,524	30,849
Missouri	53,199	54,528	51,329	48,888
Nebraska	42,985	43,410	26,488	26,552
New Jersey	7,391	7,858	7,355	7,562
New York	17,556	18,505	17,616	17,250
North Carolina	51,902	46,130	47,679	41,676
Ohio	100,420	99,389	84,679	84,126
Pennsylvania	129,125	132,299	117,612	116,994
South Carolina	34,635	37,862	33,144	35,591
Tennessee	37,674	29,256	32,984	20,490
Texas	136,124	140,788	133,406	136,638
Virginia	34,567	35,798	33,244	34,891
West Virginia	61,792	64,182	55,808	53,335
Wisconsin	36,701	36,904	30,643	29,688
Total	1,345,888	1,321,092	1,221,466	1,163,027

**Table VIII.A-5 - Projected State-level Ozone-Season NO<sub>x</sub> Emissions from Fossil-Fired Electric Generating Units Greater than 25 MW in Covered States in 2012 and 2014 in Base Case and with Transport Rule (tons)**

	Base Case		Transport Rule	
	2012	2014	2012	2014
Alabama	34,074	31,365	31,607	29,532
Arkansas	15,037	16,644	15,087	16,728
Florida	41,646	45,993	27,645	29,435
Georgia	29,106	19,293	26,660	17,838
Illinois	21,371	22,043	21,102	21,210
Indiana	46,877	46,086	46,789	46,564
Iowa	18,307	19,440	15,746	16,346
Kansas	16,126	13,967	13,425	10,217
Kentucky	37,588	35,296	34,969	31,547
Louisiana	13,433	13,924	13,669	13,943
Maryland	7,179	7,540	6,705	7,248
Michigan	25,989	28,037	25,476	24,248
Mississippi	10,161	11,212	10,639	10,960
Missouri	23,156	23,759	21,788	20,805
New Jersey	3,440	3,668	3,403	3,518
New York	8,336	9,031	8,404	8,399
North Carolina	22,902	20,169	21,081	18,154
Ohio	42,274	41,327	34,576	35,769
Oklahoma	31,415	31,723	20,910	21,200
Pennsylvania	52,895	54,217	50,384	50,446
South Carolina	15,145	16,586	13,810	15,058
Tennessee	15,505	12,141	14,305	8,461
Texas	64,711	65,492	62,824	63,749
Virginia	15,148	15,339	14,311	14,744
West Virginia	26,464	27,099	23,352	22,406
Wisconsin	15,876	16,048	12,840	12,768
Total	654,161	647,439	591,508	571,293

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*B. The Impacts on PM<sub>2.5</sub> and Ozone of the Final SO<sub>2</sub> and NO<sub>x</sub> Strategy*

The air quality modeling platform described in section V was used by EPA to model the impacts of the final rule SO<sub>2</sub> and NO<sub>x</sub> emission reductions on annual average PM<sub>2.5</sub>, 24-hour PM<sub>2.5</sub>, and 8-hour ozone concentrations. In brief, we ran the CAMx model for the meteorological conditions in the year of 2005 for the eastern U.S. modeling domain.<sup>91</sup> Modeling was performed for

the 2014 base case and the 2014 air quality-assured trading (*i.e.*, remedy) scenario to assess the expected effects of the final rule on projected PM<sub>2.5</sub> and ozone design value concentrations and nonattainment and maintenance. The procedures used to project future design values and nonattainment and maintenance are described in section V.

The projected 2014 concentrations of annual PM<sub>2.5</sub>, 24-hour PM<sub>2.5</sub>, and ozone at each monitoring site in the East for which projections were made are

provided in the Air Quality Modeling Final Rule TSD. The number of nonattainment and/or maintenance sites in the East for the 2012 base case, 2014 base case, and 2014 remedy for annual PM<sub>2.5</sub>, 24-hour PM<sub>2.5</sub>, and ozone are provided in Table VIII.B-1.<sup>92</sup> The average and peak reductions in annual PM<sub>2.5</sub>, 24-hour PM<sub>2.5</sub>, and ozone predicted at 2012 nonattainment and/or maintenance sites due the emission reductions between 2012 and the 2014 remedy are provided in Table VIII.B-2.

<sup>91</sup> As described in the Air Quality Modeling Final Rule TSD, the eastern U.S. was modeled at a horizontal resolution of 12 x 12 km. The remainder

of the U.S. was modeled at a resolution of 36 x 36 km.

<sup>92</sup> To provide a point of reference, Table VIII.B-1 also includes the number of nonattainment and/or maintenance sites based on ambient design values for the period 2003 through 2007.

TABLE VIII.B-1—PROJECTED REDUCTION IN NONATTAINMENT AND/OR MAINTENANCE PROBLEMS FOR PM<sub>2.5</sub> AND OZONE IN THE EASTERN U.S.

	Ambient (2003–2007)	2012 Base case	2014 Base case	2014 remedy	Percent reduction: 2012 base case vs. 2014 remedy (percent)	Percent reduction: 2014 base case vs. 2014 remedy
Annual PM <sub>2.5</sub> Nonattainment Sites <sup>93</sup> .....	103	12	7	0	100	100 percent.
Annual PM <sub>2.5</sub> Maintenance-Only Sites .....	22	4	3	0	100	100 percent.
24-hour PM <sub>2.5</sub> Nonattainment Sites .....	151	20	10	1	95	90 percent.
24-hour PM <sub>2.5</sub> Maintenance-Only Sites .....	48	21	12	4	81	67 percent.
Ozone Nonattainment Sites .....	104	7	4	4	43	No Change.
Ozone Maintenance-Only Sites .....	65	9	6	6	33	No Change.

TABLE VIII.B-2—AVERAGE AND PEAK REDUCTION IN ANNUAL PM<sub>2.5</sub>, 24-HOUR PM<sub>2.5</sub>, AND OZONE FOR SITES THAT ARE PROJECTED TO HAVE NONATTAINMENT AND/OR MAINTENANCE PROBLEMS IN THE 2012 BASE CASE

	Average reduction: 2012 base Case to 2014 remedy	Peak reduction: 2012 base case to 2014 remedy
Annual PM <sub>2.5</sub> Nonattainment Sites .....	2.73 µg/m <sup>3</sup> .....	3.32 µg/m <sup>3</sup> .
Annual PM <sub>2.5</sub> Maintenance-Only Sites .....	2.99 µg/m <sup>3</sup> .....	3.26 µg/m <sup>3</sup> .
24-hour PM <sub>2.5</sub> Nonattainment Sites .....	6.8 µg/m <sup>3</sup> .....	11.7 µg/m <sup>3</sup> .
24-hour PM <sub>2.5</sub> Maintenance-Only Sites .....	6.5 µg/m <sup>3</sup> .....	11.0 µg/m <sup>3</sup> .
Ozone Nonattainment Sites .....	1.9 ppb .....	2.3 ppb.
Ozone Maintenance-Only Sites .....	1.8 ppb .....	2.1 ppb.

The information in Table VIII.B-1 shows that there will be significant reductions in the extent of nonattainment and maintenance problems for annual PM<sub>2.5</sub>, 24-hour PM<sub>2.5</sub>, and ozone between 2012 and 2014 as a result of the emission budgets in this rule coupled with emission reductions during this time period from other existing control programs. Specifically, the results of the air quality modeling indicate that no sites are projected to be in nonattainment or projected to have a maintenance problem for annual PM<sub>2.5</sub> in 2014 with the emission reductions expected from the Transport Rule. As indicated in Table VIII.B-2, the average reduction in annual PM<sub>2.5</sub> across the twelve 2012 nonattainment sites is 2.73 µg/m<sup>3</sup> and the peak reduction at an individual nonattainment site is 3.32 µg/m<sup>3</sup>. Large reductions are also projected at annual PM<sub>2.5</sub> maintenance-only sites.

For 24-hour PM<sub>2.5</sub>, we project that the number of nonattainment sites will be reduced by 95 percent and the number of maintenance-only sites by 81 percent in 2014 compared to the 2012 base case. The average reduction in 24-hour PM<sub>2.5</sub> across the twenty 2012 nonattainment sites is 6.8 µg/m<sup>3</sup> and the peak reduction at an individual nonattainment site is 11.7 µg/m<sup>3</sup>. Similarly large reductions are projected

at 24-hour PM<sub>2.5</sub> maintenance-only sites, as indicated in Table VIII.B-2.

The emission reductions in the Transport Rule will result in considerable progress toward attainment and maintenance at the 5 sites that remain as nonattainment and/or maintenance for the 24-hour PM<sub>2.5</sub> standard. On average for these 5 sites, the predicted amount of PM<sub>2.5</sub> reduction in 2014 is 64 percent of what is needed for these sites to attain and/or maintain the 24-hour standard.

Thus, the SO<sub>2</sub> and NO<sub>x</sub> emission reductions which will result from the Transport Rule will greatly reduce the extent of PM<sub>2.5</sub> nonattainment and maintenance problems by 2014 and beyond. As described previously, these emission reductions are expected to substantially reduce the number of PM<sub>2.5</sub> nonattainment and/or maintenance sites in the East and make attainment easier for those counties that remain nonattainment by substantially lowering PM<sub>2.5</sub> concentrations in residual nonattainment sites. The emission reductions will also help those locations that may have maintenance problems.

Based on the 2012 base air quality modeling for ozone, 16 sites in the East are projected to be nonattainment or have problems maintaining the 1997 ozone standard. The summer NO<sub>x</sub> reductions are projected to lower 8-hour ozone concentration by 1.8 ppb, on average by 2014, at monitoring sites projected to be nonattainment and/or

have maintenance problems in the 2012 base case. We expect that the number of nonattainment sites will be reduced by 43 percent and the number of maintenance-only sites by 33 percent in 2014 compared to the 2012 base case. Thus, our modeling indicates that by 2014 the summer NO<sub>x</sub> emission reductions in this rule, coupled with other existing control programs, will lower ozone concentrations in the East and help bring areas closer to attainment for the 8-hour ozone NAAQS. As discussed in section III of this preamble, EPA plans to finalize its reconsideration of the 2008 revised ozone NAAQS soon, and these reductions will help areas achieve those revised NAAQS.

C. Benefits

1. Human Health Benefit Analysis

To estimate the human health benefits of the final Transport Rule, EPA used the BenMAP model to quantify the changes in PM<sub>2.5</sub> and ozone-related health impacts and monetized benefits based on changes in air quality. For context, it is important to note that the magnitude of the PM<sub>2.5</sub> benefits is largely driven by the concentration response function for premature mortality. Experts have advised EPA to consider a variety of assumptions, including estimates based both on empirical (epidemiological) studies and judgments elicited from scientific experts, to characterize the uncertainty in the relationship between PM<sub>2.5</sub>

<sup>93</sup> "Nonattainment" is used to denote sites that are projected to have both nonattainment and maintenance problems.

concentrations and premature mortality. For this rule we cite two key empirical studies, one based on the American Cancer Society cohort study<sup>94</sup> and the other based on the extended Six Cities cohort study.<sup>95</sup>

The estimated benefits of this rule are substantial, particularly when viewed within the context of the total public health burden of PM<sub>2.5</sub> and ozone air pollution. A recent EPA analysis estimated that 2005 levels of PM<sub>2.5</sub> and ozone were responsible for between 130,000 and 320,000 PM<sub>2.5</sub>-related and 4,700 ozone-related premature deaths, or about 6.1 percent of total deaths from all causes in the continental U.S. (using the lower end of the range for premature deaths).<sup>96</sup> In other words, 1 in 20 deaths

in the U.S. is attributable to PM<sub>2.5</sub> and ozone exposure. This same analysis attributed almost 200,000 non-fatal heart attacks, 90,000 hospital admissions due to respiratory or cardiovascular illness, 2.5 million cases of aggravated asthma among children, and many other human health impacts to exposure to these two air pollutants.

We estimate that PM<sub>2.5</sub> improvements under the Transport Rule will, starting in 2014, annually reduce between 13,000 and 34,000 PM<sub>2.5</sub>-related premature deaths, 15,000 non-fatal heart attacks, 8,700 incidences of chronic bronchitis, 8,500 hospital admissions, and 400,000 cases of aggravated asthma while also reducing 10 million days of restricted activity due to respiratory illness and approximately 1.7 million work-loss days. We also estimate substantial health improvements for children from fewer cases of upper and lower respiratory illness and acute bronchitis.

Ozone health-related benefits are expected to occur during the summer

ozone season (usually ranging from May to September in the eastern U.S.). Based upon modeling for 2014, annual ozone related health benefits are expected to include between 27 and 120 fewer premature mortalities, 240 fewer hospital admissions for respiratory illnesses, 86 fewer emergency room admissions for asthma, 160,000 fewer days with restricted activity levels, and 51,000 fewer days where children are absent from school due to illnesses.

Table VIII.C-1 presents the primary estimates of annual reduced incidence of PM<sub>2.5</sub> and ozone-related health effects for the final rule based on 2014 air quality improvements. When adding the PM and ozone-related mortalities together, we find that the Transport Rule will yield between 13,000 and 34,000 fewer premature mortalities annually. By 2014, in combination with other federal and state air quality actions, the Transport Rule will address a substantial fraction of the total public health burden of PM<sub>2.5</sub> and ozone air pollution.

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<sup>94</sup> Pope *et al.*, 2002. "Lung Cancer, Cardiopulmonary Mortality, and Long-term Exposure to Fine Particulate Air Pollution." *Journal of the American Medical Association*. 287:1132-1141.

<sup>95</sup> Laden *et al.*, 2006. "Reduction in Fine Particulate Air Pollution and Mortality." *American Journal of Respiratory and Critical Care Medicine*. 173:667-672.

<sup>96</sup> Fann N, Lamson A, Wesson K, Risley D, Anenberg SC, Hubbell BJ. Estimating the National Public Health Burden Associated with Exposure to

Ambient PM<sub>2.5</sub> and Ozone. *Risk Analysis*; 2011 In Press.

**VIII.C-1 Estimated Annual Reductions in Incidences of Health Effects  
Based on 2014 Modeling<sup>a</sup>**

<i>Health Effect</i>	<i>Within transport region</i>	<i>Beyond transport region</i>	<i>Total</i>
<b>PM-Related endpoints</b>			
<b>Premature Mortality</b>			
Pope et al. (2002) (age >30)	13,000 (5,200–21,000)	33 (5–60)	13,000 (5,200–21,000)
Laden et al. (2006) (age >25)	34,000 (18,000–49,000)	84 (31–140)	34,000 (18,000–49,000)
Infant (< 1 year)	59 (-47–160)	0.15 (-0.2–0.5)	59 (-47–160)
Chronic Bronchitis	8,700 (1,600–16,000)	23 (-5–50)	8,700 (1,600–16,000)
Non-fatal heart attacks (age > 18)	15,000 (5,600–24,000)	40 (7–72)	15,000 (5,600–24,000)
Hospital admissions– respiratory (all ages)	2,700 (1,300–4,000)	5 (2–9)	2,700 (1,300–4,000)
Hospital admissions– cardiovascular (age > 18)	5,700 (4,200–6,600)	15 (10–19)	5,800 (4,200–6,600)
Emergency room visits for asthma (age < 18)	9,800 (5,800–14,000)	21 (7–36)	9,800 (5,800–14,000)
Acute bronchitis (age 8-12)	19,000 (-630–37,000)	50 (-29–130)	19,000 (-660–37,000)
Lower respiratory symptoms (age 7-14)	240,000 (120,000–360,000)	630 (130–1,100)	240,000 (120,000–360,000)
Upper respiratory symptoms (asthmatics age 9-18)	180,000 (57,000–310,000)	480 (-25–980)	180,000 (57,000–310,000)
Asthma exacerbation (asthmatics 6-18)	400,000 (45,000– 1,100,000)	1,100 (-250–2,900)	400,000 (45,000– 1,100,000)
Lost work days (ages 18-65)	1,700,000 (1,500,000– 1,900,000)	4,300 (3,500–5,200)	1,700,000 (1,500,000– 1,900,000)
Minor restricted-activity days (ages 18-65)	10,000,000 (8,400,000– 11,000,000)	26,000 (20,000– 32,000)	10,000,000 (8,400,000– 12,000,000)



**Ozone-related endpoints**

## Premature mortality

Multi-city and NMMAPS	Bell et al. (2004) (all ages)	27 (11–42)	0.1 (0.01–0.3)	27 (11–42)
	Schwartz et al. (2005) (all ages)	41 (17–64)	0.2 (0.1–0.4)	41 (17–65)
	Huang et al. (2005) (all ages)	37 (17–57)	0.2 (0.1–0.4)	37 (17–57)
Meta-analyses	Ito et al. (2005) (all ages)	120 (78–160)	0.6 (0.3–0.9)	120 (79–160)
	Bell et al. (2005) (all ages)	87 (48–130)	0.5 (0.2–0.8)	87 (48–130)
	Levy et al. (2005) (all ages)	120 (89–150)	0.7 (0.4–0.9)	120 (90–160)
Hospital admissions— respiratory causes (ages > 65)		160 (21–280)	1.2 (0.1–2.3)	160 (21–290)
Hospital admissions— respiratory causes (ages <2)		83 (43–120)	0.5 (0.2–0.8)	84 (43–120)
Emergency room visits for asthma (all ages)		86 (–2–260)	0.4 (–0.2–1.4)	86 (–2–260)
Minor restricted-activity days (ages 18–65)		160,000 (80,000–240,000)	910 (240–1,600)	160,000 (80,000–240,000)
School absence days		51,000 (22,000–73,000)	290 (59–490)	51,000 (22,000–74,000)

<sup>a</sup> Values rounded to two significant figures. Benefits from reducing other criteria pollutants and hazardous air pollutants and ecosystem effects are not included here.

Source: EPA, 2011

## 2. Quantified and Monetized Visibility Benefits

Only a subset of the expected visibility benefits—those for Class I areas—are included in the monetary benefit estimates we project for this rule. We anticipate improvement in visibility in residential areas where people live, work, and recreate within the Transport Rule region for which we are currently unable to monetize benefits. For the Class I areas we estimate annual benefits of \$4.1 billion beginning in 2014 for visibility improvements. The value of visibility benefits in areas where we are unable to monetize benefits could be substantial.

## 3. Benefits of Reducing GHG Emissions

When fully implemented in 2014, the Transport Rule will reduce emissions of CO<sub>2</sub> from electrical generating units by about 25 million metric tons annually. Using a “social cost of carbon” (SCC) estimate that accounts for the marginal dollar value (*i.e.*, cost) of climate-related damages resulting from CO<sub>2</sub> emissions, previous analyses, including the RIA for the Final Rulemaking to Establish Light-Duty Vehicle Greenhouse Gas Emissions Standards and Corporate Average Fuel Efficiency Standards, have found the total benefit of CO<sub>2</sub> reductions is substantial. The monetary value of these avoided damages also grows over time. Readers interested in learning more

about the calculation of the SCC metric should refer to the SCC TSD, Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866 [Docket No. EPA–HQ–OAR–2009–0472].

## 4. Total Monetized Benefits

Table VIII.C–2 presents the estimated annual monetary value of reductions in the incidence of health and welfare effects. These estimates account for increases in the value of risk reduction over time. Total monetized benefits are driven primarily by the reduction in premature fatalities each year, which account for between 89 and 96 percent of total benefits.

**VIII.C-2 Estimated Annual Monetary Value of Reductions in Incidence of Health and Welfare Effects Based on 2014 Modeling (Billions of 2007\$)<sup>A</sup>**

Health Effect	Pollutant	Within		Total
		Transport Rule Region	Beyond Transport Rule Region <sup>B</sup>	
Premature Mortality (Pope et al. 2002 PM mortality and Bell et al. 2004 ozone mortality estimates)				
3% discount rate	PM <sub>2.5</sub> & O <sub>3</sub>	\$100 (\$8.3–\$320)	\$0.3 (\$0.01–\$0.9)	\$100 (\$8.3–\$320)
7% discount rate	PM <sub>2.5</sub> & O <sub>3</sub>	\$94 (\$7.5–\$280)	\$0.2 (\$0.01–\$0.8)	\$94 (\$7.5–\$290)
Premature Mortality (Laden et al. 2006 PM mortality and Levy et al. 2005 ozone mortality estimates)				
3% discount rate	PM <sub>2.5</sub> & O <sub>3</sub>	\$270 (\$23–\$770)	\$0.7 (\$0.05–\$2)	\$270 (\$23–\$770)
7% discount rate	PM <sub>2.5</sub> & O <sub>3</sub>	\$240 (\$21–\$700)	\$0.6 (\$0.05–\$1.8)	\$240 (\$21–\$700)
Chronic Bronchitis	PM <sub>2.5</sub>	\$4.2 (\$0.2–\$19)	\$0.01 (\$-0.003–\$0.06)	\$4.2 (\$0.2–\$19)
Non-fatal heart attacks				
3% discount rate	PM <sub>2.5</sub>	\$1.7 (\$0.3–\$4.2)	\$0.004 (\$0.003–\$0.01)	\$1.7 (\$0.3–\$4.2)
7% discount rate	PM <sub>2.5</sub>	\$1.3 (\$0.3–\$3.1)	\$0.004 (\$0.002–\$0.001)	\$1.3 (\$0.3–\$3.1)
Hospital admissions—respiratory	PM <sub>2.5</sub> & O <sub>3</sub>	\$0.04 (\$0.02–\$0.06)	---	\$0.04 (\$0.02–\$0.06)
Hospital admissions—cardiovascular	PM <sub>2.5</sub>	\$0.09 (\$0.01–\$0.2)	---	\$0.09 (\$0.01–\$0.2)
Emergency room visits for asthma	PM <sub>2.5</sub> & O <sub>3</sub>	\$0.003 (\$0.002–\$0.006)	---	\$0.003 (\$0.002–\$0.006)
Acute bronchitis	PM <sub>2.5</sub>	\$0.008 (<\$-0.01–\$0.02) <sup>c</sup>	---	\$0.008 (<\$-0.01–\$0.02) <sup>c</sup>
Lower respiratory symptoms	PM <sub>2.5</sub>	\$0.004 (\$0.002–\$0.009)	---	\$0.004 (\$0.002–\$0.009)
Upper respiratory symptoms	PM <sub>2.5</sub>	\$0.005 (<\$0.01–\$0.014)	---	\$0.005 (<\$0.01–\$0.014)
Asthma exacerbation	PM <sub>2.5</sub>	\$0.02 (\$0.002–\$0.08)	---	\$0.02 (\$0.002–\$0.08)
Lost work days	PM <sub>2.5</sub>	\$0.2 (\$0.17–\$0.24)	---	\$0.2 (\$0.17–\$0.24)
School loss days	O <sub>3</sub>	\$0.01	---	\$0.01

			(\$0.004– \$0.013)		(\$0.004–\$0.013)
Minor restricted- activity days	PM <sub>2.5</sub> & O <sub>3</sub>		\$0.7 (\$0.3–\$1)	---	\$0.7 (\$0.3–\$1)
Recreational visibility, Class I areas	PM <sub>2.5</sub>				\$4.1
Social cost of carbon (3% discount rate, 2014 value)	CO <sub>2</sub>				\$0.6

**Monetized total Benefits**(Pope et al. 2002 PM<sub>2.5</sub> mortality and Bell et al. 2004 ozone mortality estimates)

3% discount rate	PM <sub>2.5</sub> , O <sub>3</sub>	\$110 (\$8.8–\$340)	\$0.28 (\$0.01–\$0.9)	\$120 (\$14–\$350)
7% discount rate	PM <sub>2.5</sub> , O <sub>3</sub>	\$100 (\$8–\$310)	\$0.25 (\$0.01–\$0.85)	\$110 (\$13–\$320)

**Monetized total Benefits**(Laden et al. 2006 PM<sub>2.5</sub> mortality and Levy et al. 2005 ozone mortality estimates)

3% discount rate	PM <sub>2.5</sub> , O <sub>3</sub>	\$270 (\$24–\$800)	\$0.7 (\$0.05–\$2.1)	\$280 (\$29–\$810)
7% discount rate	PM <sub>2.5</sub> , O <sub>3</sub>	\$250 (\$22–\$720)	\$0.6 (\$0.04–\$1.9)	\$250 (\$26–\$730)

<sup>A</sup> Values rounded to two significant figures. Benefits from reducing other criteria pollutants and hazardous air pollutants and ecosystem effects are not included here.

<sup>B</sup> Monetary value of endpoints marked with dashes are < \$100,000.

<sup>C</sup> The negative estimates for certain endpoints are the result of the weak statistical power of the study used to calculate these health impacts and do not suggest that increases in air pollution exposure result in decreased health impacts.

Source: EPA, 2011

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5. How do the benefits in 2012 compare to 2014?

The magnitude of SO<sub>2</sub> emission reductions achieved under the rule is actually larger in 2012 than in 2014, due to substantial emission reductions expected to occur in the baseline (*i.e.*, unrelated to the Transport Rule) between those years. As a consequence, EPA expects correspondingly greater reductions in harmful effects to accrue in 2012 compared to 2014.

As presented in Table VIII.C-1, the Transport Rule is expected to prevent between 13,000 and 34,000 premature deaths annually from 2014 onward due to reductions in ambient PM<sub>2.5</sub> concentrations, which are most significantly impacted by SO<sub>2</sub> emission

reductions. Based on EPA's analysis of power sector emission reductions under the Transport Rule, the decline in SO<sub>2</sub> in 2012 is 4 percent greater than the decline in SO<sub>2</sub> in 2014 in the states modeled. EPA therefore anticipates that the Transport Rule will deliver greater reductions in ambient PM<sub>2.5</sub> concentrations in 2012 and increased annual benefits to human health and welfare beyond those presented in this section.

6. How do the benefits compare to the costs of this final rule?

The estimated annual private costs to implement the emission reduction requirements of the final rule for the Transport Rule states are \$1.85 billion in 2012 and \$0.83 billion in 2014 (2007 \$). These costs are the annual

incremental electric generation production costs that are expected to occur with the Transport Rule. The EPA uses these costs as compliance cost estimates in developing cost-effectiveness estimates.

In estimating the net benefits of regulation, the appropriate cost measure is "social costs." Social costs represent the welfare costs of the rule to society. These costs do not consider transfer payments (such as taxes) that are simply redistributions of wealth. The social costs of this rule are estimated to be approximately \$0.81 billion in 2014 assuming either a 3 percent discount rate or a 7 percent discount rate. Thus, the annual net benefit (social benefits minus social costs) as shown in Table VIII.C-3 for the Transport Rule is approximately \$120 to \$280 billion or

\$110 to \$250 billion (3 percent and 7 percent discount rates, respectively) in 2014. Implementation of the rule is expected to provide society with a

substantial net gain in social welfare based on economic efficiency criteria. A listing of the benefit categories that could not be quantified or monetized in

our benefit estimates is provided in Table VIII.C-4.

TABLE VIII.C-3—SUMMARY OF ANNUAL BENEFITS, COSTS, AND NET BENEFITS OF THE FINAL TRANSPORT RULE IN 2014 [Billions of 2007\$]<sup>a</sup>

Description	Transport Rule remedy (billions of 2007 \$)	
	3% discount rate	7% discount rate
Social costs .....	\$0.81 .....	\$0.81.
Total monetized benefits <sup>b</sup> .....	\$120 to \$280 .....	\$110 to \$250.
Net benefits (benefits-costs) .....	\$120 to \$280 .....	\$110 to \$250.

<sup>a</sup> All estimates are for 2014, and are rounded to two significant figures.

<sup>b</sup> The total monetized benefits reflect the human health benefits associated with reducing exposure to PM<sub>2.5</sub> and ozone and the welfare benefits associated with improved visibility in Class I areas. The reduction in premature mortalities account for over 90 percent of total monetized PM<sub>2.5</sub> and ozone benefits.

The annualized regional cost of the rule, as quantified here, is EPA's best assessment of the cost of implementing the Transport Rule. These costs are generated from rigorous economic modeling of changes in the power sector expected from the rule. This type of analysis, using IPM, has undergone peer review and been upheld in federal courts. The direct cost includes, but is not limited to, capital investments in pollution controls, operating expenses of the pollution controls, investments in new generating sources, and additional fuel expenditures. The EPA believes that these costs reflect, as closely as possible, the additional costs of the Transport Rule to industry. The relatively small cost associated with monitoring emissions, reporting, and recordkeeping for affected sources is not included in these annualized cost estimates, but EPA has done a separate analysis and estimated the cost to be about \$26 million (see section XII.B, Paperwork Reduction Act). However, there may exist certain costs that EPA has not quantified in these estimates. These costs may include costs of transitioning to this rule, such as the costs associated with the retirement of smaller or less efficient EGUs, employment shifts as workers are retained at the same company or re-employed elsewhere in the economy, and certain relatively small permitting costs associated with Title V that new program entrants face.

An optimization model was employed that assumes cost minimization. Costs may be understated if the regulated community chooses not to minimize its compliance costs in the same manner to comply with the rules. Although EPA has not quantified these costs, the Agency believes that they are small compared with the quantified costs of the program to the power sector.

However, EPA's experience and results of independent evaluation suggests that costs are likely to be lower by some degree (see RIA for details). The annualized cost estimates presented are the best and most accurate based upon available information. In a separate analysis, EPA estimates the indirect costs and impacts of higher electricity prices on the entire economy. These impacts are summarized in the RIA for this final rule.

Every benefit-cost analysis examining the potential effects of a change in environmental protection requirements is limited to some extent by data gaps, model capabilities (such as geographic coverage), and uncertainties in the underlying scientific and economic studies used to configure the benefit and cost models. Gaps in the scientific literature often result in the inability to estimate quantitative changes in health and environmental effects, or to assign economic values even to those health and environmental outcomes that can be quantified. While uncertainties in the underlying scientific and economics literatures (that may result in overestimation or underestimation of benefits) are discussed in detail in the economic analyses and its supporting documents and references, the key uncertainties which have a bearing on the results of the benefit-cost analysis of this rule include the following:

- EPA's inability to quantify potentially significant benefit categories;
- Uncertainties in population growth and baseline incidence rates;
- Uncertainties in projection of emission inventories and air quality into the future;
- Uncertainty in the estimated relationships of health and welfare effects to changes in pollutant concentrations, including the shape of the C-R function, the size of the effect

estimates, and the relative toxicity of the many components of the PM mixture;

- Uncertainties in exposure estimation; and
- Uncertainties associated with the effect of potential future actions to limit emissions.

Despite these uncertainties, we believe the benefit-cost analysis provides a reasonable indication of the expected economic benefits of the rulemaking in future years under a set of reasonable assumptions. This approach calculates a mean value across value of a statistical life (VSL) estimates derived from 26 labor market and contingent valuation studies published between 1974 and 1991. The mean VSL across these studies is \$6.3 million (2000\$).<sup>97</sup> The benefits estimates generated for this rule are subject to a number of assumptions and uncertainties, which are discussed throughout the RIA document.

As Table VIII.C-2 indicates, total annual monetary benefits are driven primarily by the reduction in premature mortalities each year. Some key assumptions underlying the primary estimate for the premature mortality category include the following:

(1) EPA assumes inhalation of fine particles is causally associated with premature death at concentrations near those experienced by most Americans on a 24-hour basis. Plausible biological mechanisms for this effect have been hypothesized for the endpoints included in the primary analysis, and the weight of the available epidemiological evidence supports an assumption of causality.

<sup>97</sup> In this analysis, we adjust the VSL to account for a different currency year (2007\$) and to account for income growth to 2014. After applying these adjustments to the \$6.3 million value, the VSL is \$8.7 million.

(2) EPA assumes all fine particles, regardless of their chemical composition, are equally potent in causing premature mortality. This is an important assumption, because the proportion of certain components in the PM mixture produced via precursors emitted from EGUs may differ significantly from direct PM released from automotive engines and other industrial sources, but no clear scientific grounds exist for supporting differential effects estimates by particle type.

(3) We assume that the health impact function for fine particles is linear down

to the lowest air quality levels modeled in this analysis. Thus, the estimates include health benefits from reducing fine particles in areas with varied concentrations of PM<sub>2.5</sub>, including both regions that are in attainment with the fine particle standard and those that do not meet the standard down to the lowest modeled concentrations.

The EPA recognizes the difficulties, assumptions, and inherent uncertainties in the overall enterprise. The analyses upon which the Transport Rule is based were selected from the peer-reviewed scientific literature. We used up-to-date assessment tools, and we believe the

results are highly useful in assessing this rule.

There are a number of health and environmental effects that we were unable to quantify or monetize. A complete benefit-cost analysis of the Transport Rule requires consideration of all benefits and costs expected to result from the rule, not just those benefits and costs which could be expressed here in dollar terms. A listing of the benefit categories that were not quantified or monetized in our estimate are provided in Table VIII.C-4.

TABLE VIII.C-4—UNQUANTIFIED AND NON-MONETIZED EFFECTS OF THE TRANSPORT RULE

Pollutant/Effect	Endpoint
PM: Health <sup>a</sup>	Low birth weight. Pulmonary function. Chronic respiratory diseases other than chronic bronchitis. Non-asthma respiratory emergency room visits. UVb exposure <sup>b</sup> .
PM: Welfare	Household soiling. Visibility in residential areas. Visibility in non-class I areas and class 1 areas in NW, NE, and Central regions. UVb exposure <sup>b</sup> . Global climate impacts <sup>b</sup> .
Ozone: Health	Chronic respiratory damage. Premature aging of the lungs. Non-asthma respiratory emergency room visits. UVb exposure <sup>b</sup> .
Ozone: Welfare	Yields for: —Commercial forests. —Fruits and vegetables, and —Other commercial and noncommercial crops. Damage to urban ornamental plants. Recreational demand from damaged forest aesthetics. Ecosystem functions. Increased exposure to UVb <sup>b</sup> . Climate impacts.
NO <sub>2</sub> : Health	Respiratory hospital admissions. Respiratory emergency department visits. Asthma exacerbation. Acute respiratory symptoms. Premature mortality. Pulmonary function.
NO <sub>2</sub> : Welfare	Commercial fishing and forestry from acidic deposition effects. Commercial fishing, agriculture and forestry from nutrient deposition effects. Recreation in terrestrial and estuarine ecosystems from nutrient deposition effects. Other ecosystem services and existence values for currently healthy ecosystems. Coastal eutrophication from nitrogen deposition effects.
SO <sub>2</sub> : Health	Respiratory hospital admissions. Asthma emergency room visits. Asthma exacerbation. Acute respiratory symptoms. Premature mortality. Pulmonary function.
SO <sub>2</sub> : Welfare	Commercial fishing and forestry from acidic deposition effects. Recreation in terrestrial and aquatic ecosystems from acid deposition effects. Increased mercury methylation.
Mercury: Health	Incidence of neurological disorders. Incidence of learning disabilities. Incidences in developmental delays.
Mercury: Welfare	Impact on birds and mammals (e.g., reproductive effects). Impacts to commercial, subsistence and recreational fishing.

Source: EPA.

<sup>a</sup>In addition to primary economic endpoints, there are a number of biological responses that have been associated with PM health effects including morphological changes and altered host defense mechanisms. The public health impact of these biological responses may be partly represented by our quantified endpoints.

<sup>b</sup>May result in benefits or disbenefits.

7. What are the unquantified and non-monetized benefits of the Transport Rule emission reductions?

Important benefits beyond the human health and welfare benefits quantified in this section and the RIA are expected to occur from this rule. These other benefits occur directly from NO<sub>x</sub> and SO<sub>2</sub> emission reductions and from co-benefits due to Transport Rule compliance. These benefits are listed in Table VIII.C-4. Some of the more important examples include: Reduced acidification and, in the case of NO<sub>x</sub>, eutrophication of water bodies; possible reduced nitrate contamination of drinking water; and reduced acid and particulate deposition that causes damages to cultural monuments, as well as, soiling and other materials damage. To illustrate the important nature of benefit categories EPA is currently unable to monetize, we discuss four categories of public welfare and environmental impacts related to reductions in emissions required by the Transport Rule: Reduced acid deposition, reduced eutrophication of estuaries, reduced mercury methylation and deposition, and reduced vegetation impairment from ozone.

a. What are the benefits of reduced deposition of sulfur and nitrogen to aquatic, forest, and coastal ecosystems?

Atmospheric deposition of sulfur and nitrogen, often referred to as acid rain, occurs when emissions of SO<sub>2</sub> and NO<sub>x</sub> react in the atmosphere (with water, oxygen, and oxidants) to form various acidic compounds. These acidic compounds fall to earth in either a wet form (rain, snow, and fog) or a dry form (gases and particles). Prevailing winds can transport acidic compounds hundreds of miles, across state borders. These compounds are deposited onto terrestrial and aquatic ecosystems across the U.S., contributing to the problems of acidification.

(1) Acid Deposition and Acidification of Lakes and Streams

The extent of adverse effects of acid deposition on freshwater and forest ecosystems depends largely upon the ecosystem's ability to neutralize the acid. The neutralizing ability depends largely on the watershed's physical characteristics, such as geology, soils, and size. A key indicator of neutralizing ability is termed Acid Neutralizing Capacity (ANC). Higher ANC indicates greater ability to neutralize acidity. Acidic conditions occur more frequently during rainfall and snowmelt that cause high flows of water, and less commonly during low-flow conditions except

where chronic acidity conditions are severe. Biological effects are primarily attributable to a combination of low pH and high inorganic aluminum concentrations. Biological effects of episodes include reduced fish condition factor—changes in species composition and declines in aquatic species richness across multiple taxa, ecosystems and regions—as well as fish mortality. Waters that are sensitive to acidification tend to be located in small watersheds that have few alkaline minerals and shallow soils. Conversely, watersheds that contain alkaline minerals, such as limestone, tend to have waters with a high ANC. Areas especially sensitive to acidification include portions of the Northeast (particularly, the Adirondack and Catskill Mountains, portions of New England, and streams in the mid-Appalachian highlands) and southeastern streams. This regulatory action will decrease acid deposition within and downwind of the transport region and is likely to have positive effects on the health and productivity of aquatic ecosystems in the region.

(2) Acid Deposition and Forest Ecosystem Impacts

Acidifying deposition has altered major biogeochemical processes in the U.S. by increasing the nitrogen and sulfur content of soils, accelerating nitrate and sulfate leaching from soil to drainage waters, depleting base cations (especially calcium and magnesium) from soils, and increasing the mobility of aluminum. Inorganic aluminum is toxic to some tree roots. Plants affected by high levels of aluminum from the soil often have reduced root growth, which restricts the ability of the plant to take up water and nutrients, especially calcium.<sup>98</sup> These direct effects can, in turn, influence the response of these plants to climatic stresses such as droughts and cold temperatures. They can also influence the sensitivity of plants to other stresses, including insect pests and disease,<sup>99</sup> leading to increased mortality of canopy trees.

Both coniferous and deciduous forests throughout the eastern U.S. are experiencing gradual losses of base cation nutrients from the soil due to accelerated leaching from acidifying

<sup>98</sup> U.S. Environmental Protection Agency (U.S. EPA). 2008. Integrated Science Assessment for Oxides of Nitrogen and Sulfur—Ecological Criteria National (Final Report). National

Center for Environmental Assessment, Research Triangle Park, NC. EPA/600/R-08/139. December. <http://cfpub.epa.gov/ncea/cfm/recorddisplay.cfm?deid=201485>.

<sup>99</sup> Joslin, J.D., Kelly, J.M., van Miegroet, H. 1992. Soil chemistry and nutrition of North American spruce-fir stands: evidence for recent change. *Journal of Environmental Quality*, 21, 12–30.

deposition. This change in nutrient availability may reduce the quality of forest nutrition over the long term. Evidence suggests that red spruce and sugar maple in some areas in the eastern U.S. have experienced declining health because of this deposition. For red spruce (*Picea rubens*), dieback or decline has been observed across high elevation landscapes of the northeastern U.S. and, to a lesser extent, the southeastern U.S. Acidifying deposition has been implicated as a causal factor.<sup>100</sup>

This regulatory action will decrease acid deposition within and downwind of the transport region and is likely to have positive effects on the health and productivity of forest systems in the region.

b. Coastal Ecosystems

Since 1990, a large amount of research has been conducted on the impact of nitrogen deposition to coastal waters. Nitrogen is often the limiting nutrient in coastal ecosystems. Increasing the levels of nitrogen in coastal waters can cause significant changes to those ecosystems. In recent decades, human activities have accelerated nitrogen nutrient inputs, causing excessive growth of algae and leading to degraded water quality and associated impairments of estuarine and coastal resources.

Atmospheric deposition of nitrogen is a significant source of nitrogen to many estuaries. The amount of nitrogen entering estuaries due to atmospheric deposition varies widely, depending on the size and location of the estuarine watershed and other sources of nitrogen in the watershed. A recent assessment of 141 estuaries nationwide by the National Oceanic and Atmospheric Administration (NOAA) concluded that 19 estuaries (13 percent) suffered from moderately high or high levels of eutrophication due to excessive inputs of both nitrogen and phosphorus, and a majority of these estuaries are located in the coastal area from North Carolina to Massachusetts.<sup>101</sup> For estuaries in the Mid-Atlantic region, the contribution of atmospheric distribution to total nitrogen loads is estimated to range between 10 percent and 58 percent.<sup>102</sup>

<sup>100</sup> DeHayes, D.H., P.G. Schaberg, G.J. Hawley, and G.R. Stimpbeck. 1999. Acid rain impacts on calcium nutrition and forest health. *Bioscience* 49(10):789–800.

<sup>101</sup> National Oceanic and Atmospheric Administration (NOAA). 2007. Annual Commercial Landing Statistics. August. [http://www.st.nmfs.noaa.gov/st1/commercial/landings/annual\\_landings.html](http://www.st.nmfs.noaa.gov/st1/commercial/landings/annual_landings.html).

<sup>102</sup> Valigura, R.A., R.B. Alexander, M.S. Castro, T.P. Meyers, H.W. Paerl, P.E. Stacy, and R.E. Turner. 2001. Nitrogen Loading in Coastal Water

Eutrophication in estuaries is associated with a range of adverse ecological effects. The conceptual framework developed by NOAA emphasizes four main types of eutrophication effects: low dissolved oxygen (DO), harmful algal blooms (HABs), loss of submerged aquatic vegetation (SAV), and low water clarity. Low DO disrupts aquatic habitats, causing stress to fish and shellfish, which, in the short-term, can lead to episodic fish kills and, in the long-term, can damage overall growth in fish and shellfish populations. Low DO also degrades the aesthetic qualities of surface water. In addition to often being toxic to fish and shellfish, and leading to fish kills and aesthetic impairments of estuaries, HABs can, in some instances, also be harmful to human health. SAV provides critical habitat for many aquatic species in estuaries and, in some instances, can also protect shorelines by reducing wave strength. Therefore, declines in SAV due to nutrient enrichment are an important source of concern. Low water clarity is the result of accumulations of both algae and sediments in estuarine waters. In addition to contributing to declines in SAV, high levels of turbidity also degrade the aesthetic qualities of the estuarine environment.

Estuaries in the eastern United States are an important source of food production, in particular fish and shellfish production. The estuaries are capable of supporting large stocks of resident commercial species, and they serve as the breeding grounds and interim habitat for several migratory species.

This rule is anticipated to reduce nitrogen deposition within and downwind of the Transport Rule states. Thus, reductions in the levels of nitrogen deposition will have a positive impact upon current eutrophic conditions in estuaries and coastal areas in the region.

#### c. Mercury Methylation and Deposition

Mercury is a highly neurotoxic contaminant that enters the food web as a methylated compound, methylmercury.<sup>103</sup> The contaminant is concentrated in higher trophic levels, including fish eaten by humans. Experimental evidence has established

Bodies: An Atmospheric Perspective. Washington, DC: American Geophysical Union.

<sup>103</sup> U.S. Environmental Protection Agency (U.S. EPA). 2008. Integrated Science Assessment for Sulfur Oxides—Health Criteria (Final Report). National Center for Environmental Assessment, Research Triangle Park, NC. September. <http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=198843>.

that only inconsequential amounts of methylmercury can be produced in the absence of sulfate. Current evidence indicates that in watersheds where mercury is present, increased SO<sub>x</sub> deposition very likely results in methylmercury accumulation in fish.<sup>104 105</sup> The SO<sub>2</sub> Integrated Science Assessment concluded that evidence is sufficient to infer a causal relationship between sulfur deposition and increased mercury methylation in wetlands and aquatic environments.

#### d. Ozone Vegetation Effects

Ozone causes discernible injury to a wide array of vegetation.<sup>106</sup> In terms of forest productivity and ecosystem diversity, ozone may be the pollutant with the greatest potential for regional-scale forest impacts.<sup>107</sup> Studies have demonstrated repeatedly that ozone concentrations commonly observed in polluted areas can have substantial impacts on plant function.<sup>108 109</sup>

Assessing the impact of ground-level ozone on forests in the eastern United States involves understanding the risks to sensitive tree species from ambient ozone concentrations and accounting for the prevalence of those species within the forest. As a way to quantify the risks to particular plants from ground-level ozone, scientists have developed ozone-exposure/tree-response functions by exposing tree seedlings to different ozone levels and measuring reductions in growth as “biomass loss.” Typically, seedlings are used because they are easy to manipulate and measure their growth loss from ozone pollution. The mechanisms of susceptibility to ozone within the leaves of seedlings and mature trees are identical, and the decreases predicted using the seedlings

<sup>104</sup> Drevnick, P.E., D.E. Canfield, P.R. Gorski, A.L.C. Shinneman, D.R. Engstrom, D.C.G. Muir, G.R. Smith, P.J. Garrison, L.B. Cleckner, J.P. Hurley, R.B. Noble, R.R. Otter, and J.T. Oris. 2007. Deposition and cycling of sulfur controls mercury accumulation in Isle Royale fish. *Environmental Science and Technology* 41(21):7266–7272.

<sup>105</sup> Munthe, J., R.A. Bodaly, B.A. Branfireun, C.T. Driscoll, C.C. Gilmour, R. Harris, M. Horvat, M. Lucotte, and O. Malm. 2007. Recovery of mercury-contaminated fisheries. *AMBIO: A Journal of the Human Environment* 36:33–44.

<sup>106</sup> Fox, S., Mickler, R.A. (Eds.). 1996. *Impact of Air Pollutants on Southern Pine Forests*. Ecological Studies. (Vol. 118, 513 pp.) New York: Springer-Verlag.

<sup>107</sup> U.S. Environmental Protection Agency (U.S. EPA). 2006. *Air Quality Criteria for Ozone and Related Photochemical Oxidants (Final)*. EPA/600/R-05/004aF-cF. Washington, DC: U.S. EPA. February. <http://cfpub.epa.gov/ncea/CFM/recordisplay.cfm?deid=149923>.

<sup>108</sup> De Steiguer, J., Pye, J., Love, C. 1990. Air Pollution Damage to U.S. Forests. *Journal of Forestry*, 88(8), 17–22.

<sup>109</sup> Pye, J.M. 1988. Impact of ozone on the growth and yield of trees: A review. *Journal of Environmental Quality*, 17, 347–360.

should be related to the decrease in overall plant fitness for mature trees, but the magnitude of the effect may be higher or lower depending on the tree species.<sup>110</sup> In areas where certain ozone-sensitive species dominate the forest community, the biomass loss from ozone can be significant. Significant biomass loss can be defined as a more than 2 percent annual biomass loss, which would cause long-term ecological harm, as the short-term negative effects on seedlings compound to affect long-term forest health.<sup>111</sup>

Urban ornamentals are an additional vegetation category likely to experience some degree of negative effects associated with exposure to ambient ozone levels. Because ozone causes visible foliar injury, the aesthetic value of ornamentals (such as petunia, geranium, and poinsettia) in urban landscapes would be reduced. Sensitive ornamental species would require more frequent replacement and/or increased maintenance (fertilizer or pesticide application) to maintain the desired appearance because of exposure to ambient ozone.<sup>112</sup> In addition, many businesses rely on healthy-looking vegetation for their livelihoods (e.g., horticulturalists, landscapers, Christmas tree growers, farmers of leafy crops, etc.) and a variety of ornamental species have been listed as sensitive to ozone.<sup>113</sup>

#### D. Costs and Employment Impacts

##### 1. Transport Rule Costs and Employment Impacts

For the affected region, the projected annual private incremental costs of the rule to the power industry are \$1.4 billion in 2012 and \$0.8 billion in 2014. These costs represent the private compliance cost to the electric generating industry of reducing NO<sub>x</sub> and SO<sub>2</sub> emissions to meet the requirements set forth in the rule. Estimates are in 2007 dollars.

In estimating the net benefits of regulation, the appropriate cost measure

<sup>110</sup> Chappelka, A.H., Samuelson, L.J. 1998. Ambient ozone effects on forest trees of the eastern United States: a review. *New Phytologist*, 139, 91–108.

<sup>111</sup> Heck, W.W. & Cowling, E.B. 1997. The need for a long term cumulative secondary ozone standard—an ecological perspective. *Environmental Management*, January, 23–33.

<sup>112</sup> U.S. Environmental Protection Agency (U.S. EPA). 2007. *Review of the National Ambient Air Quality Standards for Ozone: Policy assessment of scientific and technical information*. Staff paper. Office of Air Quality Planning and Standards. EPA-452/R-07-007a. July. [http://www.epa.gov/ttn/naaqs/standards/ozone/data/2007\\_07\\_ozone\\_staff\\_paper.pdf](http://www.epa.gov/ttn/naaqs/standards/ozone/data/2007_07_ozone_staff_paper.pdf).

<sup>113</sup> Abt Associates, Inc. 2005. U.S. EPA. *Urban ornamental plants: sensitivity to ozone and potential economic losses*. Memorandum to Bryan Hubbell and Zachary Pekar.

is “social costs.” Social costs represent the welfare costs of the rule to society. These costs do not consider transfer payments (such as taxes) that are simply redistributions of wealth. The social costs of this rule are estimated to be approximately \$0.8 billion annually in 2014. Overall, the economic impacts of the Transport Rule are modest in 2014, particularly in light of the large benefits (\$120 to \$280 billion annually at a 3 percent discount rate and \$110 to \$250 billion annually at a 7 percent discount rate) we expect, as shown in section XII.A of this preamble. Ultimately, we believe the electric power industry will pass along most of the costs of the rule to consumers, so that the costs of the rule will largely fall upon the consumers of electricity. For more information on electricity price changes that result from this final rule, refer to section XII.H (Statement of Energy Effects) later in this preamble.

For this rule, EPA analyzed the costs using the Integrated Planning Model (IPM). The IPM is a dynamic linear programming model that can be used to examine the economic impacts of air pollution control policies for SO<sub>2</sub> and NO<sub>x</sub> throughout the contiguous United States for the entire power system. Documentation for IPM can be found in the docket for this rulemaking or at <http://www.epa.gov/airmarkets/progsregs/epa-ipm/index.html>.

EPA also included an analysis of impacts of the final rule to industries outside of the electric power sector by using the Multi-Market Model. This model is a partial equilibrium economic impact model that includes 100 sectors that cover energy, manufacturing, and service applications and is designed to capture the short-run effects associated with an environmental regulation. This model was used to estimate economic impacts for the proposed MATS, and the promulgated industrial boilers major and area source standards and CISWI standard.

We use the Multi-Market Model to estimate the social costs of the final rule. Using this model, we estimate the

social costs of the final rule to be approximately \$0.8 billion (2007 dollars), which is close to the compliance costs. Documentation for the Multi-Market Model can be found in the RIA for this final rule.

Also note that as explained in section V.B (Baseline for Pollution Transport Analysis), the baseline used in this analysis assumes no CAIR. As explained in that section, EPA believes that this is the most appropriate baseline to use for purposes of determining whether an upwind state has an impact on a downwind monitoring site in violation of section 110(a)(2)(D).

Although a stand-alone analysis of employment impacts is not included in a standard cost-benefit analysis, the current economic climate has led to heightened concerns about potential job impacts. Such an analysis is of particular concern in the current economic climate as sustained periods of excess unemployment may introduce a wedge between observed (market) wages and the social cost of labor. In such conditions, the opportunity cost of labor required by regulated sectors to bring their facilities into compliance with an environmental regulation may be lower than it would be during a period of full employment (particularly if regulated industries employ otherwise idled labor to design, fabricate, or install the pollution control equipment required under this rule). For that reason, EPA also includes estimates of job impacts associated with the final rule. EPA presents an estimate of short-term employment opportunities as a result of increased demand for pollution control equipment. Overall, the results suggest that the final rule could support a net increase of roughly 2,250 job-years in direct employment in 2014.

The basic approach to estimate these employment impacts involved using projections from IPM from the final rule analysis such as the amount of capacity that will be retrofit with control technologies, for various energy market implications, along with data on labor and resource needs of new pollution

controls and labor productivity from secondary sources, to estimate employment impacts for 2014. This analysis was also applied for the proposed MATS. For more information, refer to Appendix D of the RIA for the final Transport Rule.”

EPA relied on Morgenstern, et al. (2002), a study that is a basis for employment impacts estimated for the final industrial boiler major and area source rules and CISWI standard, and the proposed MATS. The Morgenstern study identifies three economic mechanisms by which pollution abatement activities can indirectly influence jobs: (1) Higher production costs raise market prices, higher prices reduce consumption, and employment within an industry falls (“demand effect”); (2) pollution abatement activities require additional labor services to produce the same level of output (“cost effect”); and (3) post regulation production technologies may be more or less labor intensive (*i.e.*, more/less labor is required per dollar of output) (“factor-shift effect”).

Using plant-level Census information between the years 1979 and 1991, Morgenstern, et al., estimate the size of each effect for four polluting and regulated industries (petroleum, plastic material, pulp and paper, and steel). On average across the four industries, each additional \$1 million spending on pollution abatement results in a small net increase of 1.6 jobs; however, the estimated effect is not statistically significant. As a result, the authors conclude that increases in pollution abatement expenditures do not necessarily cause economically significant employment changes. The conclusion is similar to Berman and Bui (2001), who found that increased air quality regulation in Los Angeles did not cause large employment changes. For more information, please refer to the RIA for this final rule.

The ranges of job effects calculated using the Morgenstern, et al., approach are listed in Table VIII.D–1.

TABLE VIII.D–1—RANGE OF JOB EFFECTS FOR THE ELECTRICITY SECTOR  
[Estimates using Morgenstern, et al. (2002)]

	Demand effect	Cost effect	Factor shift effect	Net effect
Change in Full-Time Jobs per Million Dollars of Environmental Expenditure <sup>a</sup> .	–3.56 .....	2.42 .....	2.68 .....	1.55.
Standard Error .....	2.03 .....	0.83 .....	1.35 .....	2.24.
EPA Estimate for Final Rule <sup>b</sup> .....	+ 200 to –3,000 .....	+ 400 to 2,000 .....	0 to 2,000 .....	–1,000 to + 3,000.

<sup>a</sup> Expressed in 1987 dollars. See footnote a of Table 8–3 in the RIA for the inflation adjustment factor used in the analysis.

<sup>b</sup> According to the 2007 Economic Census, the electric power generation, transmission, and distribution sector (NAICS 2211) had approximately 510,000 paid employees.



EPA recognizes there may be other job effects which are not considered in the Morgenstern, et al., study. Although EPA has considered some economy-wide changes in industry output as shown earlier with the Multi-Market model, we do not have sufficient information to quantify other associated job effects associated with this rule.

## 2. End-Use Energy Efficiency

EPA believes that achievement of energy efficiency (EE) improvements in homes, buildings, and industry is an important component of achieving emission reductions from the power sector while minimizing associated compliance costs. By reducing electricity demand, energy efficiency avoids emissions of all pollutants associated with electricity generation, including emissions of NO<sub>x</sub> and SO<sub>2</sub> targeted by this final rule, and reduces the need for investments in EGU emission control technologies in order to meet emission reduction requirements. Moreover, energy efficiency can often be implemented at a lower cost than traditional control technologies.

EPA recognizes that significant opportunities remain for energy efficiency improvements in businesses, homes, and industry. However, there are several informational and market barriers that limit investment in cost-effective energy efficient practices. Several federal programs authorized under the CAA, including ENERGY STAR, are designed to address these barriers.

Congress, EPA, and states have all recognized the value of incorporating energy efficiency into air regulatory programs. Several allowance-based programs—including the Acid Rain Program, EPA's NO<sub>x</sub> Budget Trading program, and the Regional Greenhouse Gas Initiative (an effort of 10 states from the Northeast and Mid-Atlantic regions) – have provided mechanisms for rewarding energy efficiency through either the award of allowances, typically through the use of a fixed set-aside pool, or the use of revenues obtained through the auction of allowances. The emission caps established by these programs are unaffected by this approach. However, to the extent electricity demand reductions are realized, compliance costs are reduced. In addition to these allowance-based programs, EPA has also

provided guidance<sup>114</sup> concerning the recognition, in SIPs, of emission reduction benefits of energy efficiency and has approved the inclusion of EE measures in individual SIPs.<sup>115</sup>

While all remedy options considered in the proposed rule would have led to an increase in the relative cost-effectiveness of EE investments by internalizing environmental costs associated with emission of these pollutants, EPA took comment on whether EPA has authority, and whether it would be appropriate for EPA, to consider EE in developing the allowance allocation methodology and to consider other approaches for encouraging EE in the Transport Rule.

Some commenters suggested that EPA has authority to consider EE in developing the allocation methodology. Other commenters do not believe EPA has the authority to consider EE. Some commenters suggested that EPA should establish an EE set-aside provision. Other commenters suggested that EPA should allow, and help, states to establish EE set-asides as states transition from Transport Rule FIPs to SIPs. EPA believes that, while EE set-asides can be effective at encouraging incremental investments in EE, EE set-asides are more likely to be practically and effectively implemented at the state level. Establishing EE set-asides in the allowance allocation provisions in the final rule would not allow for the tailoring of the set-asides to the unique characteristics of individual states and would not build on the existing EE program delivery infrastructure that many states already possess. Instead of establishing EPA-administered EE set-asides in the final rule, EPA is clarifying that it allows and supports EE set-asides (including auction-based approaches) in abbreviated or full SIPs that states may submit, as provided in the final rule. Under this approach states have the ability to implement EE set-asides tailored to their state circumstances, if they choose. EPA anticipates providing

<sup>114</sup> U.S. EPA. 2004. Guidance on State Implementation Plan (SIP) Credits for Emission Reductions from Electric-Sector Energy Efficiency and Renewable Energy Measures.

[http://www.epa.gov/ttn/oarpg/t1/memoranda/ereserem\\_gd.pdf](http://www.epa.gov/ttn/oarpg/t1/memoranda/ereserem_gd.pdf).

<sup>115</sup> Metropolitan Washington Council of Governments developed a regional air quality plan for the eight-hour ozone standard for the DC Region nonattainment area that included an EE measure. The plan was adopted by Virginia, Maryland, and the District of Columbia and the respective ozone SIPs were approved by the EPA regions in 2007.

additional information in the future for states on EE set-asides, as needed.<sup>116</sup>

As discussed elsewhere in this preamble, the final rule provides for submission and approval of abbreviated and full SIPs providing for continued state participation in the Transport Rule trading programs, and adopting alternative allowance allocation methodologies (which may include EE set-asides) to the allocation methodologies adopted in the FIPs. While the final rule establishes certain requirements for approval of any such alternative allocation methodology, the final rule provides states flexibility to create state-implemented EE set-asides.

## IX. Related Programs and the Transport Rule

### A. Transition From the Clean Air Interstate Rule

#### 1. Key Differences Between the Transport Rule and CAIR

The Transport Rule replaces CAIR and its associated trading programs. There are a number of differences between implementation of the Transport Rule and implementation of CAIR. This section describes key implementation differences including differences in states covered, compliance deadlines, applicability, structure of the remedy, provisions for early reductions, and provisions for SIPs. The next section discusses the transition from CAIR to the Transport Rule.

*States covered.* The states covered by the Transport Rule differ somewhat from states covered by CAIR. This section summarizes differences in state coverage. EPA's approach to determine states covered by the Transport Rule is discussed in sections V and VI of this preamble.

The Transport Rule's SO<sub>2</sub> and annual NO<sub>x</sub> requirements apply to covered sources in the 23 states listed in Table III-1 in section III of this preamble. CAIR's SO<sub>2</sub> and annual NO<sub>x</sub> requirements applied to covered sources in 25 states. There are many states in common between the Transport Rule and CAIR SO<sub>2</sub> and annual NO<sub>x</sub> programs. The differences are summarized in Table IX.A-1.

<sup>116</sup> Because the question of EPA authority to create EE set-asides in the FIPs would be best addressed in the context of actual FIP provisions for EPA-created EE set-asides and EPA is, for other reasons, not adopting such provisions in the final rule, EPA is not addressing in the final rule the question of EPA's authority.

TABLE IX.A-1—DIFFERENCES IN SO<sub>2</sub> AND ANNUAL NO<sub>x</sub> STATE COVERAGE BETWEEN THE TRANSPORT RULE AND CAIR

State	Transport rule SO <sub>2</sub> and annual NO <sub>x</sub> programs	CAIR SO <sub>2</sub> and annual NO <sub>x</sub> programs
Kansas	Yes	No.
Minnesota	Yes	No.
Nebraska	Yes	No.
Delaware	No	Yes.
District of Columbia	No	Yes.
Florida	No	Yes.
Louisiana	No	Yes.
Mississippi	No	Yes.

The Transport Rule’s ozone-season NO<sub>x</sub> requirements apply to covered sources in the 20 states listed in Table III-1 in section III of this preamble,

while CAIR’s ozone-season NO<sub>x</sub> requirements applied to 26 states. There are many states in common between the Transport Rule and CAIR ozone-season

NO<sub>x</sub> programs. The differences are summarized in Table IX.A-2.

TABLE IX.A-2—DIFFERENCES IN OZONE-SEASON NO<sub>x</sub> STATE COVERAGE BETWEEN THE TRANSPORT RULE AND CAIR

State	Transport rule ozone-season NO <sub>x</sub> program	CAIR ozone-season NO <sub>x</sub> program
Georgia	Yes	No.
Texas	Yes	No.
Connecticut	No	Yes.
Delaware	No	Yes.
District of Columbia	No	Yes.
Iowa	No	Yes.
Massachusetts	No	Yes.
Michigan	No	Yes.
Missouri	No	Yes.
Wisconsin	No	Yes.

In addition, EPA is proposing a supplemental notice to apply Transport Rule ozone-season requirements to the states of Iowa, Kansas, Michigan, Missouri, Oklahoma, and Wisconsin, as discussed in section III of this preamble.

The transition from CAIR to the Transport Rule is discussed in section IX.A.2 and SIPs are discussed in section X of this preamble.

**Compliance deadlines.** The Transport Rule reduction requirements commence January 1, 2012 for annual NO<sub>x</sub> and SO<sub>2</sub> requirements and May 1, 2012 for ozone-season NO<sub>x</sub> requirements. More stringent SO<sub>2</sub> reduction requirements commence January 1, 2014 for Group 1 states.

In contrast, the first phase of CAIR NO<sub>x</sub> reductions commenced January 1, 2009 for annual NO<sub>x</sub> requirements and May 1, 2009 for ozone-season NO<sub>x</sub> requirements. On January 1, 2010, the first phase of CAIR SO<sub>2</sub> requirements commenced. However, in anticipation of CAIR, SO<sub>2</sub> reductions actually started as early as 2006 because of the incentive to reduce emissions and bank Title IV Acid Rain Program SO<sub>2</sub> allowances for use when their value would increase under CAIR in 2010 and later. The

second phase of CAIR reductions would have (if not replaced by the Transport Rule) commenced January 1, 2015 for annual NO<sub>x</sub> and SO<sub>2</sub> requirements, and May 1, 2015 for ozone-season NO<sub>x</sub> requirements.

**Applicability.** Except for the changes to the states covered, the general applicability provisions of the final Transport Rule trading programs are essentially the same as the CAIR general applicability provisions, with a few exceptions.

First, the final Transport Rule does not allow any non-covered units to opt into the trading programs, for the reasons discussed in section VII.B of this preamble. In contrast, under CAIR, through SIPs, the states could elect to allow boilers, combustion turbines, and other combustion devices to opt into the CAIR trading programs under opt-in provisions specified by EPA.

Second, the Transport Rule FIPs’ ozone-season NO<sub>x</sub> trading program applicability provisions do not cover NO<sub>x</sub> SIP Call small EGUs and non-EGUs that a number of CAIR states brought into the CAIR ozone-season NO<sub>x</sub> trading program. The Transport Rule does allow any state in the ozone-season NO<sub>x</sub>

program, through SIPs, to expand the applicability of the Transport Rule ozone-season NO<sub>x</sub> trading program to cover small EGUs. However, the Transport Rule does not allow states to expand the applicability to cover NO<sub>x</sub> SIP Call non-EGUs, for the reasons discussed elsewhere in this preamble.

In contrast, in the CAIR trading programs, a NO<sub>x</sub> SIP Call state could expand the applicability of the CAIR ozone-season NO<sub>x</sub> trading program in the state in order to include all units subject to the NO<sub>x</sub> Budget Trading Program under the NO<sub>x</sub> SIP Call. A number of states chose to expand the CAIR ozone-season NO<sub>x</sub> trading program applicability in this way. The transition from CAIR to the Transport Rule is discussed in section IX.A.2 and SIPs are discussed in section X of this preamble.

**Structure of the remedy.** The CAIR FIPs (and CAIR model trading rules adopted by a number of states in their CAIR SIPs) implemented reductions through SO<sub>2</sub>, annual NO<sub>x</sub>, and ozone-season NO<sub>x</sub> interstate emission trading programs covering primarily large EGUs. The owners and operators of a covered source could buy allowances

from or sell allowances to other covered sources (or other market participants) and were required to surrender allowances equal to the source's emissions for each compliance period. CAIR's trading programs did not impose limitations on the aggregate emissions from covered units within any covered state.

The Transport Rule FIPs will also achieve the required reductions through SO<sub>2</sub>, annual NO<sub>x</sub>, and ozone-season NO<sub>x</sub> interstate trading programs. However, in contrast to CAIR and for the reasons discussed in section VII of this preamble, the Transport Rule FIPs include assurance provisions specifically designed to ensure that no state's emissions will exceed that state's emission budget plus the variability limit, *i.e.*, the state's assurance level.

Another difference in the remedy structure is in the design of the SO<sub>2</sub> trading programs. In CAIR all of the states required to reduce SO<sub>2</sub> emissions were grouped together in one SO<sub>2</sub> trading program with no restriction on the use of SO<sub>2</sub> allowances from any state in the program by any source in the program. In contrast, and for the reasons discussed in section VI of this preamble, the Transport Rule divides states required to reduce SO<sub>2</sub> emissions into two groups with emission reduction requirements of different stringency starting in 2014 (SO<sub>2</sub> Group 1, whose reduction requirements become more stringent starting in 2014, and SO<sub>2</sub> Group 2, whose reduction requirements in 2014 do not change). A covered source may only use for compliance—with the requirements to hold allowances covering emissions and, if applicable, to surrender allowances under the assurance provisions—an SO<sub>2</sub> allowance issued for the SO<sub>2</sub> Group in which the source's state is included. In other words, an SO<sub>2</sub> Group 1 source may only use a SO<sub>2</sub> Group 1 allowance for compliance, and likewise an SO<sub>2</sub> Group 2 source may only use a SO<sub>2</sub> Group 2 allowance for compliance.

*Provisions for early reductions.* CAIR included provisions for covered sources to make early reductions prior to the start of CAIR's SO<sub>2</sub> and NO<sub>x</sub> trading programs, bank emission allowances, and carry banked allowances into its trading programs. In contrast, the Transport Rule does not include provisions for covered sources to carry over any allowances (*i.e.*, Title IV SO<sub>2</sub> allowances or CAIR annual or ozone-season NO<sub>x</sub> allowances) into the Transport Rule trading programs. EPA's reasons for not allowing the use of banked Title IV SO<sub>2</sub> allowances or CAIR annual or ozone-season NO<sub>x</sub> allowances

in the Transport Rule trading programs are discussed in the next section.

*Provisions for SIPs.* The following is a summary of the key differences between the Transport Rule and CAIR provisions for SIPs. A more detailed discussion of Transport Rule SIPs is in section X of this preamble.

The SIP provisions in the Transport Rule and CAIR are very similar. Both include provisions that allow states to submit SIP revisions (referred to as full SIPs) that replace an applicable FIP trading program with a comparable SIP trading program that has certain limited differences from the FIP trading program. Similarly, both rules include provisions that allow states to submit SIP revisions (referred to as abbreviated SIPs) that may modify certain limited provisions in the FIP trading program, which remain in place. Inclusion of this provision in the Transport Rule allows a state to modify certain elements of a Transport Rule FIP trading program in order to better meet the needs of the state. Both the Transport Rule and CAIR allow full or abbreviated SIPs that involve one or more applicable FIP trading programs. However, there are a few differences.

In particular, under the Transport Rule, states may submit SIP revisions under which the state determines allocations for the applicable trading program using either full or abbreviated SIP revisions. States could submit similar revisions under CAIR. Under the Transport Rule, the state may use the same allocation methodology as that currently used in the Transport Rule FIP trading program or some other allocation methodology. However, the Transport Rule specifies certain requirements that must be met concerning, for example, the timing of such allocation determinations, and expressly allows allowance auctions to be used. CAIR did not include similar provisions. Further, the SIP submission deadlines, allocation submission, and allocation recordation dates are different between the Transport Rule and CAIR. The Transport Rule SIP submission deadlines and allocation recordation dates are discussed in section X of this preamble.

In addition, both the Transport Rule and CAIR include provisions that allow states to submit SIP revisions under which the state expands the general applicability provisions of the ozone-season NO<sub>x</sub> trading programs to cover certain units subject to the NO<sub>x</sub> SIP Call. However, for the reasons discussed elsewhere in this preamble, this flexibility is more limited in the Transport Rule than it was in CAIR.

While CAIR allowed states to adopt, through full or abbreviated SIPs, opt-in provisions, the Transport Rule does not allow for opt-in provisions. The reasons for this are discussed in section VII.B of this preamble.

Finally, neither full nor abbreviated SIPs can replace FIP provisions that apply to units in Indian country within the borders of a state. For example, the FIPs include, for states within whose borders Indian country is located, an Indian country new unit set-aside. For states not having Indian country within their borders, abbreviated SIPs are limited to replacing the allowance allocation provisions of the FIPs for the state involved and may replace some or all of those provisions. However, for states having Indian country within their borders, abbreviated SIPs cannot replace the FIP provisions for the Indian country new unit set-aside. Similarly, for states not having Indian country, full SIPs can replace an entire FIP, but, in doing so, can only change the allowance allocation provisions. For states having Indian country, full SIPs can replace the FIPs except for the Indian country new unit set-aside provisions, which will remain under the applicable FIPs, and, like the abbreviated SIPs, can only change the allowance allocation provisions that are replaced.

Details of the Transport Rule provisions for abbreviated and full SIP revisions, including deadlines for submission to EPA, are discussed in section X of this preamble.

## 2. Transition From the Clean Air Interstate Rule to the Transport Rule

The Transport Rule replaces CAIR and its associated trading programs. This section elaborates on areas of transition from CAIR to the Transport Rule.

### a. Sunsetting of CAIR, CAIR SIPs, and CAIR FIPs

The proposal explained that, for control periods in 2012 and thereafter, CAIR, CAIR SIPs, and CAIR FIPs would be replaced entirely by the Transport Rule provisions. The proposal outlined implementation of the sunsetting of CAIR and CAIR FIPs, through revisions to CAIR, §§ 51.123 and 51.124, and the CAIR FIPs, §§ 52.35 and 52.36. For the control period in these years, the CAIR trading programs would not continue, and the Administrator would not carry out any of the functions established for the Administrator in the CAIR model trading rule, the CAIR FIPs, or any state trading programs approved under CAIR. Offset and automatic penalty provisions under CAIR would not apply to excess emissions for 2011 control periods.

Also discussed were the processes for modifying provisions in Part 52 reflecting state-specific CAIR SIP and CAIR FIP requirements, which would vary depending on whether a state has an approved CAIR SIP or a CAIR FIP. The proposal further explained that sources in some states covered by CAIR or the CAIR FIPs would not be subject to the Transport Rule and that to the extent that CAIR reductions were needed or relied upon to satisfy other SIP requirements, states might need to find alternative ways to satisfy requirements for their SIPs.

EPA is finalizing regulatory changes to sunset CAIR and the CAIR FIPs. The final rule revises the general CAIR and CAIR FIP provisions in Parts 51 and 52 applicable to all CAIR states. For control periods in 2012 and thereafter, the Administrator rescinds the determination that states must meet SIP requirements under CAIR, and the requirements of the CAIR FIPs are not applicable. Further, with regard to these control periods, the Administrator will no longer carry out any of the functions established for the Administrator in the CAIR model trading rule, the CAIR FIPs, or any state trading programs approved under CAIR with the exception of enforcing the provisions for the previous control periods, if necessary.

For the reasons discussed in the proposed rule preamble (75 FR 45337), CAIR allowances allocated for these control periods cannot be used in any CAIR trading program and, as discussed below, in any Transport Rule trading program. Specifically, for the reasons discussed in the proposed rule, offset and automatic allowance penalty provisions in the CAIR trading programs will not be applied to 2011 control period excess emissions, which will remain subject to discretionary civil penalties under CAA section 113. EPA still retains all enforcement options for excess emissions during the 2011 control period. CAIR allowances allocated for 2012 and thereafter are not usable in any CAIR or Transport Rule trading program. In light of that fact, in order to prevent any confusion by owners and operators and other members of the public concerning the status of such allowances, the final rule provides that, within 90 days after publication of the final Transport Rule, the Administrator will remove post-2011 CAIR annual NO<sub>x</sub> and ozone-season allowances from the Allowance Tracking System.

The CAIR SO<sub>2</sub> trading program, of course, uses Acid Rain allowances, which will remain in the Allowance Tracking System because they were

created by CAA Title IV and continue to be usable in the Acid Rain Program.

The final rule also adopts the discussion in the proposed rule concerning state-specific Part 52 provisions concerning CAIR (75 FR 45337–38). With regard to Part 52 provisions reflecting EPA's adoption of ongoing CAIR FIPs for some individual states, the final rule revises the CAIR FIP provisions to make them inapplicable to control periods in 2012 and thereafter and to require the Administrator to remove from the Allowance Tracking System, CAIR allowances for these control periods. The final, state-specific CAIR FIP provisions in Part 52 essentially echo the language in the final, general CAIR provisions in Part 52 discussed above. In making the CAIR FIP provisions inapplicable to control periods in 2012 and thereafter, the final, state-specific provisions sunset the applicable CAIR FIP trading programs whether or not the CAIR FIPs were revised by approved, abbreviated CAIR SIPs. (Under CAIR, abbreviated CAIR SIPs were adopted by certain states so that states, rather than EPA, made NO<sub>x</sub> allowance allocations.) Consequently, states with approved, abbreviated CAIR SIPs will not need to revise their abbreviated CAIR SIPs in order to sunset the CAIR trading programs to which these abbreviated SIPs applied. Thus, although such abbreviated SIPs may remain in the state SIPs, they will have no force and effect, once the CAIR FIPs sunset.

With regard to Part 52 provisions reflecting EPA's approval of full CAIR SIPs submitted to EPA by many individual states, the Court's *North Carolina* decision essentially overrides these Agency approvals of individual CAIR SIPs. (Under CAIR, full CAIR SIPs were adopted by certain states to replace CAIR FIPs and continue participation through the CAIR SIPs in the CAIR trading programs.) The Court found CAIR to be illegal and only allowed it to remain in effect temporarily. For this reason, the CAIR SIPs though approved, can have no force and effect once CAIR is replaced by this rule. For this reason, although the proposed rule indicated that states would need to submit SIP revisions to, among other things, make the CAIR SIPs inapplicable to control periods after 2011, the final rule does not require states to take any actions to revise their full or abbreviated CAIR SIPs. For states covered by CAIR or CAIR FIPs that are not subject to the Transport Rule and have relied on CAIR reductions to satisfy other SIP requirements, EPA will discuss with states alternative ways to satisfy requirements for those SIP

requirements, e.g., through intrastate cap and trade programs that require the level of reductions on which the state has recently relied.

#### b. NO<sub>x</sub> SIP Call Units

The NO<sub>x</sub> Budget Trading program was used by states to reduce ozone-season NO<sub>x</sub> emissions from EGUs and large non-EGUs under NO<sub>x</sub> SIP Call requirements. The program started in 2003 and ended in 2008. Under CAIR, a state subject to the NO<sub>x</sub> SIP Call was allowed to expand the applicability of the CAIR ozone-season NO<sub>x</sub> trading program in the state in order to include all units subject to the NO<sub>x</sub> Budget Trading Program under the NO<sub>x</sub> SIP Call and thereby to continue to meet the state's NO<sub>x</sub> SIP Call requirements. Fourteen states chose to expand the CAIR ozone-season NO<sub>x</sub> applicability in this way, while six states chose not to expand the applicability and instead to meet their NO<sub>x</sub> SIP Call obligations in other ways. EPA proposed to not allow this expansion in applicability for the Transport Rule, primarily because these sources as a group did not actually reduce emissions for the NO<sub>x</sub> Budget Trading Program or CAIR. EPA took comment on the proposed approach.

Several commenters generally advocated allowing, at state discretion, all NO<sub>x</sub> Budget Trading Program units to be regulated under the Transport Rule ozone-season NO<sub>x</sub> trading program. Some also questioned how states would otherwise satisfy NO<sub>x</sub> SIP Call requirements for these units. Some commenters argued that some units did in fact make emission reductions in the NO<sub>x</sub> Budget Trading Program, but did not provide information on specific units.

The final rule provides states an option to expand the general applicability provisions of the Transport Rule ozone-season NO<sub>x</sub> trading program to cover small EGUs, but not other units in the NO<sub>x</sub> SIP Call. Specifically, consistent with the comments, EPA determined that it is appropriate to allow states to expand the applicability of the Transport Rule ozone-season NO<sub>x</sub> trading program to include units serving a generator with a nameplate capacity equal to or greater than 15 MWe producing electricity for sale. This will allow states with NO<sub>x</sub> SIP Call obligations to meet those requirements with respect to these small EGUs. These units can be brought into the program through abbreviated or full Transport Rule SIPs. However, if a state chooses to expand the general applicability provisions, the state Transport Rule ozone-season NO<sub>x</sub> budget cannot be increased. EPA believes that the level of

emissions from small EGUs is sufficiently small that the existing Transport Rule state budget can accommodate these units. This is consistent with the approach taken in the NO<sub>x</sub> Budget Trading Program, where the states that added these small EGUs did not increase their NO<sub>x</sub> SIP Call EGU budgets. This also removes concern (expressed in the proposed rule) that increasing state budgets in the Transport Rule ozone-season NO<sub>x</sub> trading program, as part of the expansion of the applicability provisions to include small EGUs, would jeopardize elimination of a state's significant contribution to nonattainment and interference with maintenance.

With regard to large non-EGUs that were included in the NO<sub>x</sub> Budget Trading Program (the remainder of the sources in the NO<sub>x</sub> Budget Trading Program), the final Transport Rule, like the proposed rule, does not allow expansion of the general applicability provisions for the ozone-season NO<sub>x</sub> trading program to include such units. As explained in the proposed rule (75 FR 43340), while some of these units may have installed controls around the start of the NO<sub>x</sub> Budget Trading Program, EPA analysis shows that, as a group, these units did not collectively reduce emissions, their current emission rates are nearly identical to their emission rates before the start of the NO<sub>x</sub> Budget Trading Program, and their allocations are about twice their emissions, with the result that the excess allocations were sold to covered EGUs.<sup>117</sup> Moreover, EPA believes that there are little or no emission reductions available by non-EGUs at the cost thresholds used in the final rule and so no basis for developing non-EGUs state budgets reflecting the elimination of significant contribution to nonattainment and interference with maintenance. For these reasons, the final rule allows states to expand the ozone-season NO<sub>x</sub> trading program to cover small EGUs that were in the NO<sub>x</sub> Budget Trading Program, but not to cover large non-EGUs that were in that program. As explained in the proposed rule, if a state were to do so, emissions from these units could jeopardize elimination of the state's significant contribution to nonattainment or interference with maintenance. See 75 FR 45340. For states that relied on large

non-EGUs for emission reductions required by the NO<sub>x</sub> SIP Call, EPA will assist in identifying ways to ensure continued, future compliance with the NO<sub>x</sub> SIP Call requirements.

#### c. Early Reduction Provisions

Substantial emission reductions have occurred as a result of previous emission trading programs, under both Title IV and CAIR. This has led to substantial "banks" of allowances (*i.e.*, holdings of unused allowances allocated for years before the programs sunset) in each of the CAIR programs. In the proposal, EPA requested comment on whether to allow banked CAIR allowances to be used in the Transport Rule trading programs. EPA recognizes the importance of continuity in emission trading programs as a general principle. However, for the reasons explained below, EPA has decided not to allow banked CAIR allowances to be used in any of the Transport Rule trading programs. (1) SO<sub>2</sub> Allowance Bank

The bank of Title IV allowances was more than 12 million tons at the end of 2009. This bank is the result of emission reductions under the Title IV Acid Rain Program. Under the CAIR SO<sub>2</sub> trading program, EPA allowed banked (as well as future year) Title IV allowances to be used in the CAIR SO<sub>2</sub> trading program—in lieu of being used in the Acid Rain Program—for compliance with the requirement to hold allowances covering SO<sub>2</sub> emissions. This approach encouraged early reductions for the CAIR SO<sub>2</sub> trading program, but was held to be unlawful in *North Carolina*.

In the proposed rule, EPA took comment on whether sources should be allowed to use banked Title IV allowances in the Transport Rule SO<sub>2</sub> program. EPA proposed to not allow the use of Title IV allowances either as the basis for allocating Transport Rule SO<sub>2</sub> allowances or directly for compliance with allowance-holding requirements, in part, because EPA was concerned that those approaches would be perceived as inconsistent with the requirements of CAA section 110(a)(2)(D)(i)(I) as interpreted by the Court in *North Carolina*. See 75 FR 45338–39.

A number of commenters advocated that EPA recognize Title IV allowance holdings in the Transport Rule, either by allowing full or limited carryover of the allowances or by allocating all or a portion of the Transport Rule SO<sub>2</sub> allowances based on Title IV allowance holdings. Other commenters agreed with EPA's assessment that allowing Title IV allowance carryover in the Transport Rule is inconsistent with *North Carolina* and that any linkage of

Transport Rule allocations with Title IV allowance holdings would carry unnecessary, significant legal risk. Therefore, for the reasons explained above and in the proposal, EPA has decided not to permit sources to use Title IV allowances for compliance with the Transport Rule SO<sub>2</sub> trading programs.

In addition, unlike CAIR, in the Transport Rule, EPA decided not to base allocation of Transport Rule SO<sub>2</sub> allowances on the specific distribution of existing Title IV allowances. Title IV allowances continue, of course, to be usable for compliance in the Acid Rain Program.<sup>118</sup>

#### (2) NO<sub>x</sub> Allowance Banks

In the proposed rule, EPA estimated that the CAIR ozone-season NO<sub>x</sub> bank would contain over 600,000 allowances and the CAIR annual NO<sub>x</sub> bank would contain about 720,000 allowances after completion of true-up of allowance holdings and emissions for 2011. EPA considered the alternatives of allowing or not allowing pre-2012 CAIR NO<sub>x</sub> allowances and CAIR ozone-season NO<sub>x</sub> allowances to be used in the Transport Rule NO<sub>x</sub> trading programs.

EPA also described and requested comment on several possible approaches for handling banked pre-2012 CAIR NO<sub>x</sub> allowances in the Transport Rule NO<sub>x</sub> trading programs and the pros and cons of each (75 FR 45339):

- Allow all such banked CAIR allowances to be brought into the Transport Rule NO<sub>x</sub> programs, make the assurance provisions effective starting in 2012, and rely on the assurance provisions to ensure that each state continues to eliminate all of its significant contribution to nonattainment and interference with maintenance;
- Allow only a limited amount of banked pre-2012 CAIR allowances to be brought into the Transport Rule NO<sub>x</sub> programs;
- Factor the bank into the calculation of state NO<sub>x</sub> budgets by reducing the state NO<sub>x</sub> budgets to take account of the banked pre-2012 CAIR allowances; and
- Do not allow the use of any banked pre-2012 CAIR allowances in the Transport Rule NO<sub>x</sub> programs.

EPA proposed the last of these approaches and requested comment on all of the described approaches or suggestions on other ways to handle banked pre-2012 CAIR allowances in the Transport Rule NO<sub>x</sub> programs.

<sup>118</sup> The Title IV allowance bank is expected to be about 14 million tons at the beginning of 2012.

<sup>117</sup> Although the proposed rule discussed the EPA analysis in the context of considering the treatment of both small EGUs and large non-EGUs from the NO<sub>x</sub> Budget Trading Program, the analysis actually addresses, and draws conclusions about emission reductions, emission rates, and allowance allocations concerning only large non-EGUs.

- Many commenters advocated allowing the carryover of CAIR NO<sub>x</sub> allowances to the Transport Rule. Reasons given included: preservation of early reduction investments; need for market continuity; increased flexibility during program start up and early years of the programs; preservation of the credibility of, and certainty under, trading approaches; and the lack of a prohibition in *North Carolina* of carryover of CAIR NO<sub>x</sub> allowances. Commenters also suggested that surrender ratios be used to limit the amount, and negative effects, of a carryover.

- Many other commenters were against allowing CAIR NO<sub>x</sub> allowance carryover into the Transport Rule. Reasons given included: unnecessary, significant legal risk; concerns about the efficacy of the Transport Rule if state budgets are supplemented by a carryover; and differences in the nature of the programs (the NO<sub>x</sub> Budget Trading Program, which addressed the 1-hour ozone NAAQS, and the CAIR ozone-season NO<sub>x</sub> trading program, which addressed the 1997 8-hour ozone NAAQS and was reversed in *North Carolina* under which the allowances were banked, and the Transport Rule ozone-season NO<sub>x</sub> trading program, which addresses the 1997 8-hour ozone NAAQS).

For the reasons explained below, after evaluating all comments on this issue, EPA decided not to allow the use of CAIR NO<sub>x</sub> allowances in the Transport Rule NO<sub>x</sub> trading programs. EPA reevaluated the estimated size of the potential carryover (allowances that will remain unused in the CAIR programs at the end of 2011 compliance periods), taking into account 2010 emissions. EPA estimates that more than 440,000 CAIR ozone-season NO<sub>x</sub> allowances will remain and that more than 460,000 CAIR annual NO<sub>x</sub> allowances will remain at the end of the 2011 compliance periods. EPA considered whether to allow these CAIR ozone-season NO<sub>x</sub> and CAIR annual NO<sub>x</sub> allowances to be used in the Transport Rule NO<sub>x</sub> trading programs. The CAIR ozone-season NO<sub>x</sub> allowances expected to remain unused represent nearly three-quarters of aggregate state ozone-season NO<sub>x</sub> budgets<sup>119</sup> in a single year under the final Transport Rule. The allowances expected to remain unused in the annual NO<sub>x</sub> program represent

more than one-third of aggregate state annual NO<sub>x</sub> budgets in a single year under the Transport Rule. As discussed in the proposal, if these allowances were carried over in addition to the Transport Rule state budgets, EPA could not be assured that significant contribution to nonattainment or interference with maintenance would be eliminated. EPA therefore rejects any approach under which all banked CAIR NO<sub>x</sub> allowances would be added to the Transport Rule trading programs on top of each state's annual NO<sub>x</sub> and/or ozone-season NO<sub>x</sub> budgets.

In response to public comments, EPA considered whether the Transport Rule trading programs should allow some form of exchange of banked CAIR annual NO<sub>x</sub> and ozone-season allowances for new Transport Rule NO<sub>x</sub> allowances within each state's annual NO<sub>x</sub> and/or ozone-season budgets, respectively. However, EPA believes that this type of approach carries substantial legal and technical problems. First, the state-by-state distribution of CAIR NO<sub>x</sub> allowances resulted from the methodology applied by EPA in CAIR of using fuel factors to set the total amounts of allowance allocations in each state (*i.e.*, the state NO<sub>x</sub> budgets). The CAIR NO<sub>x</sub> allowance banks therefore are—at least in part—the result of this methodology, which was reversed in *North Carolina*. See *North Carolina*, 531 F.3d at 918–22. Thus, EPA did not use fuel factors in developing the Transport Rule state budgets. However, EPA is concerned that the distribution of some or all Transport Rule NO<sub>x</sub> allowances through exchanges of banked CAIR NO<sub>x</sub> allowances for Transport Rule NO<sub>x</sub> allowances would blur the bright line between the methodology used for setting budgets in the Transport Rule and the methodology used for setting budgets in CAIR that was rejected by the Court. At least to some extent, the parties that were advantaged under EPA's budget-setting methodology in CAIR would continue to have an advantage under the Transport Rule by receiving more Transport Rule NO<sub>x</sub> allowances. EPA therefore believes that allowing exchange of banked CAIR NO<sub>x</sub> allowances for Transport Rule NO<sub>x</sub> allowances carries significant legal risk.

Second, establishing a procedure for exchanging banked CAIR NO<sub>x</sub> allowances for Transport Rule NO<sub>x</sub> allowances within each state's budget would mean that Transport Rule NO<sub>x</sub> allowances could not be allocated until after completion of the process for determining compliance with allowance-holding requirements for 2011 in the CAIR NO<sub>x</sub> trading programs.

This process cannot begin until after the allowance transfer deadline for the 2011 control periods (*i.e.*, March 1, 2012 for the CAIR annual NO<sub>x</sub> program and November 1, 2011 for the CAIR ozone-season NO<sub>x</sub> program) and will not likely be completed until mid-2012. At that time, EPA could begin the procedure of implementing, state-by-state, the exchanges of the remaining CAIR NO<sub>x</sub> allowance banks held by parties (owners and operators, brokers, and other entities) for some or all of the allowances in the state NO<sub>x</sub> budgets for 2012. The portion of each state budget that would be used up by such exchanges would likely vary from state to state. The resulting delay, and uncertainty about the unit-by-unit amounts, of Transport Rule NO<sub>x</sub> allowance allocations for 2012 would undermine Transport Rule allowance market liquidity, significantly disrupt planning by owners and operators for compliance with allowance-holding requirements for the 2012 control periods, and likely impose increased compliance costs under the Transport Rule NO<sub>x</sub> trading programs or impact the ability to comply with the 2012 limits.

In light of the specific circumstances in this case and the above-described legal and technical problems that would result from a carryover of CAIR NO<sub>x</sub> allowances into the Transport Rule trading programs, the final rule does not allow any such carryover. EPA agrees that, as a general principle, it is desirable to provide continuity between sequential regulatory programs involving emission trading and thereby to ensure that allowances in the past program continue to have some value in the new program. Balancing the general desirability of providing program continuity against the potential negative consequences of a carryover in, and the specific circumstances of, this case, EPA concludes that the carryover of banked CAIR NO<sub>x</sub> allowances into the Transport Rule trading programs should not be allowed. EPA notes that, in this case, it signaled the possibility that it would take such an approach in order to provide markets with full information and avoid unnecessary disruptions. After CAIR was remanded by the Court in *North Carolina*, 550 F.3d 1176, in December 2008, EPA was concerned about the future status of CAIR NO<sub>x</sub> allowances and consequently advised the public—through a statement posted on the EPA Web site in March, 2009—that “EPA’s continued recording of CAIR NO<sub>x</sub> allowances does not guarantee or imply that any allowances will continue to be usable for

<sup>119</sup> This analysis is for all states identified to be contributing significantly to nonattainment or interfering with maintenance. When the analysis is conducted using the aggregate state budgets for only those states for which we are finalizing ozone season requirements in this rule, the percentage increases.

compliance after a replacement rule is finalized or that they will continue to have value in the future.”<sup>120</sup> EPA believes its decision to disallow carryover of banked allowances here reflects the specific factors in this case and should not be treated as setting any precedent for the treatment, in any future trading programs, of any past trading program’s banked allowances.

However, EPA notes that, under the CAIR ozone-season NO<sub>x</sub> trading program, where unused allowances were carried forward from the preceding NO<sub>x</sub> Budget Trading Program, and under the CAIR annual NO<sub>x</sub> trading program, where extra allowances (from the compliance supplement pool) were allocated for early reductions made during the NO<sub>x</sub> Budget Trading Program, the vast majority of allowance allocation decisions were made by the states administering these programs. Moreover, a number of states did not allocate CAIR allowances to their sources using fuel adjustment factors, whose use the Court rejected in *North Carolina* in connection with EPA’s setting of state NO<sub>x</sub> emission budgets.

In light of the general desirability of providing continuity between state programs, states may want to address the CAIR NO<sub>x</sub> banks when developing, in SIP revisions, the Transport Rule allowance allocations for control periods after 2012. EPA encourages each state that wants to allocate Transport Rule NO<sub>x</sub> allowances through SIP revisions to consider using information on the CAIR NO<sub>x</sub> allowance banks that will remain after 2011. Any such allowance allocations, of course, must be within the respective state’s NO<sub>x</sub> trading budget, and must be submitted to EPA within the applicable submission deadlines, established in the final rule for the control periods for which the allocations are made. The Agency intends to contact states concerning the desirability of holding a workshop to discuss issues related to state allowance allocations.

#### B. Interactions With NO<sub>x</sub> SIP Call

The proposed rule explained that states covered by both the NO<sub>x</sub> SIP Call and the Transport Rule would be required to comply with the requirements of both rules and that the Transport Rule would not preempt or replace the requirements of the NO<sub>x</sub> SIP Call. Most, but not all, NO<sub>x</sub> SIP Call

states would be included in the Transport Rule. The proposed rule further explained that the Transport Rule ozone-season NO<sub>x</sub> trading program would achieve the emission reductions required by the NO<sub>x</sub> SIP Call from EGUs serving generators with a nameplate capacity greater than 25 MW and producing electricity for sale in most NO<sub>x</sub> SIP Call states. (This would not be the case, of course, for those NO<sub>x</sub> SIP Call states not covered by the Transport Rule.)

The NO<sub>x</sub> SIP Call states used the NO<sub>x</sub> Budget Trading Program to comply with the NO<sub>x</sub> SIP Call requirements for EGUs serving a generator with a nameplate capacity greater than 25 MW and large non-EGUs with a maximum rated heat input capacity greater than 250 mmBtu/hour. (In some states, EGUs serving a generator with a nameplate capacity of 25 MW or less were also included in the NO<sub>x</sub> Budget Trading Program as a carryover from the Ozone Transport Commission NO<sub>x</sub> Budget Trading Program.) EPA stopped administering the NO<sub>x</sub> Budget Trading Program under the NO<sub>x</sub> SIP Call after the completion of compliance activities related to the 2008 ozone-season control period, and states used other mechanisms to comply with the NO<sub>x</sub> SIP Call requirements.

The proposal further explained that, if EPA promulgated a final rule that did not allow the expansion of the Transport Rule to NO<sub>x</sub> Budget Trading Program units, any state that allowed these units to participate in the CAIR ozone-season NO<sub>x</sub> trading program would need to submit a SIP revision to address the state’s NO<sub>x</sub> SIP Call requirement for the reductions. The proposal also explained that states in the CAIR ozone-season NO<sub>x</sub> trading program or the NO<sub>x</sub> Budget Trading Program that would not be in the Transport Rule ozone-season NO<sub>x</sub> trading program would need to submit SIP revisions addressing the NO<sub>x</sub> SIP Call requirements for any emission reductions (by EGUs and non-EGUs) addressed in the NO<sub>x</sub> Budget Trading Program and not addressed in some other way. See 75 FR 45340–41.

As discussed elsewhere in this preamble, the final Transport Rule allows states to expand the general applicability provisions of the Transport Rule ozone-season NO<sub>x</sub> trading program to include small EGUs, which were included by some states in the NO<sub>x</sub> Budget Trading Program, but not for large non-EGUs, which were included in the NO<sub>x</sub> Budget Trading Program. This will allow states with NO<sub>x</sub> SIP Call obligations to meet those requirements with respect to small EGUs brought into

the Transport Rule trading program, but not with regard to large non-EGUs.

With the issuance of the final Transport Rule, NO<sub>x</sub> SIP Call requirements remain in place. See 40 CFR 51.121. EPA is not changing any of the NO<sub>x</sub> SIP Call requirements. The NO<sub>x</sub> SIP Call generally requires that states choosing to rely on large EGUs and large non-EGUs for meeting NO<sub>x</sub> SIP Call emission reduction requirements must establish a NO<sub>x</sub> mass emissions cap on each source and require Part 75, subpart H monitoring. As an alternative to source-by-source NO<sub>x</sub> mass emissions caps, a state may impose NO<sub>x</sub> emission rate limits on each source and use maximum operating capacity for estimating NO<sub>x</sub> mass emissions or may rely on other requirements that the state demonstrates to be equivalent to either the NO<sub>x</sub> mass emissions caps or the NO<sub>x</sub> emission rate limits that assume maximum capacity. Collectively, the caps or their alternatives cannot exceed the portion of the state budget for those sources. See 40 CFR 51.121(f)(2) and (i)(4). EPA will work with states to ensure that NO<sub>x</sub> SIP Call obligations continue to be met (e.g., through intrastate cap and trade programs that require the level of reductions on which the state has recently relied).

#### C. Interactions With Title IV Acid Rain Program

The final rule does not affect any Acid Rain Program requirements. Acid Rain Program requirements are established independently in Title IV of the CAA and are not replaced by the Transport Rule. Title IV sources that are subject to final Transport Rule provisions still need to continue to comply with all Acid Rain provisions. Title IV SO<sub>2</sub> and NO<sub>x</sub> requirements continue to apply independently of the Transport Rule provisions. For the reasons explained above, Title IV SO<sub>2</sub> allowances are not allowed to be used in the Transport Rule trading programs. Similarly, Transport Rule SO<sub>2</sub> allowances are not usable in the Acid Rain Program.

The final Transport Rule does not include any opt-in unit provisions in the FIPs and does not allow SIP revisions to include opt-in unit provisions in the Transport Rule trading programs. Consequently, no sources, including those that have opted in to the Acid Rain Program, can opt-in to the Transport Rule trading programs.

There will likely be changes to emissions at some Acid Rain units outside of the Transport Rule area as a result of the transition from CAIR to the Transport Rule. Namely, emissions at some non-Transport Rule Acid Rain

<sup>120</sup> <http://epa.gov/airmarkets/business/cairallowancestatus.html>. EPA posed similar statements in the on-line systems for trading CAIR NO<sub>x</sub> allowances. See 40 CFR 96.102 and 96.302 (definitions of “CAIR NO<sub>x</sub> Allowance Tracking System” and “CAIR NO<sub>x</sub> Ozone Season Allowance Tracking System”).

units in the states that border the Transport Rule states may increase because of potential load-shifting from units in Transport Rule states and because of a potential decrease in the Title IV allowance price. There is a discussion of possible emission increases in non-covered states in section VI.C of this preamble.

#### *D. Other State Implementation Plan Requirements*

In this final action, EPA has not conducted any technical analysis to determine whether compliance with the Transport Rule would satisfy RACT requirements for EGUs in any nonattainment areas, or Regional Haze BART-related requirements. For that reason, EPA is neither making determinations nor establishing any presumptions that compliance with the Transport Rule satisfies any RACT or BART-related requirements for EGUs. Based on analyses that states conduct on a case-by-case basis, states may be able to conclude that compliance with the Transport Rule for certain EGUs fulfills nonattainment area RACT requirements. EPA intends to undertake a separate analysis to determine if compliance with the Transport Rule would provide sufficient reductions to satisfy BART requirements for EGUs in accordance with Regional Haze Rule requirements for alternative BART compliance options as soon as practicable following promulgation of the Transport Rule.

#### **X. Transport Rule State Implementation Plans**

EPA proposed (75 FR 45342) FIPs setting state-specific emission reduction requirements for each upwind state covered by the proposed Transport Rule and with respect to one or more of three air quality standards—the 1997 annual PM<sub>2.5</sub> NAAQS, the 2006 24-hour PM<sub>2.5</sub> NAAQS, and the 1997 ozone NAAQS. In CAIR, EPA allowed the states to replace the CAIR FIP with SIPs and provided substantial flexibility. In the proposed Transport Rule, EPA proposed to allow similar flexibility to states for addressing the CAA section 110(a)(2)(D)(i)(I) transport issues through a SIP. EPA proposed to allow a state to submit a SIP for the ozone requirements only, for the PM<sub>2.5</sub> requirements only, or for both the ozone and the PM<sub>2.5</sub> requirements with the specific quantity of emission reductions necessary for a state's SIP determined based on the state emission budgets provided in the final Transport Rule.

EPA received comments suggesting that if the proposal's remedy were finalized, EPA should allow states to replace the FIP allowance allocation

provisions in the proposed Transport Rule trading programs by state-developed allocation provisions. Commenters referenced the two alternatives provided to states in the CAIR trading programs where: (1) EPA adopted a rule and model trading regulations under which states that adopted, as state SIP trading programs, the model regulations (with only certain limited changes allowed, *e.g.*, in the allocation provisions) could participate in the EPA-administered CAIR trading programs; and (2) EPA adopted a rule allowing states to adopt in SIPs provisions replacing only certain provisions in the CAIR FIPs (*e.g.*, the allocation provisions) and to remain in the CAIR trading programs under the CAIR FIPs. Under both approaches, the covered units in the state participated in the CAIR trading programs, albeit with state-, rather than EPA-, determined allocations. Comments on the Transport Rule proposal supported these two types of approaches for allowing states to replace EPA allocations under the proposed Transport Rule trading programs by state allocations. EPA requested additional comment on this topic in the NODA published January 7, 2011 (76 FR 1109).

Two approaches with associated deadlines were explained in the NODA. Under the first approach, EPA would adopt new provisions, as part of the proposed Transport Rule FIP that would allow a state to submit a SIP (referred as an abbreviated SIP) that would modify specified provisions of the proposed Transport Rule FIP trading programs. Specifically, the abbreviated SIP would substitute state allocation provisions for control periods in years after 2012, applicable to one or more of the proposed Transport Rule FIP trading programs that apply to the state. The NODA explained which specific provisions in the FIP could be replaced. If the state allocation provisions met certain requirements and the abbreviated SIP did not change any other provisions in the respective proposed Transport Rule FIP trading program, then EPA would approve the abbreviated SIP. In the substitute state allocation provisions, the state could allocate allowances to Transport Rule units (whether existing or new units) or other entities (such as renewable energy facilities) or could auction some or all of the allowances. The NODA went on to describe the requirements for EPA approval of an abbreviated SIP (76 FR 1119) including that the total amount of allowances allocated and auctioned each year could not exceed the applicable budget; allocations and

auction results would need to be reported to EPA by the permitting authority (usually the state) by particular dates prior to the applicable control period depending on whether allowances were going to existing or new sources; the reported allocations and auction results could not be changed; and no other provisions of the FIP would be changed.

Under the second approach, EPA would adopt a new rule that would provide that, if a state submitted a SIP (referred to as a full SIP) that adopted trading program regulations meeting certain requirements for control periods in years after 2012, then EPA would approve the full SIP as correcting the deficiency under CAA section 110(a)(2)(D)(i)(I) in the state's SIP that was the basis for issuance of the comparable proposed Transport Rule FIP. In the state allocation provisions, the state could allocate allowances to Transport Rule units (whether existing or new units, except for opt-in units) or other entities (such as renewable energy facilities) or could auction allowances. Upon EPA approval of a state's full SIP, the state's SIP-based trading program would be integrated with the comparable FIP-based Transport Rule trading program (whether or not modified by an abbreviated SIP) covering other states. Moreover, covered sources in the state could participate in the integrated trading program, and the allowances issued under the SIP-based state trading program would be interchangeable with the allowances issued in the comparable FIP-based Transport Rule trading program.

The NODA went on to describe the limited changes that states could make under the full SIP option. Only allocation provisions could be modified with the same requirements as for abbreviated SIPs, including, among other things, that the total amount of allowances allocated each year could not exceed the applicable budget and that allocations would need to be reported to EPA by the permitting authority (usually the state) by particular dates prior to the applicable control period depending on whether allowances were going to existing or new sources.

The NODA also discussed the option for states to submit SIPs using emission reduction approaches other than the proposed Transport Rule trading programs to correct the deficiency under CAA section 110(a)(2)(D)(i)(I) in the state's SIP. EPA would review on a case-by-case basis SIPs using such alternative approaches (76 FR 1120).

Suggested deadlines for abbreviated and full SIPs were given in tables in the



NODA (76 FR 1120). These deadlines generally required states to submit SIPs about 2 years ahead of a particular control period for which state allocations would apply in order to give EPA time to review and approve the SIP and record allowances.

Most commenters on the NODA supported state allocation options, within the preferred FIP remedy, that would replace FIP allocations with SIP-based state allocations.

In the final rule, EPA adopts, with some revisions, both of the approaches described in the January 7, 2011 NODA. Under the first approach, a state may submit an abbreviated SIP that modifies a final Transport Rule FIP trading program in only a limited way (*i.e.*, by replacing the allowance allocation provisions in §§ 97.411(a) and (b)(1) and 97.412(a) for the annual NO<sub>x</sub> trading program, §§ 97.511(a) and (b)(1) and 97.512(a) for the ozone-season NO<sub>x</sub> trading program, §§ 97.611(a) and (b)(1) and 97.612(a) for the SO<sub>2</sub> Group 1 trading program, and §§ 97.711(a) and (b)(1) and 97.712(a) for the SO<sub>2</sub> Group 2 trading program). In the state's replacement provisions, the state may allocate allowances to Transport Rule units (whether existing or new units)<sup>121</sup> or other entities (such as renewable energy facilities) or may auction allowances. Additionally, state SIPs can address one or all of the pollutants addressed by the FIPs. For PM<sub>2.5</sub>, EPA is finalizing the flexibility for a state SIP to address either SO<sub>2</sub> or NO<sub>x</sub>, or both. Further, if a state is required to make ozone-season and annual NO<sub>x</sub> reductions, the SIP could address either ozone-season or annual NO<sub>x</sub> emissions, or both. In other words, states can replace provisions in all FIPs that apply to a particular state, and leave in place the FIPs for the requirements not addressed by a SIP.

Further, EPA will approve the abbreviated SIP only if the state replacement for the Transport Rule FIP allocation provisions meets certain requirements and the abbreviated SIP does not change any other provisions in the Transport Rule FIP trading program. For EPA approval, the state allocation and, where applicable, auction provisions (and any accompanying definitions of terms applying only to terms as used in these provisions) must meet the following requirements. First, the provisions must provide that, for each year for which the state allocation and, where applicable, auction

provisions will apply, the total amount of control period (annual or ozone-season) allowances allocated and, where applicable, auctioned in accordance with these provisions cannot exceed the applicable state budget (less any applicable Indian country new unit set-aside, which will continue to be administered by EPA) for that year under the relevant Transport Rule FIP trading program.

Second, to the extent the state provisions provide for allocations for, or auctions open to, existing units, the provisions must require that the state or the permitting authority under title V of the CAA for the state submit to the Administrator final allocations and, if any auction is to be held, final auction results in accordance with a schedule of deadlines discussed below. To the extent the provisions provide for allocations for or auctions open to new units or any other entities, the provisions must require that the permitting authority submit to the Administrator final allocations and, if applicable, auction results by July 1 of the year of the control period for which the allowances will be distributed. The allocation and auction results must be final and cannot be subject to modification (*e.g.*, through an allowance surrender adjusting the allocation or auction results).

As noted above, the state's submission to the Administrator of allocations or auction results with regard to existing units must meet a specified schedule of deadlines. These submission deadlines reflect, and are necessarily coordinated with, the deadlines for recordation by the Administrator of allowance allocations and any auction results under the Transport Rule trading programs. The recordation deadlines, which are discussed in detail in section XI of this preamble, provide that the Administrator must record existing-unit allowance allocations and auction results by: July 1, 2013 for the applicable control periods in 2014 and 2015; July 1, 2014 for the applicable control periods in 2016 and 2017; July 1, 2015 for the applicable control periods in 2018 and 2019; and July 1, 2016 and July 1 of each year thereafter for the control period in the fourth year after the year of the applicable recordation deadline. In order to provide the Administrator 1 month to review the submissions of allocations and auction results to ensure that the submissions include sufficient information (*e.g.*, the correct identification for each unit involved) to record correctly the submitted allocations and auction results, the state or permitting authority must make these

submissions to the Administrator by: June 1, 2013 for the applicable control periods in 2014 and 2015; June 1, 2014 for the applicable control periods in 2016 and 2017; June 1, 2015 for the applicable control periods in 2018 and 2019; and June 1, 2016 and June 1 of each year thereafter for the applicable control period in the fourth year after the year of the applicable submission deadline.

Under the second approach, a state may submit a full SIP adopting a Transport Rule trading program that differs from the comparable Transport Rule FIP trading program only with regard to limited provisions of the FIP trading program. First, the full SIP may include new allocation or auction provisions instead of the Transport Rule FIP allowance allocation provisions other than those concerning the Indian country new unit set-aside. In the state allocation or auction provisions, the state may allocate allowances to Transport Rule units (whether existing or new units) or other entities (such as renewable energy facilities) or may auction allowances. EPA will approve the full SIP only if the state allocation or auction provisions (and any accompanying definitions of terms applying only to terms as used in these provisions) meet certain requirements. Second, the full SIP may substitute the name of the state for the term "State" as used in the FIP trading program provisions, provided that EPA determines that the substitutions are not substantive changes. Third, as discussed in more detail below, all references to units in Indian country, as used in the FIP trading program provisions, must be removed, and the full SIP cannot impose any requirements on units in Indian country within the borders of the state and may not include the Indian country set-aside provisions. Other than these allowed changes, all other provisions in the Transport Rule trading program in the full SIP must be the same as those in the Transport Rule FIP trading program with regard to non-Indian country units. For EPA approval, the state allocation provisions must meet the same requirements, as discussed above, that state allocation or auction provisions in an abbreviated SIP must meet.

A Transport Rule trading program adopted by a state in a full SIP, and approved by EPA, under the second approach will be fully integrated with the comparable Transport Rule FIP trading program (*i.e.*, the "TR NO<sub>x</sub> Annual Trading Program", "TR NO<sub>x</sub> Ozone Season Trading Program", "TR SO<sub>2</sub> Group 1 Trading Program", or "TR SO<sub>2</sub> Group 2 Trading Program"

<sup>121</sup> EPA is not finalizing opt-in provisions, so the reference to federal-only opt-in allocations in the NODA has been removed.

respectively) for other states. This will apply whether the comparable Transport Rule FIP program for other states was modified by an abbreviated SIP approved by EPA under the first approach or was not modified by such an abbreviated SIP. The integration of these three types of trading programs will be accomplished primarily through the definitions of the terms, "TR NO<sub>x</sub> Annual allowance", "TR NO<sub>x</sub> Ozone Season allowance", "TR SO<sub>2</sub> Group 1 allowance", and "TR SO<sub>2</sub> Group 2 allowance" in the full SIPs approved by EPA and the TR FIP trading programs (whether or not the programs were modified by abbreviated SIPs). "TR NO<sub>x</sub> Annual allowance" will be defined in the state and Transport Rule FIP trading programs as including allowances issued under any of the following trading programs: The comparable EPA-approved state Transport Rule trading programs; the comparable Transport Rule FIP trading programs with EPA-approved state allocation and auction provisions; and the Transport Rule FIP trading programs with EPA allocation provisions. Similarly, the definitions in the state and Transport Rule FIP trading programs of "TR NO<sub>x</sub> Ozone Season allowance", "TR SO<sub>2</sub> Group 1 allowance", and "TR SO<sub>2</sub> Group 2 allowance" respectively will include allowances issued under all three types of trading programs. As a result, allowances issued in one approved state Transport Rule trading program will be interchangeable with allowances issued in the comparable Transport Rule FIP trading program (whether or not modified by an abbreviated SIP), and all these allowances will be available for use for compliance with the allowance-holding requirements (to cover emissions and to meet assurance provision requirements) in all three types of trading programs.

The integration of state and the proposed Transport Rule FIP trading programs will also be reflected in the definitions of "TR NO<sub>x</sub> Annual Trading Program", "TR NO<sub>x</sub> Ozone Season Trading Program", "TR SO<sub>2</sub> Group 1 Trading Program", and "TR SO<sub>2</sub> Group 2 Trading Program". Each of these definitions in the state Transport Rule and Transport Rule FIP trading programs will expressly encompass the comparable Transport Rule FIP trading programs (whether or not modified by an abbreviated SIP) and the comparable EPA-approved state full SIP trading program.

The final rule also sets deadlines for the submission of complete abbreviated and full SIPs. These deadlines are based on the first year for which the state wants to allocate or auction allowances,

reflect the above-discussed deadlines for the Administrator's recordation of allocations and auction results, and build in a 6-month period for EPA review, provision of notice and opportunity for public comment, and approval of the SIP revisions. This 6-month period is built into the final rule's SIP submission deadlines because that is the period EPA found was needed for reviewing, providing notice and comment for, and approving state trading program provisions in abbreviated and full SIPs under CAIR. As a result, the final rule requires that complete abbreviated and full SIPs must be submitted to the Administrator by: December 1, 2012 in order to govern allowance allocation and auction for control periods in 2014 and 2015; December 1, 2013 in order to govern control periods in 2016 and 2017; December 1, 2014 in order to govern allowance allocation and auction for control periods in 2018 and 2019; and December 1, 2015 and by December 1 of any year thereafter in order to govern allowance allocation and auction for control periods in the fifth year after such submission deadline.

EPA notes that, in cases where a state that has Indian country within its borders submits, and EPA approves, a full SIP, the comparable FIP will not be entirely replaced. In such cases, the FIP will continue to be in place with regard to the Transport Rule trading program provisions that concern units in Indian country, and the full SIP will encompass all other provisions of the trading program. Specifically, to the extent Transport Rule trading program provisions reference and apply to Indian country units (including, for example, references in the applicability provisions and the Indian country new unit set-aside provisions), those provisions, as they apply to Indian country units, will remain in the FIP. The full SIP will include those provisions only as they apply to non-Indian country units.

As a practical matter, this means that the Indian country new unit set-aside provisions, which apply exclusively to Indian country new units, will remain entirely in the FIP. Further, other trading program provisions that reference both non-Indian country units and Indian country units (such as the applicability provisions) will remain in the FIP to the extent of their application to Indian country units and will be included in the full SIP to the extent of their application to non-Indian country units.

However, EPA notes that the assurance provisions in each Transport Rule trading program require

calculations using the entire state budget, including any portion of the budget that may be allocated to Indian country new units. Further, EPA notes that currently no new units are planned or anticipated to be located in Indian country. Under these circumstances, EPA will handle the assurance provisions as follows. The full SIP for a state having Indian country will initially include the assurance provisions, as set forth in the FIP, except with removal of any references to sources and units in Indian country. The FIP will initially not include the assurance provisions, which will be fully effective and enforceable under the full SIP. In the event that any new unit is located in Indian country in the state, EPA intends to modify its approval of the full SIP to take back the assurance provisions in order to apply, in the FIP, the assurance provisions to both Indian country and non-Indian country units.

This final rule not only allows a state to choose to submit an abbreviated or a full SIP; it also allows a state to choose to submit either form of SIP to replace any or all of the FIPs in this rule as they apply to a particular state. By promulgating these Transport Rule FIPs, EPA in no way affects the right of a state to submit, for review and approval, a SIP that replaces the federal requirements of the FIP with state requirements that do not involve state participation in the Transport Rule trading programs. In order to replace the FIP in a state, the state's SIP taking an approach other than participation in Transport Rule trading programs must provide adequate provisions to prohibit NO<sub>x</sub> and SO<sub>2</sub> emissions that are determined in the Transport Rule to contribute significantly to nonattainment or interfere with maintenance in another state or states. EPA will review such a SIP on a case-by-case basis. The Transport Rule FIPs remain fully in place in each covered state until a state's SIP is submitted and approved by EPA to revise or replace a FIP.

In response to numerous comments urging EPA to allow states to determine allowance allocations as soon as possible, EPA has developed a SIP revision procedure that applies to 2013 allowance allocations only. In developing this procedure, EPA is balancing the desire to allow states the flexibility to tailor allowance allocations to the specific needs and situations in a particular state with the need to provide certainty to source owners and operators by having allowances recorded sufficiently ahead of the control period for which the allocations are made in order to facilitate owners'

and operators' efforts to optimize their compliance strategies. This final rule allows states to make 2013 allowance allocations through the use of a SIP revision that is narrower in scope than the other SIP revisions states can use to replace the FIPs and/or to make allocation decisions for 2014 and beyond. For 2013 allocations, the scope of the SIP revision is limited to allocations made to units that commence commercial operation before January 1, 2010 and provided in the form of a list of those units and their corresponding allocations for 2013. Additionally, this particular SIP revision may allocate only the portions of the state budgets set forth in Tables X-1 through X-3, *i.e.*, each state budget minus the new unit set-aside and the Indian country new unit set-aside.

In developing this procedure, EPA set deadlines for submissions of the SIP revisions for 2013 allocations and for recordation of the allocations that balanced the need to record allowances sufficiently ahead of the control period with the desire to allow state flexibility for 2013. EPA set deadlines that will allow sufficient time for EPA to review and approve these SIP revisions, taking into account that EPA approval must be final and effective before the 2013 allocations can be recorded and the allowances are available for trading. In order to ensure that EPA review and approval (which must include public notice and opportunity for comment) can be completed in time, the final rule necessarily limits the allowed scope of the SIP revisions for 2013 allocations, as

set forth in the requirements discussed below, and thereby limits the issues that must be considered and addressed in the review and approval process. Further, the final rule prescribes the form in which the state allocations for 2013 must be provided to EPA in order to facilitate rapid recordation of the allocations upon their approval.

States, along with their sources, will need to weigh the trade-offs of a relatively short period of recording before the control period for which the allocation is made (about 6 months) with the desire to have state allocations in 2013, when deciding whether to pursue a SIP revision for 2013 allocations. States may choose to submit a SIP revision for one or more of the trading programs. In other words, state allocations for 2013 could apply in one trading program while 2013 FIP allocations apply in another.

States can make 2013 allowance allocations provided the state meets certain requirements.

- By the date 70 days after publication of the final rule in the **Federal Register**, a state must provide notification to EPA if the state intends to submit state allocations for 2013. The notification must be in a format prescribed by the Administrator and submitted electronically.

- By April 1, 2012, the state must submit a SIP revision to EPA that:
  - Allocates to existing units<sup>122</sup> only, provides a list of the units and their

<sup>122</sup> Existing unit means a unit that commenced commercial operation before January 1, 2010.

state allocations to EPA electronically and in a format prescribed by EPA, and does not provide for any change in the units and allocations on the list and in any allocation previously determined and recorded by the Administrator;

- Allocates a total amount of allowances for 2013 that does not exceed the applicable amount in Tables X-1 through X-3 for each trading program that applies in that particular state; and

- Provides for no set-asides and does not alter the new unit set-asides, the Indian country new unit set-asides, and any aspect of the FIP rules other than the existing-unit allocations for 2013.

If EPA does not receive notification from a state by the date 70 days after publication of the final rule in the **Federal Register**, EPA will record FIP allocations for 2012 and 2013 as scheduled (by the date 90 days after publication of the final rule). If EPA receives timely notification from a state, EPA will record FIP allocations for 2012 only and wait to record 2013 allocations. If the state provides a timely (not later than April 1, 2012) SIP revision meeting all the above-described requirements and EPA approves the SIP revision by October 1, 2012, EPA will record state-determined allocations for 2013 by October 1, 2012. Otherwise, EPA will record the EPA-determined allocations for 2013.

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**Table X-1 Portion of the Annual NO<sub>x</sub> Trading Budget Available for State Allocation in 2013**

State	Portion of the NO <sub>x</sub> Annual Trading Budget Available for State Allocation in 2013
Alabama	71,237
Georgia	60,770
Illinois	44,042
Indiana	106,434
Iowa	37,568
Kansas	30,100
Kentucky	81,683
Maryland	16,300
Michigan	58,989
Minnesota	28,981
Missouri	50,803
Nebraska	24,589
New Jersey	7,121
New York	17,017
North Carolina	47,552
Ohio	90,849
Pennsylvania	117,586
South Carolina	31,848
Tennessee	34,989
Texas	129,587
Virginia	31,580
West Virginia	56,498
Wisconsin	29,730

**Table X-2 Portion of the Ozone-Season NO<sub>x</sub> Trading Budget Available for State Allocation in 2013**

State	Portion of the Ozone Season NO <sub>x</sub> Trading Budget Available for State Allocation in 2013
Alabama	31,111
Arkansas	14,736
Florida	27,268
Georgia	27,385
Illinois	19,511
Indiana	45,470
Kentucky	34,720
Louisiana	13,029
Maryland	7,035
Mississippi	9,957
New Jersey	3,314
New York	8,081
North Carolina	20,838
Ohio	39,262
Pennsylvania	51,157
South Carolina	13,631
Tennessee	14,610
Texas	61,152
Virginia	13,729
West Virginia	24,019

**Table X-3 Portion of the SO<sub>2</sub> Group 1 or Group 2 Trading Budget Available for State Allocation in 2013**

State	Portion of the SO <sub>2</sub> Group 1 or Group 2 Trading Budget Available for State Allocation in 2013
Alabama	211,712
Georgia	155,356
Illinois	223,145
Indiana	276,861
Iowa	104,943
Kansas	40,697
Kentucky	218,702
Maryland	29,518
Michigan	224,717
Minnesota	41,141
Missouri	203,317
Nebraska	62,450
New Jersey	5,463
New York	26,778
North Carolina	125,931
Ohio	304,025
Pennsylvania	273,078
South Carolina	86,848
Tennessee	145,187
Texas	231,756
Virginia	67,987
West Virginia	135,942
Wisconsin	75,506

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EPA will work with states that wish to submit full SIPs or abbreviated SIPs to ensure a smooth integration with the relevant Transport Rule trading programs. The Agency intends to provide information and tools to assist states in their rulemaking efforts, including electronic versions of the Transport Rule trading rules and EPA will work with states that wish to submit full SIPs or abbreviated SIPs to ensure a smooth integration with the relevant Transport Rule trading programs. The Agency intends to provide information and tools to assist states in their rulemaking efforts, including electronic versions of the Transport Rule trading rules and other products states feel may be helpful.

States that submit approvable full SIPs or abbreviated SIPs to implement one or all of the Transport Rule trading programs are not required to include an additional technical demonstration relating to elimination of emissions that contribute significantly to nonattainment or contribute to maintenance in downwind areas.

**XI. Structure and Key Elements of Transport Rule Air Quality-Assured Trading Program Rules**

In order to make the final FIP trading program rules as simple and consistent as possible, EPA designed them so that the final rules (like the proposed rules) for each of the trading programs (*i.e.*, the “TR NO<sub>x</sub> Annual Trading Program”, “TR NO<sub>x</sub> Ozone Season Trading

Program”, “TR SO<sub>2</sub> Group 1 Trading Program”, and “TR SO<sub>2</sub> Group 2 Trading Program”) are parallel in structure and contain the same basic elements. For example, the rules for the Transport Rule annual NO<sub>x</sub>, ozone-season NO<sub>x</sub>, SO<sub>2</sub> Group 1, and SO<sub>2</sub> Group 2 trading programs are located, respectively, in subparts AAAAAA (§§ 97.401, *et seq.*), BBBBBB (§§ 97.501, *et seq.*), CCCCCC (§§ 97.601, *et seq.*), and DDDDDD (§§ 97.701, *et seq.*) of Part 97 in Title 40 of the Code of Federal Regulations. Moreover, the order of the specific provisions for each trading program is the same, and the provisions have parallel numbering. The key elements of the final Transport Rule trading program rules are as follows.

## (1) General Provisions

(i) §§ 97.402 and 97.403, 97.502 and 97.503, 97.602 and 97.603, and 97.702 and 97.703—Definitions and Abbreviations

Most of the definitions in the final Transport Rule trading program rules are essentially the same as in the proposed rules and for each of the Transport Rule trading programs (except where necessary to reflect the different pollutants (NO<sub>x</sub> and SO<sub>2</sub>), control periods (for annual and ozone-season NO<sub>x</sub>, and for annual SO<sub>2</sub>), and geographic coverage involved in the trading programs). Moreover, many of the definitions in the final rules that are essentially the same as in the proposed rule are also essentially the same as in prior EPA-administered trading programs. However, as discussed in more detail below, some of the definitions in the final rules clarify, or differ from, the definitions in the proposed rule.

As noted, several definitions in the final rules are essentially the same as those both in the proposed rules and in prior EPA-administered trading programs. Examples include the definitions of “source,” “allowance transfer deadline,” “owner,” “operator,” “Allowance Management System” (used instead of the term “Allowance Tracking System”), and “continuous emission monitoring system.”

One example of a definition in the final rules that is the same as in the proposed rule, but that clarifies the definition used in prior trading programs is the definition of “fossil fuel.” In the final rule, the term “fossil fuel” is defined in general as including natural gas, petroleum, coal, or any form of fuel derived from such material, regardless of the purpose for which such material is derived. For example, with regard to consumer products that are made of materials derived from natural gas, petroleum, or coal, are used by consumers, and then are used as fuel, these materials in the consumer products qualify as fossil fuel. The definition in the final rules also includes language establishing a narrower meaning of “fossil fuel” that is not generally applicable, but rather is applicable only for purposes of applying the limitation on fossil-fuel use under the solid waste incineration unit exemption (which is discussed elsewhere in this preamble). This latter portion of the “fossil fuel” definition makes explicit an interpretation that EPA adopted in CAIR that—solely for purposes of applying the fossil-fuel use limitation in that exemption—the term “fossil fuel” is limited to natural gas,

petroleum, coal, or any form of fuel derived from such material “for the purpose of creating useful heat.” For example, applying this narrower meaning, consumer products made from natural gas, petroleum, or coal are not fossil fuel, for purposes of determining qualification under the fossil-fuel use limitation, because the products (*e.g.*, tires) were derived from natural gas, petroleum, or coal in order to meet certain consumer needs (*e.g.*, to meet transportation needs), not in order to create fuel (*i.e.*, material that would be combusted to produce useful heat).

As noted above, some of definitions in the final rules clarify definitions in the proposed rules. The definitions of “allowable NO<sub>x</sub> emission rate” and “allowable SO<sub>2</sub> emission rate” are clarified by explaining that such a rate is the most stringent state or federal emission rate limitation, expressed in lb/MWhr or, if originally expressed in lb/mmBtu, converted to lb/MWhr by multiplying it by the unit’s heat rate in mmBtu/MWhr. This clarification ensures consistency from unit to unit in determining a unit’s allowable rate.

By further example, while the proposed rules used the same definition of “commence commercial operation” as in prior EPA-administered trading programs, the final rules clarify the definition. Under the definition in the proposed rules, a unit that is physically changed is treated as the same unit. However, the proposed rules were unclear about the treatment of a unit that is replaced and whether moving a unit to a different location or source constitutes a physical change. The definition of “commence commercial operation” in the final rules clarifies that a unit that is physically changed (which includes a unit that is replaced) continues to be treated, for purposes of this final rule, as the same unit with the same commence-commercial-operation date. The definition also clarifies that moving a unit to a different location or source is treated the same as a physical change, and so the unit continues to be treated as the same unit. The definition also clarifies that a unit (the replaced unit) that is replaced, whether at the same source or a different source, is treated as the same unit, while the unit (the replacement unit) that replaces the unit is treated as a separate unit with a new commence-commercial-operation date. (The definition of “commence operation” is removed in the final rules because they do not use this term.)

By further example, while the proposed rules used the same definition of “unit” as in prior EPA-administered trading programs, the final rules clarify the definition. The “unit” definition is

clarified by expanding it to incorporate explicitly the concepts—set forth in the definition in the final rules of “commence commercial operation” and thus already applicable to all units—that a unit that is physically changed, moved to a different location or source, or replaced at the same or a different source continues to be treated as the same unit and that a replacement unit at the same source is treated as a separate unit. EPA believes that it is preferable to provide a comprehensive definition of “unit” in one place because the term is used so frequently in the final rules.

By further example, the definition of “nameplate capacity” is clarified in the final rules by explaining that it is expressed in MWe rounded to the nearest tenth. This is the same rounding convention that is used in the reporting of nameplate capacity to the Energy Information Administration.

As noted above, some of the definitions in the final rules are similar to those in the proposed rules but have some substantive differences. For example, in the proposed rules, the definitions of “cogeneration unit” and “fossil-fuel-fired” are similar to those in prior trading programs but with changes to minimize the need for data concerning individual units or combustion devices for periods before 1990. In order to qualify as fossil-fuel-fired, a unit would have to combust any amount of fossil fuel in 1990 or thereafter. In order to qualify as a cogeneration unit, a unit would have to meet certain efficiency and operating standards during the later of: the 12-month period starting when the unit begins producing electricity, or 1990. For a topping-cycle unit, useful power plus one-half of useful thermal energy output of the unit must equal no less than a certain percentage of the total energy input and useful thermal energy must be no less than a certain percentage of total energy output, and, for a bottoming-cycle unit, useful power must be no less than a certain percentage of total energy input. EPA proposed to limit to 1990 or later the historical period for which information on fuel consumption and on cogeneration unit efficiency and operations would be required to apply the “fossil-fuel-fired” and “cogeneration unit” definitions. This limitation was proposed because EPA was concerned that some owners and operators could have difficulty obtaining pre-1990 information about older units, particularly for units whose ownership has changed over time.

While EPA proposed to use 1990 as the earliest year for which information

would be required under these definitions, EPA requested comment on whether a more recent year should be used. As discussed elsewhere in this preamble, the final rules use 2005 (about 5 years before this rule's promulgation), rather than 1990, as the reference year. Further, because the language describing the historical time period used (including the reference year), appeared in the proposal both in the "cogeneration unit" definition and the provisions concerning cogeneration units in the applicability provisions, the final rules removed any language about the historical time period from the "cogeneration unit" definition and revised the language in the applicability provisions to use the 2005 reference year for the requirements for meeting the exemption for cogeneration units from the Transport Rule trading programs. Further, consistent with this use of 2005 as the reference year, the "fossil-fuel-fired" definition in the final rule specifically references 2005, rather than 1990, and as discussed elsewhere in this preamble, the final rules also use January 1, 2005 (rather than November 15, 1990) as the reference date throughout the applicability provisions.

With this change in the reference date for the requirement to meet the operating and efficiency standards under the "cogeneration unit" definition, a unit would have to meet these standards throughout the later of 2005 or the 12-month period starting when the unit begins producing electricity and continuing thereafter. EPA requested comment on whether these standards should be applied to a calendar year when the unit involved did not combust any fuel, *i.e.*, did not operate at all. As discussed elsewhere in this preamble, the final rules expressly provide that the operating and efficiency standards do not have to be met for a calendar year throughout which a unit did not operate at all.

In addition, under the proposed rules, if a group of cogeneration units operating as an integrated cogeneration system met the efficiency standards, a topping-cycle unit in that system would be deemed to meet those standards. EPA requested comment on whether this provision should also apply to a bottoming-cycle unit. As discussed elsewhere in this preamble, this provision in the final rules is not limited to topping-cycle units.

By further example of definitions in the final rules that have substantive differences from the definitions in the proposed rules, the proposed definitions of "TR NO<sub>x</sub> Annual allowance," "TR NO<sub>x</sub> Ozone Season allowance," "TR SO<sub>2</sub> Group 1 allowance," "TR SO<sub>2</sub>

Group 1 allowance," "TR NO<sub>x</sub> Annual Trading Program," "TR NO<sub>x</sub> Ozone Season Trading Program," "TR SO<sub>2</sub> Group 1 Trading Program," and "TR SO<sub>2</sub> Group 1 Trading Program" are changed in the final rules. Language is added to the definitions in order to reference comparable allowances and trading programs established through SIP revisions submitted by states and approved by the Administrator. As discussed elsewhere in this preamble, the final Transport Rule provides that, if a state submits SIP revisions meeting certain specified requirements, the state or permitting authority (rather than the Administrator) will allocate allowances, and the covered sources in the state will participate—along with covered sources in states remaining subject to the Transport Rule FIPs—in an integrated, region-wide air quality-assured trading program under which both any allowance allocated by the Administrator and any allowance allocated by the state or permitting authority will each authorize one ton of emissions of the relevant pollutant and will be usable by any source for compliance with the requirement to hold allowances covering emissions.

As noted above, the final rules include some definitions that were not used in prior EPA-administered trading programs and that reflect unique provisions of the Transport Rule trading programs. For example, the terms, "assurance account," "TR NO<sub>x</sub> Annual unit," "TR NO<sub>x</sub> Ozone Season unit," "TR SO<sub>2</sub> Group 1 unit," "TR SO<sub>2</sub> Group 2 unit," "common designated representative," "common designated representative's assurance level," and "common designated representative's share" are used and defined in the final rule.

While the proposed rules included definitions for the terms, "owner's assurance level" and "owner's share," the final rules replace these terms and instead define the terms, "common designated representative," "common designated representative's assurance level," and "common designated representative's share." This is because, as discussed elsewhere in this preamble, the final rules include assurance provisions similar to those in the proposed rules but that are implemented based on groups of units having a common designated representative, instead of being implemented on an owner-by-owner basis. The definition of "common designated representative" in the final rules reflects that the determination of what groups of units and sources in a State have a common designated representative is made based on the

identity of units' and sources' designated representatives as of April 1 of the year after the year of the control period when a state triggers the assurance provisions. EPA believes that the use of this reference date will give owners and operators greater flexibility to select common designated representatives after information about total state control period emissions is available and after the allowance transfer deadline when owners and operators may prefer to have a designated representative for their specific source (rather than a common designated representative for a larger group) who is focused on ensuring that sufficient allowances are held in or transferred to the source's account to cover the sources' emissions. EPA notes that the definition of "common designated representative's share" is simpler than the definition of "owner's share" because implementing the assurance provisions at the designated representative level means it is no longer necessary to address, in the definition, owner- and unit-level issues that may arise when a unit has multiple owners or where two or more units emit through the same stack.

Finally, some definitions are added to the final rules that are not in the proposed rules. For example, because the term, "business day," was used, but not defined, in the proposed rule, its meaning was unclear. Specifically, it was unclear whether a day that was uniquely a state holiday, and not a federal holiday, was a business day for purposes of the federally administered Transport Rule trading programs, *e.g.*, whether the allowance transfer deadline applicable to all sources in all states in a Transport Rule trading program could fall on a day that was a unique state holiday in one or a few states or whether the allowance transfer deadline would be advanced to the next business day for all sources in all states or perhaps only for sources in the state with the state holiday. EPA believes that, for a federally administered trading program covering sources in multiple states, the deadlines should be clear and uniform for all sources, regardless of the state in which the sources are located, and should not be affected by unique state holidays of which owners and operators of sources in other states may not even be aware. Consequently, the "business day" definition is added in the final rules and means a day that does not fall on a weekend or a federal holiday.

By further example, a definition for "natural gas" was added in the final rules. That definition, as well as the definition for "coal," incorporate the



corresponding definitions in Part 72 of the Acid Rain Program regulations. The Part 72 definitions are incorporated because they are also used in the Part 75 monitoring, reporting, and recordkeeping provisions, which provisions are already incorporated in the final Transport Rule Trading Program rules. (ii) §§ 97.404 and 97.405, 97.504 and 97.505, 97.604 and 97.605, and 97.704 and 97.705—Applicability and Retired Units

The applicability provisions in the final rules are, except as discussed herein, essentially the same as in the proposed rules and for each of the Transport Rule trading programs. Of course, for each trading program, the definition of “State” reflects differences in the specific states whose electric generating units are covered by the respective trading program.

Under the general applicability provisions of the proposed rules, the Transport Rule trading programs would cover fossil-fuel-fired boilers and combustion turbines serving—at any time starting November 15, 1990 or later—an electrical generator with a nameplate capacity exceeding 25 MWe and producing power for sale, with the exception of certain cogeneration units and solid waste incineration units. As discussed elsewhere in this preamble, the general applicability provisions in the final rules reference January 1, 2005 (about 5 years before this rule’s promulgation), rather than November 15, 1990.

**Cogeneration unit exemption.** Under the final rules (as well as the proposed rules) certain cogeneration units or solid waste incinerators otherwise covered by the general category of covered units are exempt from the FIP requirements. In particular, the final rules include an exemption for a unit that qualifies as a cogeneration unit throughout the later of 2005 or the first 12 months during which the unit first produces electricity and continues to qualify throughout each calendar year ending after the later of 2005 or such 12-month period and that meets the limitation on electricity sales to the grid. In order to qualify as a cogeneration unit (*i.e.*, meet the definition of “cogeneration unit”) in the final rules, a unit (*i.e.*, a boiler or combustion turbine) must operate as part of a “cogeneration system,” which is defined as an integrated group of equipment at a source (including a boiler or combustion turbine, and a steam turbine generator) designed to produce useful thermal energy for industrial, commercial, heating, or cooling purposes and electricity through the sequential use of energy. In addition, in order to qualify, a unit must

be a topping-cycle unit or a bottoming cycle unit because units that produce useful thermal energy and useful power through sequential use of energy either produce useful power first (*i.e.*, are topping-cycle units) or produce thermal energy first (*i.e.*, are bottom-cycle units).

Further, in order to qualify as a cogeneration unit, a unit also must meet, on a 12-month or annual basis, the above described efficiency and operating standards. As discussed elsewhere in this preamble, EPA clarifies that the electricity sales limitation under the exemption is applied in the same way whether a unit serves only one generator or serves more than one generator. In both cases, the total amount of electricity produced annually by a unit and sold to the grid cannot exceed the greater of one-third of the unit’s potential electric output capacity or 219,000 MWhr.

The final rules also clarify when a unit that meets the requirements for the cogeneration unit exemption and subsequently fails to meet all these requirements loses the exemption and becomes a covered unit. Such a unit loses the exemption starting the earlier of January 1 (or May 1 for the NO<sub>x</sub> ozone season trading program) after the first year during which the unit no longer meets the “cogeneration unit” definition or January 1 (or May 1) of the first year during which the unit no longer meets the electricity sales limitation.

**Solid waste incineration unit exemption.** The final rules also include an exemption for a unit that qualifies as a solid waste incineration unit during the later of 2005 or the first 12 months during which the unit first produces electricity, that continues to qualify throughout each calendar year ending after the later of 2005 or such 12-month period, and that meets the limitation on fossil-fuel use. In contrast, the exemption for solid waste incineration units in the proposed rules distinguished between units commencing operation before January 1, 1985 and those commencing operation on or after that date and established somewhat different criteria for these two categories of units. As discussed elsewhere in this preamble, the final rules remove the distinction based on whether a solid waste incineration unit commences operation before January 1, 1985 or on or after January 1, 1985. In order to be exempt, the unit must qualify as a solid waste incineration units during the later of 2005 or the first 12 months during which the unit first produces electricity, must continue to qualify throughout each calendar year ending after the later of 2005 or such 12-

month period, and must meet the limitation on fossil-fuel use on a three-year average basis during the first 3 years of operation starting no earlier than 2005 and every 3 years of operation thereafter.

**Retired unit exemption.** The final rule provisions exempting permanently retired units from most of the requirements of the Transport Rule trading programs are essentially the same as in the proposed rules and for each of the Transport Rule trading programs. The retired unit provisions exempt these units from the requirements for emission monitoring, recordkeeping, and reporting and for holding allowances, as of the allowance transfer deadline, sufficient to cover their emissions. However, the permanently retired units in a state must be included in determining whether owners and operators must surrender allowances, and, if so, how many, to comply with the assurance provisions (which are discussed elsewhere in this preamble) if the state’s total covered-unit emissions exceed the state assurance level.

Specifically, a common designated representative must include these units in determining whether his or her share of total emissions of covered units in a state exceed his or her share (generally based on the allowances allocated to the units that he or she represents) of the state trading budget with the variability limit and thus whether the owners and operators of the units that he or she represents have to surrender allowances under the assurance provisions.

(iii) §§ 97.406, 97.506, 97.606, and 97.706—Standard Requirements

The basic requirements applicable to owners and operators of units and sources covered by the Transport Rule trading programs and presented as standard requirements in the final rules are, except as discussed herein, essentially the same as in proposed rules and for each of the Transport Rule trading programs. These basic requirements include: designated representative requirements; emissions monitoring, reporting, and recordkeeping requirements; emissions requirements comprising emissions limitations and assurance provisions; permit requirements; additional recordkeeping and reporting requirements; liability provisions; and provisions describing the effect of the Transport Rule trading program requirements on other CAA provisions.

In particular, the paragraphs addressing emissions requirements for owners and operators describe these requirements in detail and reference

other sections of the final rules that set forth the procedures for determining compliance with the emissions limitations and assurance provisions. The paragraphs in the final rules concerning compliance with the emissions limitations clarify that owners and operators of a source and each covered unit at the source must hold allowances at least equaling the total control period emissions of all covered units at the source. Further, the paragraphs in the final rules concerning compliance with the assurance provisions differ from those in the proposed rules in that, as discussed elsewhere in this preamble, the final rules implement the assurance provisions based on groups of units with a common designated representative, instead of being implemented on an owner-by-owner basis, as proposed. Under the final rules, the assurance provisions are triggered when total control period emissions by covered units in a state (starting in 2012) exceed the state trading budget plus variability limit. If the assurance provisions are triggered for a state for a control period in a given year, owners' and operators' responsibility for the resulting penalty (*i.e.*, the surrender of allowances for deduction through the transfer of such allowances to the assurance account created by the Administrator for such owners and operators) is determined on a common designated representative basis.

For purposes of implementing the assurance provisions, covered units in a state are in effect grouped by common designated representative (which is defined as an individual (*i.e.*, a natural person) who is the designated representative, as distinguished from the alternate designated representative, for a group of one or more units and sources as of April 1 after the control period for which the state exceeds the state assurance level). The control period emissions of all covered units with a common designated representative are compared with the allowance allocations of such units plus their share of the state variability limit. The owners and operators of the units and sources in each group that has emissions in excess of allocations plus share of variability are subject to the assurance provisions penalty. The owners and operators of the units and sources in each group must transfer to the assurance account created for such owners and operators a total amount of allowances equal to two times such owners' and operators' proportionate share of the state's excess of covered-

unit emissions over the state trading budget plus variability.

The group's proportionate share is the percentage resulting from division of the amount of the group's excess of emissions over allocations plus share of variability by the sum of these excess amounts for all groups of units with a common designated representative in the state. The final rule makes it clear that this percentage is not rounded to the nearest whole number, but rather that the calculated amount of allowances resulting from application of this percentage is rounded to the nearest whole number because, in the Transport Rule trading programs, only whole (not fractional) allowances are used. If instead this percentage were rounded before its application, each group's share would be either 100 percent or 0 percent, which would be contrary to the intent of the assurance provisions in both the final rules and the proposed rules.

The provisions addressing the assurance requirements in the final rules reflect this common-designated-representative-based approach. For example, as discussed elsewhere in this preamble, these provisions use the terms, "common designated representative's share" and "common designated representative's assurance level," in lieu of the terms, "owner's share" and "owner's assurance level," used in the proposed rules. By further example, these final rule provisions refer to both "common designated representatives" and "owners and operators," rather than simply "owners."

The final rules also explain what vintage year (*i.e.*, allocation year) of allowances can be used in order to comply with the requirement to cover emissions and with the requirements of the assurance provisions. With regard to emissions during a control period in a given year, only allowances allocated for that year or any prior year can be used to cover such emissions. Further, only allowances of the following vintage can be used to meet excess emissions penalties and assurance penalties concerning emissions during a control period in a given year: allowances allocated for that year, any year before that year, or the year immediately after that year. This approach makes the vintage years usable for excess emissions and assurance penalties consistent and helps ensure that allowances will be available to meet these obligations.

The final rules also clarify the standard emission requirements by explaining further what is meant by the provision that an allowance is a limited

authorization to emit. The final rules clarify that an allowance provides authorization to emit during the control period in one year and is limited in both its use and its duration. For example, each Transport Rule trading program's final rules state that an allowance provides an emission authorization that can only be used in accordance with the requirements of the respective trading program, such as the requirements specifying what allowances are available for use, and how such allowances must be held or transferred, in order to cover emissions or meet the assurance provisions. By further example, under the final rules, an allowance continues to provide an authorization to emit one ton of the relevant pollutant until the allowance is deducted, *e.g.*, in order to be used for compliance with the requirement to cover emissions or the requirements of the assurance provisions. Moreover, under the final rules, the Administrator has the express authority to terminate or limit the authorization to emit, and thereby change the use and duration of the authorization, described in the final rules, to the extent he or she determines to be necessary or appropriate to implement any provision of the CAA.

The remaining paragraphs in the standard requirements section address permitting, recordkeeping and reporting, liability provisions, and the effect on other CAA provisions. For example, the paragraphs concerning permitting requirements are limited to stating that no title V permit revisions are necessary to account for allowance allocation, holding, deduction, or transfer and that the minor permit modification procedures can be used to add or change general descriptions in the title V permits of the monitoring and reporting approach used by the units covered by each title V permit. These provisions remain essentially the same in the final rules as in the proposed rules.

(iv) §§ 96.407, 97.507, 97.607, and 97.707—Computation of Time

These sections address how to determine the deadlines referenced in the Transport Rule trading program rules and are, except as discussed herein, essentially the same as in the proposed rules and for each of the Transport Rule trading programs. The final rules revise the proposed rule provisions concerning the treatment of the final date in any time period in order to make the provision consistent with the approach discussed above with regard to the new definition of "business day." The revised provision states that, if the final date is not a

“business day”, then the time period is extended to the next “business day.”

(v) §§ 97.408, 97.508, 97.608, 97.708 and Part 78—Administrative Appeal Procedures

Under the final Transport Rule, final decisions of the Administrator under the Transport Rule trading programs are appealable to EPA’s Environmental Appeals Board under the regulations set forth in Part 78 (40 CFR part 78), which are revised by the final Transport Rule to accommodate such appeals. The provisions in the final Transport Rule concerning appeals are, except as discussed herein, essentially the same as in the proposed Transport Rule. The proposed Transport Rule would add a provision in Part 78 explaining who is an “interested person” with regard to a decision, *i.e.*, a person who submitted comments, testimony, or objections as part of the process of making the decision or a person who submitted his or her name to the Administrator to be placed to an interested persons list. The final Transport Rule includes that provision, but with additional language that clarifies the process for submitting a name to be placed on such a list.

## (2) Allowance Allocations

Sections 97.410 through 97.412, 97.510 through 97.512, 97.610 through 97.612, and 97.710 through 97.712 set forth: certain information related to allowance allocation and for implementation of the assurance provisions; the timing for allocation of allowances to existing and new units; and the procedures for new unit allocations. In particular, these sections include tables providing, for each state covered by the particular Transport Rule trading program and for each year, the state trading budget (without the variability limit), new unit set-aside, Indian country new unit set-aside (where applicable), and variability limit. These provisions in the final rules differ in several ways, from the proposed rules and are essentially the same for each of the Transport Rule trading programs.

With regard to the tables in the final rules for the state trading budgets (without the variability limits), new unit set-asides, and variability limits, the identity of the specific states involved and the values for each state differ from the tables in the proposed rules. The final rule values reflect the determinations and modeling underlying the final rules and discussed elsewhere in this preamble. Further, as discussed elsewhere in this preamble, the variability limits are only those based on one-year variability and not those proposed to be based on three-

year variability, and Indian country set-asides are shown for states with Indian country within their borders.

With regard to existing unit allocations, the final rules provide that these allocations will be set forth in a notice of data availability to be issued by the Administrator. In contrast, the proposed rules stated that existing unit allocations would be set forth in an appendix to the rules for each Transport Rule trading program. EPA believes that including these allocations in a notice of data availability referencing the EPA Web site (rather than publishing them in tables requiring a large number of pages in the **Federal Register** for each Transport Rule trading program) is a more efficient method of making these allocations public, particularly since these allocations may be changed for 2013 and thereafter by states through SIP revisions. In addition, under the final rules the allocations for an existing unit can change if the unit does not operate (*i.e.*, has no heat input) for 2 consecutive years starting in 2012. In that case, the unit continues to receive its existing unit allocation for those years plus only 2 more years. As explained elsewhere in this preamble, this is a modification of the proposed rules, under which a unit that did not operate for 3 consecutive years would continue to receive its existing unit allocation for those years plus 3 more years.

Under the final rule provisions for new units, the Administrator allocates allowances from the new unit set-aside for the state where the respective unit is located and for each year when the unit first becomes eligible for an allocation and each year thereafter. The units eligible for new unit set-aside allocations include units commencing commercial operation on or after January 1, 2010, as well as several other categories of units, such as, for example, existing units that were not initially but then become covered units, existing units whose allocations are lost due to lack of unit operation and that subsequently begin operating again, and units that lost their allocations because they changed location from one state to another. The approach in the final rules differs from the proposed rules, which required that owners and operators initially request allowances from the new unit set-aside when the unit first became eligible for an allocation. As discussed elsewhere in this preamble, under the final rules, EPA identifies which units become eligible and when they become eligible, based on information provided in other submissions (*e.g.*, certificates of representation, monitoring system

certifications, and quarterly emissions reports) that such units must make to EPA, and the requirement that owners and operators submit requests for new unit set-aside allocations is removed in the final rules.

The final rules also provide for two rounds of allocations from the new unit set-aside, in contrast with the proposed rules that provided for only one round. In the first round in the final rules (as in the single round in the proposed rules), a unit’s new unit set-aside allocation initially equals that unit’s emissions—as determined in accordance with §§ 97.430–97.435, 97.530–97.535, 97.630–97.635, and 97.730–97.735 of the final rules and Part 75 (40 CFR part 75)—for the control period (annual or ozone season, depending on the Transport Rule trading program involved) in the preceding year. If the new unit set-aside lacks sufficient allowances to provide this initial allocation for all of the new units, then each new unit is allocated its proportionate share (based on its initial allocation amount) of the allowances in the new unit set-aside. The Administrator issues a notice of data availability informing the public of the specific new unit allocations and provides an opportunity for submission of objections on the grounds that the allocations are not consistent with the requirements of the relevant final rule provisions. A second notice of data availability is subsequently issued in order to make any necessary corrections in the specific new unit allocations. As discussed elsewhere in this preamble, the final rules establish a somewhat different schedule for issuance of these notices of data availability than the proposed rules. In particular, a single set of dates (*i.e.*, for the first notice, June 1 of the year for which the new unit allocations are described in the notice and, for the second notice, August 1 of that year) is established for all of the Transport Rule trading programs. For the reasons discussed elsewhere in this preamble, the final rules provide for a second round of allocations to the extent that any allowances remain in the new unit set-aside after the allocations are made to new units in the first round. (In the proposed rules, remaining allowances were immediately allocated to existing units.) The units eligible for allocations in the second round are new units that commenced commercial operation during the control period for which allocations are being made and during the prior control period. The second round allocation for each such unit initially equals the positive difference (if any) between the unit’s

first round allocation (if any) and the unit's emissions during the control period for which allocations are being made. If the amount of allowances remaining in the new unit set-aside after the first round is insufficient to provide this initial allocation for all of the second round new units, then each such new unit is allocated its proportionate share of the allowances remaining in the new unit set-aside. The Administrator uses notices of data availability (which are issued by December 15 (for the annual trading programs) and September 15 (for the ozone season trading program) of the control period involved and February 15 (for the annual trading programs) and November 15 (for the ozone season trading program) before the allowance transfer deadline for the control period involved, in a manner analogous to the use of such notices in the first round, to inform the public about the identification of the new units in the second round allocations and obtain and consider any objections. The February 15 and November 15 notices also inform the public about the amounts of the second round allocations. If, after both rounds of allocations, any allowances remain in the new unit set-aside, those allowances are allocated to existing units in proportion to such units' allocations.

The final rules also establish a separate Indian country new unit set-aside in each state where Indian country is located (*i.e.*, in Florida, Iowa, Kansas, Louisiana, Michigan, Minnesota, Mississippi, Nebraska, New York, North Carolina, South Carolina, Texas, and Wisconsin). As discussed elsewhere in this preamble, the Administrator operates the Indian country new unit set-aside in essentially the same manner as state new unit set-aside, except that unallocated allowances remaining in the Indian country new unit set-aside after the two rounds of new unit set-aside allocations are first placed in the new unit set-aside in the state where the Indian country involved is located and then, if still unallocated, are allocated to existing units in the state. As with the state new unit set-aside, EPA will identify the new units qualifying for the Indian country new unit set-aside, calculate the allocations, and issue notices of data availability using the same schedules as notices for the state new unit set-aside.

Under the final rules (like under the proposed rules), if a unit in certain specified categories is allocated allowances that should not have received them, the Administrator applies procedures under which the allocation is not recorded or the amount

of the recorded allocations is deducted as an incorrect allocation, with one exception. The exception is where the determination of compliance with the emissions limitation (*i.e.*, requirement to hold allowances covering emissions, as distinguished from the assurance provisions) for the source that includes the unit has already been completed, in which case no action is taken to account for the erroneous allocation for the control period involved.

While this procedure concerning recordation or deduction of allocations is the same as under the proposed rules, the final rules change the description of the circumstances under which this procedure concerning recordation or deduction of allocations is applied. Under both the final rules and the proposed rules, this procedure is applied to a unit (whether an existing unit or a new unit) that receives an allocation but is not actually a covered unit. However, under the final rules, another category of units—*i.e.*, any existing unit that is not located—as of January 1 of the control period for which the allocation is received—in the state from whose trading budget the allocation was made is also subject to this procedure. Although relatively few units are moved from one state to another, EPA believes that it is important to address what happens to such units' allocations, both because each state has a limited trading budget out of which all allocations for a year to existing and new units in that state must be made and because, under the assurance provisions, determinations are made about owners' and operators' surrender of allowances based on, among other things, the allocations for units in a specific state. Because, under the final rules, a unit that is moved from one state to another may lose its existing unit allocation in the first state under the above-described procedure, the final rules also makes such a unit eligible for allocations from the new-unit set-aside of the second state.

Finally, the final rules remove, as no longer necessary, one category of units that the proposed rules included as subject to this procedure. The proposed rules, treated, as existing units, some units that had not yet operated but were projected to operate by January 1, 2012, and so the proposed rules made these units subject to the procedure for not recording or for deducting allocations if they actually were not required to certify their monitoring systems and hold allowances covering emissions starting January 1, 2012. The final rule does not treat projected units as existing units and so this category of units no

longer needs to be made subject to this procedure.

### (3) Designated Representatives and Alternate Designated Representatives

Sections 97.413 through 97.418, 97.513 through 97.518, 97.613 through 97.618, and 97.713 through 97.718 establish the procedures for certifying and authorizing the designated representative, and alternate designated representative, of the owners and operators of a source and the units at the source, and for changing the designated representative and alternate designated representative. These sections also describe the designated representative's and alternate designated representative's responsibilities and the process through which he or she can delegate to an agent the authority to make electronic submissions to the Administrator. Except as discussed herein, the provisions in the final rules are essentially the same as in the proposed rules and for each of the Transport Rule trading programs.

The designated representative is the individual (*i.e.*, the natural person) authorized to represent the owners and operators of each covered source and covered unit at the source in matters pertaining to all Transport Rule trading programs to which the source and units were subject. One alternate designated representative (also an individual) can be selected to act on behalf of, and legally bind, the designated representative and thus the owners and operators. Because the actions of the designated representative and alternate legally bind the owners and operators, the designated representative and alternate must submit a certificate of representation certifying that each was selected by an agreement binding on all such owners and operators and is authorized to act on their behalf.

In the final rules (like in the proposed rules), the certificate of representation must contain: Specified identifying information for the covered source (including location) and the covered units at the source and for the designated representative and alternate; the name of every owner and operator of the source and units; and certification language and signatures of the designated representative and alternate. The final rules require an additional piece of identifying information, *i.e.*, whether the unit is located in Indian country. This is necessary in order for the Administrator to implement the above-described Indian country new unit set-aside. All submissions (*e.g.*, monitoring plans, monitoring system certifications, and allowance transfers) under the final rules for a covered

source or covered unit must be submitted, signed, and certified by the designated representative or alternate, except that electronic submission may be delegated.

In order to change the designated representative or alternate, a new certificate of representation must be received by the Administrator. A new certificate of representation must also be submitted to reflect changes in the owners and operators of the source and units involved. The new certificate must be submitted within 30 days of such changes.

The final rules make explicit an implied requirement of the proposed rules, *i.e.*, that, if a unit is added to a source or is moved from one source to a second source, a certificate of representation needs to be submitted to reflect the change. This requirement is implicit in the proposed rules when a unit is added to a source because the designated representative would not be authorized to make submissions concerning the added unit unless that unit were included on the certificate of representation. Similarly, where a unit is moved to another source, new certificates of representation would need to be submitted in order for the correct designated representative to be authorized to make submissions concerning the moved unit. Moreover, because compliance accounts in the Allowance Management System would cover all units at a given source and would be based on the information in the certificate of representation submitted by the designated representative for the source, when a unit is moved from a source to a second source, the designated representative of the second source would need to submit a certificate of representation removing the moved unit from the list of units.

The final rules explicitly require that a new certificate of representation be submitted to reflect changes (whether caused by the addition or removal of units) in which units are located at a source. In addition, the final rules impose a deadline on the submission requirement of 30 days from the date of the change in the units. This is analogous to the maximum time period between a change in a unit's owner or operator and the deadline for submission of a new certificate of representative reflecting to the change. Long before any actual move of a unit to a new location, owners and operators will need to make decisions about, and plan the implementation of, such a move. Consequently, EPA believes that a 30-day deadline after any move for reflecting the move in the certificate of representation is reasonable. In the

event the change involves the addition of a unit that operated before being located at the source, the final Transport Rule also requires that the designated representative provide in the certificate of representation information on the entity from which the unit was obtained, the date on which the unit was obtained, and the date on which the unit became located at the source. In the event of a change involving the removal of a unit, the designated representative must provide in the certificate of representation information on the entity that obtained the unit, the date on which that entity obtained the unit, and the date on which the unit became no longer located at the source. This information will enable the Administrator to determine what actions are necessary to reflect the change in units located at the sources involved. For example, if a covered unit is moved from one source to second source, the Administrator will have the information necessary to determine whether the unit's allocation should be changed to reflect movement of the unit from one state to another.

#### (4) Allowance Management System

Sections 97.420 through 97.428, 97.520 through 97.528, 97.620 through 97.628, and 97.720 through 97.728 establish the procedures and requirements for using and operating the Allowance Management System (which is the electronic data system through which the Administrator handles allowance allocation, holding, transfer, and deduction), and for determining compliance with the emissions limitations and assurance provisions, in an efficient and transparent manner. The Allowance Management System also provides the allowance markets with a record of ownership of allowances, dates of allowance transfers, buyer and seller information, and the serial numbers of allowances transferred. Except as discussed herein, these sections of the final rules are essentially the same as in the proposed rules and for each of the Transport Rule trading programs.

#### (i) §§ 97.420, 97.520, 97.620, and 97.720—Compliance, Assurance, and General Accounts

Under the final rules, the Allowance Management System contains three types of accounts. One type comprises compliance accounts, one of which the Administrator establishes for each covered source upon receipt of the certificate of representation for the source. A compliance account is the account in which all allowance allocations must be recorded and in

which any allowances used by the covered source for compliance with the emission limitations must be held. The designated representative and alternate for the source are also the authorized account representative and alternate for the compliance account.

A second type comprises general accounts, which can be established by any entity upon receipt by the Administrator of an application for a general account. General accounts can be used by any person or group for holding or trading allowances. To open a general account, a person or group must submit an application for a general account, which is similar in many ways to a certificate of representation. The provisions for changing the authorized account representative and alternate, for submitting a superseding application to take account of changes in the persons having an ownership interest with respect to allowances, and for delegating authority to make electronic submissions are analogous to those applicable to comparable matters for designated representatives and alternates.

A third type comprises assurance accounts. The Administrator establishes one assurance account for each group of units having a common designated representative and located in a state where the assurance provisions are triggered by total emissions exceeding the state trading budget plus variability.

#### (ii) §§ 97.421 Through 97.423, 97.521 Through 97.523, 97.621 Through 97.623, and 97.721 Through 97.723—Recordation of Allowance Allocations and Transfers

Under the final rules, by November 7, 2011, the Administrator must record allowance allocations for existing units, as set forth in a required notice of data availability, for the Transport Rule annual NO<sub>x</sub>, ozone-season NO<sub>x</sub>, and SO<sub>2</sub> trading programs for 2012 and 2013, unless, as discussed elsewhere in this preamble, a state notifies the Administrator that the state will submit a SIP revision with existing-unit allocations for 2013 by May 1, 2012. If the Administrator approves that SIP revision by October 1, 2012, the Administrator will record the state-determined existing-unit allocations for 2013, and, in the absence of such approval by that date, the Administrator will record the EPA-determined existing-unit allocations for 2013. By July 1, 2013, the Administrator must record existing-unit allowance allocations (whether EPA- or state-determined) for each Transport Rule trading program for 2014 and 2015. By July 1, 2014, the Administrator must

record existing-unit allowance allocations for each Transport Rule trading program for 2016 and 2017. By July 1, 2015, the Administrator must record existing-unit allowance allocations for each Transport Rule trading program for 2018 and 2019. By July 1, 2016 and July 1 of each year thereafter, the Administrator must record existing-unit allowance allocations for each Transport Rule trading program for the control period in the fourth year after the year of the applicable recordation deadline. By August 1, 2012 and August 1 of each year thereafter, the Administrator must record new-unit allowance allocations for each Transport Rule trading program for that year. These recordation deadlines differ from those in the proposed rules for two reasons. First, as discussed elsewhere in this preamble, EPA is adopting provisions that allow states to submit, and EPA to approve, SIP revisions (abbreviated or full SIPs) under which the state, rather than the Administrator, determines the distribution of allowances under one or more of the Transport Rule trading programs applicable in the state. In selecting allocation recordation deadlines, EPA took into account and balanced certain countervailing factors. On one hand, EPA considered the need to provide a reasonable time for a state to develop, propose, and finalize, and for EPA to review and propose and finalize approval of, the SIP revision and the desirability of providing a reasonable opportunity for state distributions to become effective for a year relatively soon after the 2012 commencement of the Transport Rule trading programs. EPA's experience with prior trading programs has shown that the process for development and submission of SIP revisions by states and approval by EPA in many cases is about 18 months and in some cases even longer. On the other hand, EPA considered the desirability of owners and operators having allocations in their compliance accounts a reasonable time before the year for which the allocations are made (*i.e.*, the vintage year). Having the allocations recorded, to the extent possible, before the vintage year facilitates compliance decisions and use of the allowance market in implementing such decisions. EPA believes that optimally allocations would be recorded at least 3 years in advance of the vintage year.

In balancing these countervailing factors, EPA is adopting an allocation recordation schedule that provides initially for recordation ranging from 6 months to 18 months before the

beginning of the control period in the first 2 years (*i.e.*, 2012 and 2013) for which allocations are made and that, as allocations for control periods in subsequent years are recorded, gradually increases the amount of time between recordation and the beginning of the year of the control period involved until allocations are recorded about three and one-half years in advance. With regard to the need to facilitate states' distribution of allowances, this approach gives states multiple opportunities to develop, submit, and obtain EPA approval for SIPs under which the states (rather than EPA) will distribute allowances under the Transport Rule trading programs for control periods relatively early in the programs. Because of time (which has in the past ranged from about 6 months to about 2 years) it may take for a state to develop and submit such a SIP and because of the time (which has in the past been at least 6 months) it will likely take EPA to review and approve such a SIP, EPA believes that 2013 is the first year for which a state can determine allowance distributions and have them recorded some minimal time before the control period involved. With regard to the need to record allowances in advance, this approach achieves recordation at least 6 months in advance and eventually achieves recordation by what EPA believes is an optimal amount of time (greater than 3 years) before the control period for which recorded allowances are issued.

As discussed elsewhere in this preamble, the approach to allowance recordation in the final rules results in following schedule for submission of abbreviated or full SIPs under the final Transport Rule. SIP revisions with existing-unit allocations for 2013 control periods must be submitted to the Administrator by April 1, 2012. Complete abbreviated and full SIPs must be submitted to the Administrator by: December 1, 2012 in order to govern allowance allocation and auction for control periods in 2014 and 2015; December 1, 2013 in order to govern control periods in 2016 and 2017; December 1, 2014 in order to govern allowance allocation and auction for control periods in 2018 and 2019; and December 1, 2015 and by January 1 of any year thereafter in order to govern allowance allocation and auction for control periods in the fifth year after the year of such submission deadline.

The second reason for the differences in the recordation deadlines in the final rules, as compared to the proposed rules, is that, in order to simplify the recordation schedule for owners and operators and EPA, EPA set uniform

recordation deadlines for all of the Transport Rule trading programs. EPA believes that these deadlines provide the Agency sufficient time, after receipt of any information necessary to determine allocations (*e.g.*, for new unit set-aside allocations, the emission data from the control period in the prior year), to complete the recordation of allocations and, as discussed above, makes the allocations available to owners and operators before the year for which the allocations are made. EPA notes that these are deadlines and that the Administrator has the discretion, where feasible and appropriate, to record allocations before such deadlines.

Under the final rules (as under the proposed rules), the process for transferring allowances from one account to another is quite simple. A transfer is submitted providing, in a format prescribed by the Administrator, the account numbers of the accounts involved, the serial numbers of the allowances involved, and the name and signature of the transferring authorized account representative or alternate. If the transfer form containing all the required information is submitted to the Administrator and, when the Administrator attempts to record the transfer, the transferor account includes the allowances identified in the form, the Administrator records the transfer by moving the allowances from the transferor account to the transferee account within 5 business days of the receipt of the transfer form.

(iii) §§ 97.424, 97.524, 97.624, and 97.724—Compliance With Emissions Limitations

Under the final rules (as under the proposed rules), once a control period has ended (*i.e.*, December 31 for the Transport Rule NO<sub>x</sub> and SO<sub>2</sub> annual trading programs and September 30 for the ozone-season NO<sub>x</sub> trading program), covered sources have a window of opportunity—until the allowance transfer deadline of midnight on March 1 or December 1 following the control period for the annual and ozone season trading programs respectively—to evaluate their reported emissions and obtain any allowances that they need to cover their emissions during that control period. Each allowance issued in each Transport Rule trading program authorizes emission of one ton of the pollutant involved, and so is usable for compliance in that trading program, for a control period in the year for which the allowance was allocated or a later year. Consequently, each source needs—as of the allowance transfer deadline—to have in its compliance account, or

properly submit a transfer that moves into its compliance account, enough allowances usable for compliance to authorize the source's total emissions for the control period.

If a source fails to hold sufficient allowances for compliance to cover the emissions, then the owners and operators must provide, for deduction by the Administrator, two allowances allocated for the control period, in the year of when the emissions occurred, any prior year, or the year immediately after the year of the emissions, for every allowance that the owners and operators failed to hold as required to cover emissions. In addition, the owners and operators are subject to discretionary civil penalties for each violation.

(iv) §§ 97.425, 97.525, 97.625, and 97.725—Compliance With Assurance Provisions

Under the final rules (as under the proposed rules), the assurance provisions ensure that each state will eliminate its significant contribution to nonattainment and interference with maintenance that EPA identifies in this action. A requirement that owners and operators surrender allowances under the assurance provisions is triggered only for certain owners and operators of sources and units in a state where the total state covered-unit emissions for a control period exceed the applicable state trading budget with the variability limit. Moreover, the surrender requirement is implemented based on groups of sources and units with a common designated representative. For each group of sources and units with a common designated representative, the owners and operators of such sources and units must surrender allowances only if the units' emissions (referred to as the common designated representative's share of emissions) during the control period involved exceed the units' allocations plus share of the state variability limit (referred to as the common designated representative's share of the state trading budget with variability).

As discussed elsewhere in this preamble, EPA decided to implement the assurance provisions on a common designated representative basis, rather than on an owner basis. The final rules implement in a series of steps the process of determining which states have total covered-unit emissions sufficient to trigger the allowance surrender requirement for a given control period and determining, using the approach based on common designated representatives, which owners and operators are subject to the allowance surrender and whether those

owners and operators are in compliance. This common-designated-representative-based process is more streamlined than the owner-based process in the proposed rules.

First, the Administrator performs the calculations necessary to determine whether any state has total covered-unit emissions for a control period greater than the state trading budget with the 1-year variability limit. As discussed elsewhere in this preamble, EPA decided not to use a 3-year variability limit because, among other things, such a limit seems unnecessary to ensuring elimination of significant contribution to nonattainment and interference with maintenance and would make compliance planning extremely difficult for owners and operators. By June 1, 2013 and June 1 of each year thereafter, the Administrator promulgates a notice of data availability of the results of these calculations.

Second, by July 1, for states identified in the June 1 notice of data availability as having emissions exceeding the state trading budget with variability, the designated representative of each new unit in the state that operated during but did not receive an allocation for the year involved must submit a statement to the Administrator with certain information about the unit. This information—*i.e.*, the unit's allowable emission rate for the pollutant involved (NO<sub>x</sub> or SO<sub>2</sub>) and heat rate—is used to calculate a surrogate allocation for the unit to be used solely for the purposes of determining whether the group of units with a common designated representative that includes the unit had emissions exceeding allocations plus share of the state's variability limit.

Third, the Administrator calculates, for each state identified in the June 1 notice of data availability and for each common designated representative of a group of units (which groups can include one or more units and sources) in the state, the common designated representative's share of emissions, the common designated representative's share of the state trading budget with the variability limit, and the amount (if any) that the groups of owners and operators of units represented by the common designated representative (which groups can include one or more owners and operators) in the state must surrender under the assurance provisions (*i.e.*, the common designated representative's proportionate share of the excess of state emissions over the state trading budget with the variability limit). The Administrator promulgates by August 1 a notice of data availability of the results of these calculations, provides an opportunity for submission

of objections, and promulgates by October 1 a second notice of data availability of any necessary adjustments to the calculations. In contrast with the proposed rules, objections may be submitted concerning information in the August 1 notice, whether or not that information was also provided in the June 1 notice. In short, the process of issuing notices is shortened in the final rules by providing one, comprehensive opportunity to submit objections to the June 1 and August 1 notices, rather than two separate opportunities, one for each notice.

Also in contrast with the proposed rules, the deadlines for issuance of notices of data availability for implementation of the assurance provisions are made uniform under the final rules for all of the Transport Rule trading programs. EPA is taking this approach for the same reasons that the deadlines for issuance of notices of data availability for new unit set-aside allocations are made uniform for all of these trading programs.

Fourth, the owners and operators identified in the October 1 notice of data availability as being required to surrender allowances under the assurance provisions must transfer, by November 1, to the assurance account created by the Administrator for such owners and operators the amount of allowances (usable for compliance) that the Administrator determined in the October 1 notice of data availability. Where the October 1 notice indicates that a specified surrender amount is owed by a group of two or more owners and operators, all the group members are liable for the surrender amount, and it is up to the owners and operators in the group to decide who will actually surrender allowances. This is analogous to the situation where a group of two or more owners and operators of covered units at a source is required to hold allowances covering the unit's emissions and therefore the group of owners and operators is liable. *See* 58 FR 3590, 3599 (January 11, 1993) (discussing liability of owners and operators under allowance-holding requirements of the Acid Rain Program).

EPA believes that the approach of making the owners and operators responsible for deciding which of them will actually surrender the necessary allowances under the assurance provisions is reasonable because the identity of who is an owner or operator (particularly who is an owner) of a unit or source and the percentage of an owner's share can change during the year and this information is available to the owners and operators on an ongoing

basis, and not to EPA unless EPA were to impose new requirements for reporting this information. Further, EPA believes that it is reasonable to leave to private agreements the establishment of procedures for determining when, and under what conditions, specific owners and operators will provide the allowances for surrender. Owners and operators already make these types of determinations with regard to the surrender requirements in meeting the emissions limitations and any excess emission penalties.

As part of implementing the common-designated-representative-based approach of the assurance provisions in the final Transport Rule, the final rules provide that the Administrator (instead of the owners, as in the proposed rules) will create an assurance account for each group of the owners and operators of units and sources with a common designated representative in each state where the assurance provisions are triggered. Because the final rules require owners and operators to transfer surrendered allowances to the appropriate assurance account (rather than requiring the Administrator to deduct from accounts established by the owners), there is no need for the proposed rule provisions concerning identification of which allowances are to be deducted and first-in, first-out deduction in the absence of such identification.

The final rules provide that, in general, the surrender amounts specified in the October 1 notice for owners and operators are final and will not be revised even if the underlying data (e.g., emission data) used in the calculations underlying the October 1 notice are subsequently revised. However, the final rules set forth limited exceptions to this: Where such data are revised as a result of a decision in or settlement of litigation concerning the data on appeal. EPA believes that the limitation on revisions of the surrender amounts specified in the October 1 notice are necessary to provide some certainty to owners and operators and avoid the potential for multiple changes in owners' and operators' required surrender amounts. Because the surrender amount for each group of owners and operators of units and sources with a common designated representative in a state is calculated using emission data from all of the covered units in that state, each change in one or a few units' emission data that might occur after issuance of the October 1 notice could otherwise change the calculated surrender amounts for all or many groups in the state. For the limited exceptions where

the final rules provide that the surrender amounts specified in the August 1 notice may be revised, the final rules require the Administrator to set a new surrender deadline for any additional surrender required and to transfer allowances back out of the assurance account involved for any reduced surrender requirement, as appropriate.

Under the final rules (as under the proposed rules), it is not a violation of the CAA for total state covered-unit emissions to exceed the state trading budget with the variability limit or for a group of owners and operators to become subject to the allowance surrender requirement under the assurance provisions. However, the failure of any group of owners and operators to surrender the required amount of allowances in the assurance account created for such owners and operators violates the CAA and is subject to discretionary penalties, with each required allowance that was not surrendered and each day of the control period involved constituting a violation.

(v) §§ 97.426 Through 97.428, 97.526 Through 97.528, 97.626 Through 97.628, and 97.726 Through 97.728—Miscellaneous Provisions

These sections in the final rules (as in the proposed rules) include provisions allowing banking of the allowances issued in the Transport Rule trading programs, *i.e.*, the retention of unused Transport Rule allowances allocated for a given control period for use or trading in a later control period. While this can potentially cause emissions from sources in some states in some control periods to be greater than the allowances allocated for those control periods, the assurance provisions limit such emissions in a way that ensures that each state's significant contribution to nonattainment and interference with maintenance that EPA has identified in this action will be eliminated.

These sections also include provisions stating that the Administrator can, at his or her discretion and on his or her own motion, correct any type of error that he or she finds in an account in the Allowance Management System. In addition, the Administrator can review any submission under the Transport Rule trading programs, make adjustments to the information in the submission, and deduct or transfer allowances based on such adjusted information.

(5) Emissions Monitoring, Recordkeeping, and Reporting

Sections 97.430 through 97.435, 97.530 through 97.535, 97.630 through 97.635, and 97.730 through 97.735 establish emissions monitoring, recordkeeping, and reporting requirements for Transport Rule units. These provisions reference the relevant sections of Part 75 (40 CFR part 75), where the specific procedures and requirements for monitoring and reporting NO<sub>x</sub> and SO<sub>2</sub> mass emissions are set forth. The provisions in the final rules are virtually the same as the monitoring, recordkeeping, and reporting requirements in the proposed rules and under previous EPA-administered trading programs, *e.g.*, the Acid Rain Program and NO<sub>x</sub> Budget and CAIR trading programs. The final rule provisions are also essentially the same for each of the Transport Rule trading programs, except for differences reflecting the different pollutants and control periods involved.

Under the provisions of the final rules and under Part 75, a unit has several options for monitoring and reporting. A unit's options are to use: a CEMS; an excepted monitoring methodology (NO<sub>x</sub> mass monitoring for certain peaking units and SO<sub>2</sub> mass monitoring for certain oil- and gas-fired units); low mass emissions monitoring for certain, non-coal-fired, low emitting units; or an alternative monitoring system approved by the Administrator through a petition process. In addition, unit owners and operators may submit, and the Administrator can approve, petitions for alternatives to Transport Rule and Part 75 monitoring, recordkeeping, and reporting requirements.

As discussed elsewhere in this preamble, the final rules and Part 75 specify that each CEMS must undergo rigorous initial certification testing and periodic quality assurance testing thereafter. In addition, when a monitoring system is not operating properly, standard substitute data procedures are applied and result in a conservative estimate of emissions for the period involved. Further, the final rules and Part 75 require electronic submission, to the Administrator and in a format prescribed by the Administrator, of a quarterly emissions report.

The final rules include revised language in §§ 97.430(b)(3), 97.530(b)(3), 97.630(b)(3), and 97.730(b)(3) that incorporates by reference, and thereby applies to units in the Transport Rule trading programs, clarification that EPA recently adopted in § 75.4(e) of Part 75 (for Acid Rain Program units)



concerning the requirements for certification, recertification, and diagnostic testing of emission monitoring systems when a unit adds a new stack or new add-on SO<sub>2</sub> or NO<sub>x</sub> emission control device. See 76 FR 17288, 17298–300 (March 28, 2011). The revised language is adopted for the reasons set forth in the preamble of that Acid Rain Program final rule and in order to continue the approach, in the Transport Rule trading program rules, of adopting monitoring, recordkeeping, and reporting requirements that are generally consistent with those in the Acid Rain Program, which covers many units in the Transport Rule trading programs.

## XII. Statutory and Executive Order Reviews

The projected impacts of this final rule as presented throughout the preamble do not reflect minor technical corrections to SO<sub>2</sub> budgets in three states (KY, MI, and NY) made after the impact analyses were conducted. These projections also assumed preliminary variability limits that were smaller than the variability limits finalized in this rule. EPA conducted sensitivity analysis confirming that these differences do not meaningfully alter any of the Agency's findings or conclusions based on the projected cost, benefit, and air quality impacts presented for the final Transport Rule. The results of this sensitivity analysis are presented in Appendix F in the final Transport Rule RIA.

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

Under EO 12866 (58 FR 51735, October 4, 1993), this action is an "economically significant regulatory action" because it is likely to have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or state, local, or tribal governments or communities.

Accordingly, EPA submitted this action to the OMB for review under EO 12866 and EO 13563 (76 FR 3821, January 21, 2011) and any changes in response to OMB recommendations have been documented in the docket for this action. In addition, EPA prepared an analysis of the potential costs and benefits for this action. This analysis is contained in the Regulatory Impact Analysis (RIA) for this action. For more information on the costs and benefits for

this rule, please refer to Table VIII.C–3 of this preamble.

When estimating the human health benefits and compliance costs in Table VIII.C–3 of this preamble, EPA applied methods and assumptions consistent with the state-of-the-science for human health impact assessment, economics, and air quality analysis. EPA applied its best professional judgment in performing this analysis and believes that these estimates provide a reasonable indication of the expected benefits and costs to the nation of this rulemaking. The RIA available in the docket describes in detail the empirical basis for EPA's assumptions and characterizes the various sources of uncertainties affecting the estimates below. In doing what is laid out above in this paragraph, EPA adheres to EO 13563, "Improving Regulation and Regulatory Review," (76 FR 3,821, January 21, 2011), which is a supplement to EO 12866.

In addition to estimating costs and benefits, EO 13563 focuses on the importance of a "regulatory system [that] \* \* \* promote[s] predictability and reduce[s] uncertainty" and that "identify[ies] and use[s] the best, most innovative, and least burdensome tools for achieving regulatory ends." EO 13563 also states that "[i]n developing regulatory actions and identifying appropriate approaches, each agency shall attempt to promote such coordination, simplification, and harmonization. Each agency shall also seek to identify, as appropriate, means to achieve regulatory goals that are designed to promote innovation." We recognize that the utility sector has compliance obligations related to multiple environmental statutes authorizing regulatory action, including this rule's requirements to reduce interstate transport of harmful ozone and fine particles and their precursors, as well as other rules' requirements to reduce air toxic emissions, to reduce greenhouse gas emissions, to safely manage coal combustion wastes, and to protect aquatic wildlife from water intake procedures. In the wake of promulgating this final rule, EPA recognizes that moving forward the agency needs to approach these rulemakings in ways that allow the industry to make practical investment decisions that minimize costs in complying with all of the final rules, while still securing the fundamentally important environmental and public health benefits that led Congress to enact those authorities in the first place. At the same time, EPA notes that the flexibility inherent in the allowance-trading mechanism included in this rule

affords utilities themselves a degree of latitude to determine how best to integrate compliance with the emission reduction requirements of this rule and those of the other rules.

The final rule will also reduce emissions of directly emitted PM and ozone precursors, and estimates of the PM<sub>2.5</sub>-related benefits of these air quality improvements may be found in Tables VIII.C–1 and VIII.C–2 of this preamble. When characterizing uncertainty in the PM-mortality relationship, EPA has historically presented a sensitivity analysis applying alternate assumed thresholds in the PM concentration-response relationship. In its synthesis of the current state of the PM science, EPA's 2009 Integrated Science Assessment for Particulate Matter concluded that a no-threshold log-linear model most adequately portrays the PM-mortality concentration-response relationship. In the RIA accompanying this rulemaking, rather than segmenting out impacts predicted to be associated levels above and below a "bright line" threshold, EPA includes a "lowest measured level" (LML) analysis that illustrates the increasing uncertainty that characterizes exposure attributed to levels of PM<sub>2.5</sub> below the LML of each epidemiological study used to estimate PM<sub>2.5</sub>-related premature death. Figures provided in the RIA show the distribution of baseline exposure to PM<sub>2.5</sub>, as well as the lowest air quality levels measured in each of the epidemiology cohort studies. This information provides a context for considering the likely portion of PM-related mortality benefits occurring above or below the LML of each study; in general, our confidence in the size of the estimated reduction PM<sub>2.5</sub>-related premature mortality diminishes as baseline concentrations of PM<sub>2.5</sub> are lowered. Approximately 69 percent of the avoided impacts occur at or above an annual mean PM<sub>2.5</sub> level of 10 µg/m<sup>3</sup> (the LML of the Laden et al. 2006 study); about 96 percent occur at or above an annual mean PM<sub>2.5</sub> level of 7.5 µg/m<sup>3</sup> (the LML of the Pope et al. 2002 study). Although the LML analysis provides some insight into the level of uncertainty in the estimated PM mortality benefits, EPA does not view the LML as a threshold and continues to quantify PM-related mortality impacts using a full range of modeled air quality concentrations. It is important to note that the monetized benefits include many but not all health effects associated with PM<sub>2.5</sub> exposure. Benefits are shown as a range from Pope, et al., (2002) to Laden, et al., (2006). These models assume that all fine particles,

regardless of their chemical composition, are equally potent in causing premature mortality because there is no clear scientific evidence that would support the development of differential effects estimates by particle type.

The cost analysis is also subject to uncertainties. Estimating the cost conversion from one process to another is more difficult than estimating the cost of adding control equipment because it is more dependent on plant specific information. More information on the cost uncertainties can be found in the RIA.

A summary of the monetized benefits and net benefits for the final rule at discount rates of 3 percent and 7 percent is in Table VIII.C-3 of this preamble. For more information on the benefits analysis, please refer to the RIA for this rulemaking, which is available in the docket.

**B. Paperwork Reduction Act**

EPA is required to document the information collection burden imposed by the Transport Rule on industry, states, and EPA in an information collection request (ICR). The ICR describes the information collection requirements associated with the Transport Rule and estimates the incremental costs of compliance with all such requirements, such as the requirement for industry to monitor, record, and report emission data to EPA.

The ICR for the final Transport Rule has been submitted for approval by OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.*, and the information collection requirements it documents are not enforceable until such approval has been granted. An ICR was also submitted to OMB in support of the proposed Transport Rule; no adverse comment was received by EPA on either the information collection requirements or their associated cost estimates as described in that document.

The costs associated with the information collection requirements of the Transport Rule include start-up and capital costs for units newly affected by

an emission trading program, or whose reporting status has changed (*e.g.*, from ozone-season-only to annual reporting), as well as the additional operation and maintenance costs for Transport Rule-affected units already participating in an EPA-administered cap and trade program. More information on the ICR analysis is included in the final Transport Rule docket.

The records and reports generated by these activities will be used by EPA and states to ensure that affected facilities comply with emission limits and other requirements. Such records and reports are also helpful to EPA and states in both identifying affected facilities that may not be in compliance with applicable requirements and in discerning which units and what records or processes should be inspected.

The incremental capital and operating costs associated with the recordkeeping and reporting burden to Transport Rule-affected sources in states participating in the Transport Rule trading programs are approximately \$26 million annually in 2010 dollars. The total number of burden hours associated with the recordkeeping and reporting burden to Transport Rule-affected sources in states participating in the Transport Rule trading programs is approximately 185,000 hours annually. These estimates include the annualized cost of installing and operating appropriate SO<sub>2</sub> and NO<sub>x</sub> emission monitoring equipment to measure and report the total emissions of these pollutants from affected EGUs (serving generators greater than 25 MW). The burden to state and local air agencies, as documented in the ICR, includes any necessary SIP revisions, performance of monitor certifications, and fulfillment of audit responsibilities. Burden is defined at 5 CFR 1320.3(b).

The amendments do not require any notifications or reports beyond those required by the General Provisions. The recordkeeping requirements require only the specific information needed to determine compliance, which is specifically authorized by CAA section 114 (42 U.S.C. 7414). All information

submitted to EPA for which a claim of confidentiality is made will be safeguarded according to EPA policies in 40 CFR part 2, subpart B, Confidentiality of Business Information. An Agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations in 40 CFR are listed in 40 CFR part 9. When this ICR is approved by OMB, the Agency will publish a technical amendment to 40 CFR part 9 in the **Federal Register** to display the OMB control number for the approved information collection requirements contained in this final rule.

**C. Regulatory Flexibility Act**

The Regulatory Flexibility Act (RFA) generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of this final rule on small entities, small entity is defined as:

(1) A small business as defined by the Small Business Administration's (SBA) regulations at 13 CFR 121.201. For the electric power generation industry, the small business size standard is an ultimate parent entity defined as having a total electric output of 4 million megawatt-hours (MWh) or less in the previous fiscal year.

(2) A small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and

(3) A small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

TABLE XII.C-1—POTENTIALLY REGULATED CATEGORIES AND ENTITIES <sup>a</sup>

Category	NAICS code <sup>b</sup>	Examples of potentially regulated entities
Industry .....	221112	Fossil-fuel-fired electric utility steam generating units.
Federal Government .....	<sup>c</sup> 221112	Fossil-fuel-fired electric utility steam generating units owned by the federal government.
State/Local Government .....	2 <sup>c</sup> 21112	Fossil-fuel-fired electric utility steam generating units owned by municipalities.
Tribal Government .....	921150	Fossil-fuel-fired electric utility steam generating units in Indian Country.

<sup>a</sup> Include NAICS categories for source categories that own and operate electric generating units only.

<sup>b</sup> North American Industry Classification System.

<sup>c</sup> Federal, state, or local government-owned and operated establishments are classified according to the activity in which they are engaged.

EPA used Velocity Suite's Ventyx data as a basis for identifying plant ownership and compiling the list of potentially affected small entities. For plants burning fossil fuel as the primary fuel, plant-level boiler and generator capacity, heat input, generation, and emission data were aggregated by owner and then parent company. For cooperatives, investor-owned utilities, and subdivisions that generate less than 4 billion kWh of electricity annually but may be part of a large entity, additional research on power sales, operating revenues, and other business activities was performed to make a final determination regarding size.

After considering the economic impacts of this final rule on small entities, EPA certifies that this action will not have a significant economic impact on a substantial number of small entities (No SISNOSE). This certification is based on the economic impact of this final rule to all affected small entities across all industries affected. EPA assessed the potential impact of this action on small entities and found that there are about 660 potentially affected small units (*i.e.*, greater than 25 MW and generating less than 4 million MWh) out of 3,625 existing units in the Transport Rule states. The majority of these EGUs are owned by entities that do not meet the small entity definition. The remaining 271 of the 660 EGUs are owned by 108 potentially affected small entities and are likely to be affected by this rule. EPA estimates that 24 of the 108 identified small entities will have annualized costs greater than 1 percent of their revenues, and the other 84 are projected to incur costs less than 1 percent of revenues. Eleven small entities out of 108—approximately 10 percent—are estimated to have annualized costs greater than 3 percent of their revenues. EPA has lessened the impacts for small entities by excluding all units smaller than 25 MWe. This exclusion, in addition to the exemptions for cogeneration units and solid waste incineration units, eliminates the burden of higher costs for a substantial number of small entities located in the Transport Rule states.

While the total number of small entities has increased compared to the proposal as a result of updated modeling and changes in geographic coverage, the number with compliance costs greater than 1 percent of revenues has fallen, and both the number and percentage of significantly impacted small entities (costs greater than 3 percent of revenues) are lower—now 10 percent compared to 17 percent in the proposal. The share of significantly

impacted small entities has fallen because of updated modeling and the change in the allowance allocation methodology (see section VII.D for more information about allowance allocations).

Although this final rule will not have a significant economic impact on a substantial number of small entities, EPA nonetheless has tried to reduce the impact of this rule on small entities. In EPA's modeling, most of the cost impacts for these small entities and their associated units are driven by lower electricity generation relative to the base case. Specifically, two small units reduce their generation by significant amounts, driving the bulk of the costs for all small entities. Excluding these two units, one of the main drivers of small entity impacts is higher fuel costs, which the affected units would incur irrespective of whether they had to comply with this rule. In addition, EPA's decision to exclude units smaller than 25 MWe has already significantly reduced the burden on approximately 390 small entities.

For more information on the small entity impacts associated with the final rule, refer to the Regulatory Impact Analysis for this final rule, which can be found in the docket for this rule and on the Web site <http://www.epa.gov/airtransport>.

#### *D. Unfunded Mandates Reform Act*

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), 2 U.S.C. 1531–1538, requires federal agencies, unless otherwise prohibited by law, to assess the effects of their regulatory actions on state, local, and tribal governments, and the private sector. This rule contains a federal mandate that may result in expenditures of \$100 million or more for state, local, and tribal governments, in the aggregate, or the private sector in any 1 year. Accordingly, EPA has prepared, under section 202 of the UMRA, a written statement which is summarized later.

Consistent with the intergovernmental consultation provisions of section 204 of the UMRA, EPA held consultations with the governmental entities affected by this rule during the proposal phase. Subsequently, EPA sent a letter to the ten Representative National Organizations to draw their attention to the Transport Rule Notice of Data Availability (NODA) on allowance allocations and other related matters and to invite their comments. During the NODA comment period, EPA participated in informational calls with the Environmental Council of the States (ECOS) and the National Governors Association to provide information

about the NODA directly to state and local officials. There were no new concerns raised during these informational calls. In addition, EPA also conducted consultations with federally recognized tribes prior to finalizing this rule and invited them to comment on the allowance allocation NODA. EPA has added a new unit set-aside provision to this final rule specifically for EGUs constructed in Indian country to ensure allowances are available to tribes and tribal sovereignty is respected.

Consistent with section 205, EPA identified and considered a reasonable number of regulatory alternatives. In the proposal, EPA included three remedy options that it considered when developing this final rule: (1) The preferred remedy trading programs, (2) State Budgets/Intrastate Trading, and (3) Direct Controls. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective, or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted.

EPA examined the potential economic impacts on state- and municipality-owned entities associated with this rulemaking based on assumptions of how the affected states will implement control measures to meet program requirements. Although EPA does not conclude that the requirements of the UMRA apply to the Transport Rule, these impacts have been calculated to provide additional understanding of the nature of potential impacts and additional information.

EPA has determined that this rule contains a federal mandate that may result in expenditures of \$100 million or more in 1 year. EPA has determined that this rule contains no regulatory requirements that might significantly or uniquely affect small governments and that development of a small government plan under section 203 of the Act is not required. The costs of compliance will be borne predominately by sources in the private sector although a small number of sources owned by state and local governments may also be impacted. The requirements in this action do not distinguish EGUs based on ownership, either for those units that are included within the scope of the rule or for those units that are exempted by the generating capacity cut-off. Therefore, this rule is not subject to the requirements of section 203 of UMRA because it contains no regulatory requirements that might significantly or uniquely affect small governments.

#### *E. Executive Order 13132: Federalism*

This final rule does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. The final rule primarily affects private industry, and does not impose significant economic costs on state or local governments. Thus, Executive Order 13132 does not apply to the final rule.

Although section 6 of Executive Order 13132 does not apply to the final rule, EPA did provide information to state and local officials during development of both the proposal and final rule. EPA sent a letter to the ten Representative National Organizations to draw their attention to the Transport Rule NODA on allowance allocations and other related matters and to invite their comments. Following that letter in early 2011, EPA participated in informational calls with the Environmental Council of the States (ECOS) and the National Governors Association to provide information about the NODA directly to state and local officials. There were no new concerns raised during these informational calls.

#### *F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments*

Under Executive Order 13175 (65 FR 67249, November 9, 2000), EPA may not issue a regulation that has tribal implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the federal government provides the funds necessary to pay the direct compliance costs incurred by tribal governments, or EPA consults with tribal officials early in the process of developing the proposed regulation and develops a tribal summary impact statement.

EPA has concluded that this action may have tribal implications if a new unit covered by the rule is built in Indian country. Additionally, tribes have a vested interest in how this final rule affects their air quality. However, it will neither impose substantial direct compliance costs on tribal governments, nor preempt tribal law. EPA consulted with tribal officials during the process of finalizing this regulation to permit them to have meaningful and timely input into its development.

EPA received comments on the proposed Transport Rule that the Agency did not properly conduct consultation during the proposal phase

of the rulemaking process. In response to these comments, EPA sent a letter to all federally-recognized tribes in the country offering consultation. In addition, several commenters also noted that the Agency did not adequately consider opportunities for tribes to enter into any of the trading programs and, in particular, did not consider sovereignty issues when addressing how to distribute allowances to potential new units in Indian country. On January 7, 2011, EPA issued a NODA requesting comment on allocations for new units in Indian country, among other topics.

The Agency held a consultation call with three tribes on January 21, 2011. A follow-up call was held on February 4, 2011 with two of the three original tribes plus 13 additional tribes, as well as representatives from the National Tribal Air Association. In all ten tribes participated in these calls as consultation and six participated as information-sharing. EPA considered the additional input from these consultation and information calls, in conjunction with the public comments, in the development of the final rule. Accordingly, EPA created an Indian country new unit set-aside to specifically address tribes' concerns regarding the protection of tribal sovereignty in the distribution of allowances for new units in Indian country. See section VII.D.2 of this preamble for details on the Indian country set-aside for new units constructed in Indian country within states covered by the Transport Rule.

As required by section 7(a) of the Executive Order, EPA's Tribal Consultation Official has certified that the requirements of the Executive Order have been met in a meaningful and timely manner. A copy of the certification is included in the docket for this action.

#### *G. Executive Order 13045: Protection of Children From Environmental Health and Safety Risks*

Executive Order 13045 (62 FR 19,885, April 23, 1997) applies to any rule that: (1) Is determined to be "economically significant" as defined under EO 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of this planned rule on children, and explain why this planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

This action is not subject to Executive Order 13045 because it does not involve decisions on environmental health or safety risks that may disproportionately affect children. EPA believes that the emission reductions from the strategies in this rule will further improve air quality and will further improve children's health. Analyses by EPA that show how the emission reductions from the strategies in this rule will further improve air quality and children's health can be found in the RIA for this rule.

#### *H. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution, or Use*

Executive Order 13211 (66 FR 28355, May 22, 2001) provides that agencies shall prepare and submit to the Administrator of the Office of Regulatory Affairs, OMB, a Statement of Energy Effects for certain actions identified as "significant energy actions." Section 4(b) of Executive Order 13211 defines "significant energy action" as "any action by an agency (normally published in the **Federal Register**) that promulgates or is expected to lead to the promulgation of a final rule or regulation, including notices of inquiry, advance notices of proposed rulemaking, and notices of proposed rulemaking: (1)(i) That is a significant regulatory action under Executive Order 12866 or any successor order, and (ii) is likely to have a significant adverse effect on the supply, distribution, or use of energy; or (2) that is designated by the Administrator of the Office of Information and Regulatory Affairs as a significant energy action." This rule is a significant regulatory action under Executive Order 12866, and this rule is likely to have a significant adverse effect on the supply, distribution, or use of energy. EPA prepared a Statement of Energy Effects for this action as follows.

Under the provisions of this rule, EPA projects that approximately 4.8 GW of additional coal-fired generation may be removed from operation by 2014. In practice, however, the units projected to be uneconomic to maintain may be "mothballed," retired, or kept in service to ensure transmission reliability in certain parts of the grid. These units are predominantly small and infrequently-used generating units dispersed throughout the area affected by the rule. If current forecasts of either natural gas prices or electricity demand were revised in the future to be higher, that would create a greater incentive to keep these units operational.

EPA estimates that average retail electricity prices could increase in the

contiguous U.S. by about 1.7 percent in 2012 and 0.8 percent in 2014. This is generally less of an increase than often occurs with fluctuating fuel prices and other market factors. Related to this, EPA projects limited impacts on coal and gas prices. The average delivered coal price decreases by about 1.4 percent in 2012 and 0.9 percent in 2014 relative to the base case as a result of decreased coal demand and shifts in the type of coal demanded. EPA also projects that the electric power sector-delivered natural gas price will increase by about 0.3 percent over the 2012–2030 timeframe and that natural gas use for electricity generation will increase by approximately 200 billion cubic feet (BCF) by 2014. These impacts are well within the range of price variability that is regularly experienced in natural gas markets. Finally, under the Transport Rule, EPA projects that coal production for use by the power sector will increase above 2009 levels by 21 million tons in 2012 and a further 14 million tons in 2014, as opposed to 30 million tons in 2012 and a further 26 million tons in 2014 without the Transport Rule in place. The Transport Rule is not projected to impact production of coal for uses outside the power sector (*e.g.*, export, industrial sources), which represent approximately 6 percent of total coal production in 2009. EPA does not believe that this rule will have any other impacts (*e.g.*, on oil markets) that exceed the significance criteria.

EPA believes that a number of features of the rulemaking serve to reduce its impact on energy supply. First, the trading component of the Transport Rule provides flexibility to the power sector and enables industry to comply with the emission reduction requirements in the most cost-effective manner compared to the alternative remedy approaches on which EPA took comment in the proposal, thus minimizing overall costs and the ultimate impact on energy supply. Second, the more stringent budgets for SO<sub>2</sub> are set in two phases, providing adequate time for EGUs to install pollution controls. In addition, both the operational flexibility of trading and the ability to bank allowances for future years helps industry plan for and ensure reliability in the electrical system.

For more details concerning energy impacts, *see* the RIA for the Transport Rule.

#### *I. National Technology Transfer Advancement Act*

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Public Law 104–113, 12(d) (15 U.S.C. 272 note) directs

EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (*e.g.*, materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards. This rule will require all sources to meet the applicable monitoring requirements of 40 CFR part 75. Part 75 already incorporates a number of voluntary consensus standards. Consistent with the Agency's Performance Based Measurement System (PBMS), Part 75 sets forth performance criteria that allow the use of alternative methods to the ones set forth in Part 75. The PBMS approach is intended to be more flexible and cost effective for the regulated community; it is also intended to encourage innovation in analytical technology and improved data quality. At this time, EPA is not recommending any revisions to Part 75; however, EPA periodically revises the test procedures set forth in Part 75. When EPA revises the test procedures set forth in Part 75 in the future, EPA will address the use of any new voluntary consensus standards that are equivalent. Currently, even if a test procedure is not set forth in Part 75, EPA is not precluding the use of any method, whether it constitutes a voluntary consensus standard or not, as long as it meets the performance criteria specified; however, any alternative methods must be approved through the petition process under 40 CFR 75.66 before they are used.

#### *J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations*

Executive Order (EO) 12898 (59 FR 7629 (Feb. 16, 1994)) establishes federal executive policy on environmental justice. Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority, low-income, and Tribal populations in the United States. During development of this final Transport Rule, EPA considered its impacts on low-income, minority, and tribal communities in

several ways and provided multiple opportunities for these communities to meaningfully participate in the rulemaking process. The proposed Transport Rule included an analysis of its effects on these populations; this section describes additional analysis conducted since proposal, EPA's responses to key comments on environmental justice issues raised during the comment period, and the public outreach and comment opportunities for this rule.

A summary of the history, statutory authority, and key components of this final Transport Rule are described in the Executive Summary (section III) of this preamble. That section also summarizes a supplemental notice of proposed rulemaking (SNPR) that EPA is publishing to correct a procedural flaw by providing an opportunity for public comment on issues that arose from new analyses with updated inventories and modeling platforms.

Briefly, this final Transport Rule will reduce emissions of SO<sub>2</sub> and NO<sub>x</sub> in 23 eastern and central states in 2012 and 2014 that contribute to annual and/or 24-hour PM<sub>2.5</sub> nonattainment or interfere with maintenance in downwind states. It will also reduce emissions of ozone-season NO<sub>x</sub> in 20 eastern and central states in 2012 and 2014 that contribute to the 1997 ozone nonattainment or interfere with maintenance in downwind states. This rule is replacing an earlier rule (the 2005 Clean Air Interstate Rule (CAIR)) that was first vacated and then remanded to EPA by the U.S. Court of Appeals for the District of Columbia Circuit in 2008.

#### *1. Consideration of Environmental Justice in the Transport Rule Development Process and Response to Comments*

The effects of this final Transport Rule on the most highly exposed populations were integral in its development. This rule uses EPA's authority in CAA section 110(a)(2)(d) to reduce sulfur dioxide (SO<sub>2</sub>) and (nitrogen oxides) NO<sub>x</sub> pollution that significantly contributes to downwind PM<sub>2.5</sub> and ozone nonattainment or maintenance areas. As a result, the rule will reduce exposures to ozone and PM<sub>2.5</sub> in the most-contaminated areas (*i.e.*, areas that are not meeting the 1997 ozone and 1997 and 2006 PM<sub>2.5</sub> National Ambient Air Quality Standards (NAAQS)). In addition, the rule separately identifies both nonattainment areas and maintenance areas (maintenance areas are those that are projected to meet the NAAQS but that, based on past data, are in danger of

exceeding the standards in the future). This requirement reduces the likelihood that any areas close to the level of the standard will exceed the current health-based standards in the future.

This final Transport Rule implements these emission reductions using an emission trading mechanism with assurance provisions for power plants. EPA recognizes that many environmental justice communities have voiced concerns in the past about emission trading and the potential for any emission increases in any location. EPA also received several comments on this issue during the comment period for the proposed Transport Rule. As described below, we believe this final rule addresses the concerns raised on this issue during the comment period.

PM<sub>2.5</sub> and ozone pollution from power plants have both local and regional components: Part of the pollution in a given location—even in locations near emission sources—is due to emissions from nearby sources and part is due to emissions that travel hundreds of miles and mix with emissions from other sources. Therefore, in many instances the exact location of the upwind reductions does not affect the levels of air pollution downwind.

It is important to note that the section of the Clean Air Act providing authority for this rule, section 110(a)(2)(D), unlike some other provisions, does not dictate levels of control for particular facilities. As at least one commenter noted, none of the alternatives put forward by EPA in the proposed rule could have ensured no emission increases at any facility. Under the direct control alternative, the emission rate for each facility would have been limited but each facility could emit more by increasing their power output in order to meet electricity reliability or other goals. Under the intrastate trading option, sources could not trade allowances with sources in other states but individual facilities within each state could have increased their emissions as long as another facility in the state had decreased theirs at some time.

The final Transport Rule allows sources to trade allowances with other sources in the same or different states while firmly constraining any emissions shifting that may occur by requiring a strict emission ceiling in each state (the budget plus variability limit). In addition, assurance provisions in the rule outline the allowance surrender penalties for failing to meet the budget plus variability limits; there are additional allowance penalties as well as financial penalties for failing to hold an adequate number of allowances to cover emissions. This approach

eliminates emissions in each state that significantly contribute to downwind nonattainment or maintenance areas, while allowing power companies to adjust generation as needed and ensure that the country's electricity needs will continue to be met. EPA maintains that the existence of these assurance provisions, including the penalties imposed when triggered, will ensure that state emissions will stay below the level of the budget plus variability limit.

In addition, all sources must hold enough allowances to cover their emissions. Therefore, if a source emits more than its allocation in a given year, either another source must have used less than its allocation and be willing to sell some of its excess allowances, or the source itself had emitted less than its allocation in one or more previous years (*i.e.*, banked allowances for future use).

In summary, the final remedy addresses commenter concerns about localized hot spots and reduces ambient concentrations of pollution where they are most needed by sensitive and vulnerable populations by: Considering the science of ozone and PM<sub>2.5</sub> transport to set strict state budgets to eliminate significant contributions to ozone and PM<sub>2.5</sub> nonattainment and maintenance (*i.e.*, the most polluted) areas; implementing air quality-assured trading; requiring any emissions above the level of the allocations to be offset by emission decreases; and imposing strict penalties for sources that contribute to a state's exceedance of its budget plus variability limit. In addition, it is important to note that nothing in this final rule allows sources to violate their title V permit or any other federal, state, or local emissions or air quality requirements.

EPA received comments from several tribal commenters regarding the lack of allocations in the proposal to new units in Indian Country. EPA responded to these comments by changing the allocation approach in the final rule to create Indian country new unit set-asides. In order to protect tribal sovereignty, these set-asides will be managed and distributed by the federal government regardless of whether the Transport Rule in the adjoining or surrounding state is implemented through a FIP or SIP. While there are no existing power plants in Indian country covered by this Transport Rule, the Indian country set-asides will ensure that any future new units built in Indian country will be able to get the necessary allowances. A full discussion of the Indian country new unit set-asides can be found in section VII.D.2.

EPA also received several comments during the comment period from

individuals and groups requesting additional emission reductions to further protect sensitive and vulnerable communities. While EPA has adjusted the emission requirements somewhat in the final rule to accommodate revised data and updated modeling results, we are finalizing emission reductions very similar to the level in the proposal. This is because EPA believes that the emission reductions required by this final rule are appropriate to meet the statutory requirements of CAA section 110(a)(2)(d) and respond to the concerns raised by the Court's opinion in *North Carolina* that remanded CAIR to the Agency in 2008.

In addition, it is important to note that CAA section 110(a)(2)(d), which addresses transport of criteria pollutants between states, is only one of many provisions of the CAA that provide EPA, states, and local governments with authorities to reduce exposure to ozone and PM<sub>2.5</sub> in communities. These legal authorities work together to reduce exposure to these pollutants in communities, including for minority, low-income, and tribal populations, and provide substantial health benefits to both the general public and sensitive sub-populations.

For example, the recently-proposed Mercury and Air Toxics Standards (MATS) would also result in significant reductions in SO<sub>2</sub> emissions and provide significant health and environmental benefits nationwide. This and other actions described in section III will have substantial and long-term effects on both the U.S. power industry and on communities currently breathing dirty air. Therefore, we anticipate significant interest in many, if not most, of these actions from environmental justice communities, among many others. EPA will continue to provide multiple opportunities for comment on these actions, similar to the opportunities provided during the comment process for this rule, detailed at the end of this section. We encourage environmental justice communities to review and comment on these actions.

## 2. Potential Environmental and Public Health Impacts Among Populations Susceptible or Vulnerable to Air Pollution

EPA expects that this final rule will provide significant health and environmental benefits to, among others, people with asthma, people with heart disease, and people living in ozone or PM<sub>2.5</sub> nonattainment areas. EPA's analysis of the effects of this rule, including information on air quality changes and the resulting health benefits, is presented both in section

VIII of this preamble and in the Regulatory Impact Analysis (RIA) for this rule. These documents can be accessed through the rule docket No. EPA-HQ-OAR-2009-0491 and from the main EPA webpage for the rule at <http://www.epa.gov/airtransport>.

EPA considered several aspects of the effects of the Transport Rule on minority, low-income, and tribal populations. These included: amount of emission reductions and where they take place (including any potential for areas of increased emissions); the changes in ambient concentrations across the affected area; the estimated health benefits; and how the estimated health benefits are distributed among different populations, including those susceptible and vulnerable to air pollution health impacts.

#### a. Emission Reductions

EPA's emission modeling data indicate that implementation of the Transport Rule will substantially reduce SO<sub>2</sub> emissions from electric generating units (EGUs). As noted in section III, emissions in states covered by the Transport Rule will decrease by 6.4 million tons (73 percent) in 2014 compared to 2005 (the year the Clean Air Interstate Rule was finalized). Emissions are also projected to decrease when compared to the base case (the base case estimates emissions in 2014 in the absence of this rule or the Clean Air Interstate Rule it is replacing). EPA estimates that SO<sub>2</sub> emissions in 2014 in covered states will be 3.9 million tons lower (62 percent lower) compared to the base case.

EPA also assessed emission changes in states not covered by the Transport Rule. Emissions in the states not covered by the Transport Rule are also projected to decrease substantially compared to 2005 levels; in 2014 SO<sub>2</sub> emissions are projected to be approximately 430,000 tons lower (30 percent lower) than in 2005.

As described in section VI.C, EPA's modeling does project that some states not covered by any of the fine particle control programs in the final Transport Rule may experience increases of SO<sub>2</sub> emissions greater than 5,000 tons compared to the base case. These states are Arkansas, Colorado, Louisiana, Montana, and Wyoming. These emission increases are the result of forecasted changes in operation of power plant units outside of the Transport Rule states due to the interconnected nature of the utility grid (*i.e.*, shifts in generation of electricity to sources outside the Transport Rule states) or influence of the rule on the market for lower sulfur coal. For

example, EPA projects that the rule will raise demand for lower sulfur coal in the states covered by the Transport Rule for PM<sub>2.5</sub> (thereby raising its price), which may lead sources in states not covered for PM<sub>2.5</sub> to choose higher-sulfur coals that increase SO<sub>2</sub> emissions in those states.

EPA is not requiring SO<sub>2</sub> emission reductions in these states under this rule because our modeling indicates none of these states' contributions would increase enough to cause them to meet or exceed the thresholds described in section V.D for either of the PM<sub>2.5</sub> standards. EPA's authority under CAA section 110(a)(2)(d) is limited to addressing this significant contribution to nonattainment and interference with maintenance. However, as noted above, EPA has recently proposed the Mercury and Air Toxics Standards that will apply nationwide and result in substantial additional SO<sub>2</sub> emission reductions, including in states not covered by the Transport Rule.

EPA's emission modeling data indicates that ozone-season NO<sub>x</sub> emissions from EGUs in states covered by the Transport Rule will be approximately 340,000 tons lower (36 percent lower) in 2014 than they were in 2005. Emissions in states not covered by the Transport Rule are also expected to decrease somewhat (approximately 82,000 tons or 25 percent). EPA's modeling does project that two states (California and Pennsylvania) may experience increases of NO<sub>x</sub> emissions greater than 5,000 tons in 2014 compared to 2005 levels. California is not covered by the Transport Rule; in Pennsylvania, 2005 was an unusually low-emitting year and sources are projected to increase their heat input slightly (usually meaning they are generating more power) after the rule takes effect.

EPA also assessed the expected changes in seasonal NO<sub>x</sub> emissions with implementation of the Transport Rule compared to the base case (*i.e.*, without the rule) in 2014. The modeling indicates ozone-season NO<sub>x</sub> emissions from EGUs in both covered states and non-Transport Rule states under this rule will be lower than they would have been in 2014 in the base case. Ozone-season NO<sub>x</sub> emissions in covered states are projected to decrease by approximately 74,000 tons (11 percent); ozone-season NO<sub>x</sub> emissions in non-Transport Rule states are projected to decrease by approximately 10,000 tons (4 percent). Both California and Pennsylvania are projected to have lower NO<sub>x</sub> emissions in 2014 under the Transport Rule as compared to the base case. In addition, EPA anticipates that

additional upcoming actions, including likely additional interstate transport reductions to help states attain the upcoming new ozone NAAQS, will result in significant additional NO<sub>x</sub> reductions in the future.

#### b. Air Quality Improvements

EPA assessed the air quality metrics (called "design values") for each NAAQS addressed in this rule: 24-hour PM<sub>2.5</sub>, annual PM<sub>2.5</sub>, and ozone. We then compared these metrics for the final rule to the same metrics in the recent past (2003–2007 average ambient air quality) and for the 2014 base case to assess improvements in air quality.

EPA's modeling indicates that there will be significant improvements in air quality as measured by the 24-hour PM<sub>2.5</sub> standard. Throughout much of the eastern half of the U.S., 24-hour PM<sub>2.5</sub> design values are projected to improve more than 10 µg/m<sup>3</sup> compared to the 2003–2007 average levels. In addition, compared to the 2014 base case levels, we project the Transport Rule will result in improvements of 8–10 µg/m<sup>3</sup> in a broad swath of states stretching from far southwestern New York through Pennsylvania, Ohio, West Virginia, Maryland, Indiana, southern Illinois, eastern Missouri, eastern Arkansas, Kentucky, Tennessee, northern Alabama, and northern Mississippi. Isolated areas of Virginia and northern New Jersey are also expected to see this level of improvement. Improvements of 2–6 µg/m<sup>3</sup> are projected in surrounding states stretching from New England and New York to Minnesota, Iowa, the far eastern edge of Nebraska, Missouri, eastern Kansas, Oklahoma, Texas, the Gulf of Mexico states, and the states bordering the Atlantic Ocean from Florida to New Hampshire.

EPA modeling indicates that air quality as measured by the annual PM<sub>2.5</sub> design value will also improve. Improvements range from 2 to over 4 µg/m<sup>3</sup> compared to the 2003–2007 average levels throughout the eastern half of the U.S. Annual PM<sub>2.5</sub> air quality with the Transport Rule is also projected to improve compared to the 2014 base case levels. The largest improvements of up to 4 µg/m<sup>3</sup> are projected to occur in northern West Virginia and a small area in northwestern Tennessee. Improvements of up to 3 µg/m<sup>3</sup> are projected for portions of the Ohio River valley areas of southwestern Pennsylvania, Ohio, West Virginia, Kentucky, central Tennessee, and southern Indiana. Improvements of up to 2 µg/m<sup>3</sup> are projected to take place in a ring of surrounding states including all or most of New York, Michigan, Indiana,

Illinois, Missouri, Arkansas, the far eastern edge of Oklahoma, the northeastern edge of Texas, Louisiana, Mississippi, Alabama, Georgia, South Carolina, North Carolina, Virginia, Maryland, Delaware, Pennsylvania, and New Jersey. Smaller improvements are projected in New England, Wisconsin, the Plains states, southeastern New Mexico, and Florida.

EPA modeling indicates that ozone air quality will improve greatly (10–12 ppb or more) across much of the eastern U.S. between the average levels seen in 2003–2007 and implementation of the Transport Rule. Most of the improvements take place in the base case; that is, they are the result of federal and state programs other than the Transport Rule. However, ozone air quality is projected to improve somewhat as a direct result of the Transport Rule. Improvements in ozone design values compared to the base case of more than 1 ppb are projected for portions of Florida, eastern Oklahoma, and areas along the upper reaches of the Ohio River. In addition, improvements in ozone design values of up to 1 ppb are projected over a wide area across the eastern U.S. from New England to Texas and north to Minnesota. Improvements are also projected in north-central Colorado.

EPA's modeling does indicate small increases in annual PM<sub>2.5</sub> air quality design values in the final rule compared to the 2014 base case in two counties outside of the Transport Rule states: one county in northern Colorado and one county in eastern Montana. As noted above in the section on emissions, these increases are likely the result of forecasted changes in electricity generation due to the interconnected nature of both the utility grid and the national low-sulfur coal market. It should be noted that 2003–2007 average air quality levels in these counties are well below the level of the NAAQS. In addition, other actions, including federal rules such as the recently proposed Mercury and Air Toxics Standards, state, or local actions may also improve air quality in these areas over the next few years.

As described in section VIII.B, EPA anticipates that this final rule will reduce, but not eliminate, the number of nonattainment and maintenance areas for the 1997 ozone and PM<sub>2.5</sub> and 2006 PM<sub>2.5</sub> NAAQS. As noted above, ozone and PM<sub>2.5</sub> concentrations are the result of both local emissions and long-range transport of pollution. Even when the significant contributions of upwind states are fully eliminated, additional emission reductions within the nonattainment area and/or the

downwind state will be needed for some areas to attain and maintain the NAAQS.

#### c. Estimated Health Benefits

This rule reduces concentrations of PM<sub>2.5</sub> and ozone pollution. Exposure to these pollutants can cause, or contribute to, adverse health effects that affect many minority, low-income, and tribal individuals and communities. PM<sub>2.5</sub> and ozone are particularly (but not exclusively) harmful to children, the elderly, and people with existing heart and lung diseases, including asthma. Exposure to these pollutants can cause premature death and trigger heart attacks, asthma attacks in those with asthma, chronic and acute bronchitis, emergency room visits and hospitalizations, as well as milder illnesses that keep children home from school and adults home from work. High rates of heart disease (*e.g.*, high blood pressure)<sup>123</sup> and asthma<sup>124</sup> exist in many environmental justice communities, making these populations more susceptible to air pollution health impacts. In addition, many individuals in these communities lack access to high quality health care to treat these illnesses.<sup>125</sup>

We estimate that in 2014 the PM-related annual benefits of the final rule include approximately 13,000 to 34,000 fewer premature mortalities, 8,700 fewer cases of chronic bronchitis, 15,000 fewer non-fatal heart attacks, 8,500 fewer hospitalizations (for respiratory and cardiovascular disease combined), 10 million fewer days of restricted activity due to respiratory illness, and approximately 1.7 million fewer lost work days. We also estimate substantial health improvements for children in the form of fewer cases of upper and lower respiratory illness, acute bronchitis, and asthma attacks.

Ozone health-related benefits are expected to occur during the summer ozone season (usually ranging from May to September in the eastern U.S.). Based upon modeling for 2014, annual ozone related health benefits are expected to include (in addition to the PM-related benefits above) between 27–120 fewer premature mortalities, 240 fewer

hospital admissions for respiratory illnesses in children and older adults, 86 fewer emergency room admissions for asthma, 160,000 fewer days with restricted activity levels, and 51,000 fewer “school absence” days when children are absent from school due to illnesses. When adding the PM and ozone-related mortalities together, we find that the final rule will yield between 13,000 and 34,000 fewer premature mortalities.

It should be noted that, as discussed in the RIA, there are other benefits to the emission reductions discussed here, including many other health benefits beyond reducing the risk of premature mortality. Additional benefits of reducing emissions of SO<sub>2</sub> include improved visibility, reduced acidification of lakes and streams, and reduced mercury methylation in contaminated waters; additional benefits of NO<sub>x</sub> reductions include improved visibility, reduced acidification of lakes and streams, and reduced coastal eutrophication.

#### d. Distribution of Health Benefits Among Different Populations

EPA also estimated the PM<sub>2.5</sub> mortality risks according to race, income, and educational attainment before and after implementation of this Transport Rule. We used premature mortality for this analysis for several reasons: It is the most serious health effect of exposure to PM<sub>2.5</sub>, and EPA has access to nationwide incidence and demographic data at an appropriate scale to conduct this type of analysis. EPA included educational attainment in this assessment because research on the effects of PM<sub>2.5</sub> has found that educational attainment is inversely related to the risk of all-cause mortality. That is, populations with lower levels of education (in particular, less than grade 12) experience higher rates of PM<sub>2.5</sub> mortality. Krewski and colleagues<sup>126</sup> note in their analysis of this relationship that the level of education attainment is likely to be a surrogate for the effects of complex socioeconomic processes (including factors such as race and income) on mortality.

In the first step of the analysis, we estimated baseline (2005) PM<sub>2.5</sub> mortality risk by race (White, Black, Asian, Native American) among people living in the counties with the highest (top 5 percent) PM<sub>2.5</sub> mortality risk. We

<sup>123</sup> Neighborhood of Residence and Incidence of Coronary Heart Disease Ana V. Diez Roux, M.D., PhD *et al.* *N Engl J Med* 2001; 345:99–106; July 12, 2001.

<sup>124</sup> Centers for Disease Control and Prevention. 2007 National Health 11. Interview Survey Data. Table 4–1. Current Asthma Prevalence Percents by Age, United States: National Health Interview Survey, 2007. Atlanta, GA: U.S. Department of Health and Human Services, CDC, 2010. Accessed June 1, 2010.

<sup>125</sup> R. Nelson, Eds. National Institute of Medicine, 2003.

<sup>126</sup> Krewski D, Jerrett M, Burnett RT, Ma R, Hughes E, Shi Y, Turner C, Pope CA, Thurston G, Calle EE, Thun MJ. Extended follow-up and spatial analysis of the American Cancer Society study linking particulate air pollution and mortality. *HEI Research Report*, 140, 2009; Health Effects Institute, Boston, MA.



also estimated baseline PM<sub>2.5</sub> mortality risk by race among people living in the counties with both the highest (top 5 percent) poverty rate and the highest (top 5 percent) PM<sub>2.5</sub> mortality risk in 2005. And, we estimated the baseline (2005) PM<sub>2.5</sub> mortality risk by educational attainment for people living in the highest PM<sub>2.5</sub> mortality risk counties. In the second step, we estimated the changes in risk for different races among the people living in these “high-risk” and “high risk and high-poverty” counties resulting from implementation of other existing rules in 2014 and from implementation of just the Transport Rule in 2014. Finally, in the third step, we compared the effects of the Transport Rule by race in the high-risk and high risk/high-poverty counties with the effects on people (by race) living in all other counties.

In 2005, people living in the highest-risk counties and in the high risk/high poverty counties had substantially greater risks of PM<sub>2.5</sub>-related death than people living in the other 95 percent of counties. This was true regardless of race: The difference among races in both groups of counties was very small and dwarfed by the large difference between the two groups of counties for all races. For educational attainment, in contrast, our analysis found that people with less than high school education had significantly greater risks from PM<sub>2.5</sub> mortality than people with a greater than high school education. This was especially true for people living in the highest-risk counties, but also held true for people living in all other counties. In summary, in 2005, having less than a high school or high school education, living in one of the poorest counties, and living in a high air pollution risk county are associated with higher PM<sub>2.5</sub> mortality risk; race is not.

Our analysis of the effects of the Transport Rule on this underlying exposure pattern finds that the rule will significantly reduce the PM<sub>2.5</sub> mortality among all populations of different races living throughout the U.S. compared to both 2005 and 2014 pre-rule (*i.e.*, base case) levels. No group will experience any increases in PM<sub>2.5</sub> related deaths as a result of implementing the Transport Rule.

The analysis indicates that the populations with the largest improvement (*i.e.*, largest decline) in PM<sub>2.5</sub> mortality risk as a result of the Transport Rule in 2014 (compared to the base case in 2014) are people living in the highest-risk counties. Among these counties, the largest improvements are for people with less than high school or high school education. These reductions in risk within the highest-risk counties,

as well as the reductions in risk within the other 95 percent of counties, are distributed among populations of different races fairly evenly. Therefore, there is no indication that people of particular race receive a greater benefit (or smaller benefit) than others.

The analysis indicates that people living in the high risk/high poverty counties will experience larger improvements in risk from the Transport Rule compared to their counterparts in the other counties. This result suggests that the Transport Rule is providing the greatest risk reduction improvements among counties containing the poorest, and highest risk, populations. There is also little difference in the improvement in risk among races; in other words, people in the high risk/high poverty counties experience the same improvement in risk regardless of race.

The analysis also indicates that this rule, in conjunction with the implementation of existing or proposed rules (*e.g.*, the proposed Mercury and Air Toxics Standards), will reduce the disparity in risk between the highest-risk counties and the other 95 percent of counties for all races and educational levels. In addition, implementation of this Transport Rule and other rules will, together, reduce risks in the poorest and highest risk counties to the approximate level of risk for the rest of the counties before implementation. This analysis is presented in more detail in the RIA for this rule which is available in the rule docket No. EPA-HQ-OAR-2009-0491 and from the main EPA webpage for the rule at <http://www.epa.gov/airtransport>.

### 3. Meaningful Public Participation

EPA defines “Environmental Justice” to include meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. To promote meaningful involvement, EPA developed a communication and outreach strategy to ensure that interested communities had access to the proposed Transport Rule, were aware of its content, and had an opportunity to comment during the comment period. These efforts are summarized below.

As EPA began considering approaches to address the court remand of the 2005 Clean Air Interstate Rule, long before the rule was proposed, the agency also began gathering input from a large range of stakeholders. In the spring of 2009, EPA held a series of listening sessions to gather information and perspectives from stakeholders prior to the formal

start of the rulemaking process. These stakeholders included a number of environmental groups who requested that EPA consider several potential environmental justice issues during development of this rule. In addition, many environmental justice organizations were represented at a November 2009 EPA-Health and Human Services White House Stakeholder Briefing titled, “The Public Health Benefits of Energy Reform” in which EPA discussed our intention to propose this rule in the spring of 2010 and participants had the opportunity to respond. Finally, EPA notified Indian Tribes of our intent to propose this rule in the fall of 2009 during a regularly scheduled meeting to update the National Tribal Air Association members of upcoming EPA policies and regulations and to receive input from them on the effects of these efforts in Indian country. These were not opportunities for stakeholders to comment on the specifics of the proposal, as they took place prior to its development, but they provided valuable information that EPA used in developing the proposal.

Just after the rule was proposed in July 2010, EPA presented a summary of information related to the proposed Transport Rule at the National Environmental Justice Advisory Council (NEJAC) meeting in Washington, DC, and responded to questions from NEJAC members regarding the proposed rule. EPA also solicited suggestions for how to engage environmental justice communities during the rule comment period.

During the public comment period, EPA held public hearings in Chicago, Philadelphia, and Atlanta. Each hearing was advertised by EPA through a variety of products targeted to general audiences (*e.g.*, fact sheets, press release, slide presentation, etc.); on EPA’s environmental justice listserve; and by non-profit organizations (*e.g.*, American Lung Association). The public hearings were held in public buildings (*i.e.*, no formal identification required to enter or to speak) and were open for 11 hours (9 a.m.–8 p.m.) to accommodate commenters with various work schedules. All three hearings were well-attended by members of the general public. During hearing breaks, EPA staff spent time talking with individuals, including those representing environmental justice organizations or communities, to understand their perspectives in greater detail. As noted above, several commenters at each hearing made comments related to the need to protect communities living near power plants and the most vulnerable

individuals. Some of these commenters specifically mentioned environmental justice; others mentioned issues often of concern to environmental justice communities, such as hot spots, interest in additional emission reductions and greater environmental protection, and concern over the effects of the rule on the most sensitive and vulnerable populations.

In September 2010, during the comment period, EPA held a webinar for EJ communities on the proposed Transport Rule. A presentation tailored for an audience of environmental justice, community, and tribal representatives was specifically designed for this webinar. It was sent to registered participants beforehand and put on the Transport Rule webpage, where it remains posted. The presentation included both information on the context of the rule, plain language information describing the rule itself, and directions on how to comment on the rule.

EPA staff made a short presentation and answered questions about the Transport Rule on a standing bi-monthly community conference call targeted to environmental justice and tribal representatives and organizations. In addition, at the fall 2010 NEJAC meeting in Kansas City, Missouri, EPA provided details of the proposed Transport Rule as part of a larger discussion of a sector-based approach to utility regulation.

Regarding tribal consultation, EPA sent letters to all 565 federally-recognized Tribes in the country offering consultation on the proposed Transport Rule. In addition, the January 7 NODA on allowance allocation methodologies specifically requested comment on allocating allowances to new units in Indian Country. EPA held two consultation and information-sharing calls with 16 interested Tribes in late January and early February 2011. Tribes participating on these consultation and information calls provided comments on the proposed rule and the allowance allocation NODA. As noted above, this additional input from the consultation process was taken into account in the development of the final rule. See Section XII.F for more information on tribal consultation.

#### 4. Summary

EPA believes that the vast majority of communities and individuals in areas covered by this rule, including numerous low-income, minority, and tribal individuals and communities in both rural areas and inner cities in the eastern and central U.S., will see significant improvements in air quality

and resulting improvements in health. EPA's assessment of the effects of the proposed and final Transport Rules on these communities included: (a) The structure of the rule and responses to comments received on issues specific to these communities; (b) expected SO<sub>2</sub> and NO<sub>x</sub> emission reductions; (c) expected PM<sub>2.5</sub> and ozone air quality improvements; (d) expected health benefits, including asthma and other health effects of particular concern for environmental justice communities; and (e) a quantitative assessment of the expected socioeconomic distribution of a key health benefit (reduction in premature mortality). All of these analyses indicate large health and environmental benefits for these communities; none shows evidence of adverse effects. As a result, EPA concludes that we do not expect disproportionately high and adverse human health or environmental effects on minority, low-income, or tribal populations in the United States as a result of implementing this final Transport Rule.

#### K. Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is a "major rule" as defined by 5 U.S.C. 804(2). This rule will be effective October 7, 2011.

#### L. Judicial Review

Petitions for judicial review of this action must be filed in the United States Court of Appeals for the District of Columbia Circuit by October 7, 2011. Section 307(b)(1) of the CAA indicates which Federal Courts of Appeal have venue for petitions of review of final actions by EPA. This section provides, in part, that petitions for review must be filed in the Court of Appeals for the District of Columbia Circuit if (i) the agency action consists of "nationally applicable regulations promulgated, or final action taken, by the Administrator," or (ii) such action is locally or regionally applicable, if "such

action is based on a determination of nationwide scope or effect and if in taking such action the Administrator finds and publishes that such action is based on such a determination."

Any final action related to the Transport Rule is "nationally applicable" within the meaning of section 307(b)(1). Through this rule, EPA interprets section 110 of the CAA, a provision which has nationwide applicability. In addition, the Transport Rule applies to 27 States. The Transport Rule is also based on a common core of factual findings and analyses concerning the transport of pollutants between the different states subject to it. For these reasons, the Administrator also is determining that any final action regarding the Transport Rule is of nationwide scope and effect for purposes of section 307(b)(1). Thus, pursuant to section 307(b) any petitions for review of final actions regarding the Transport Rule must be filed in the Court of Appeals for the District of Columbia Circuit within 60 days from the date final action is published in the **Federal Register**.

Filing a petition for reconsideration of this action does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed and shall not postpone the effectiveness of such rule or action. In addition, pursuant to CAA section 307(b)(2) this action may not be challenged later in proceedings to enforce its requirements.

In addition, this action is subject to the provisions of section 307(d). CAA section 307(d)(1)(B) provides that section 307(d) applies to, among other things, to "the promulgation or revision of an implementation plan by the Administrator under CAA section 110(c)" (42 U.S.C. 7407(d)(1)(B)). The Agency has complied with procedural requirements of CAA section 307(d) during the course of this rulemaking.

#### List of Subjects

##### 40 CFR Part 51

Administrative practice and procedure, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen oxides, Ozone, Particulate matter, Regional haze, Reporting and recordkeeping requirements, Sulfur dioxide.

##### 40 CFR Part 52

Administrative practice and procedure, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen

oxides, Ozone, Particulate matter, Regional haze, Reporting and recordkeeping requirements, Sulfur dioxide.

**40 CFR Part 72**

Acid rain, Administrative practice and procedure, Air pollution control, Electric utilities, Incorporation by reference, Intergovernmental relations, Nitrogen oxides, Reporting and recordkeeping requirements, Sulfur dioxide.

**40 CFR Part 78**

Acid rain, Administrative practice and procedure, Air pollution control, Electric utilities, Intergovernmental relations, Nitrogen oxides, Reporting and recordkeeping requirements, Sulfur dioxide.

**40 CFR Part 97**

Administrative practice and procedure, Air pollution control, Electric utilities, Nitrogen oxides, Reporting and recordkeeping requirements, Sulfur dioxide.

Dated: July 6, 2011.

**Lisa P. Jackson,**  
Administrator.

For the reasons set forth in the preamble, parts 51, 52, 72, 78, and 97 of chapter I of title 40 of the Code of Federal Regulations are amended as follows:

**PART 51—[AMENDED]**

■ 1. The authority citation for part 51 continues to read as follows:

**Authority:** 23 U.S.C. 101; 42 U.S.C. 7401–7671q.

**§ 51.121 [Amended]**

■ 2. In § 51.121 paragraph (r)(2) is amended by removing the words “§ 51.123(bb)” and adding, in their place, the words “§ 51.123(bb) with regard to an ozone season that occurs before January 1, 2012”.

■ 3. Section 51.123 is amended by adding a new paragraph (ff) to read as follows:

**§ 51.123 Findings and requirements for submission of State implementation plan revisions relating to emissions of oxides of nitrogen pursuant to the Clean Air Interstate Rule.**

\* \* \* \* \*

(ff) Notwithstanding any provisions of paragraphs (a) through (ee) of this section, subparts AA through II and AAAA through IIII of part 96 of this chapter, subparts AA through II and AAAA through IIII of part 97 of this chapter, and any State’s SIP to the contrary:

(1) With regard to any control period that begins after December 31, 2011, the Administrator:

(i) Rescinds the determination in paragraph (a) of this section that the States identified in paragraph (c) of this section must submit a SIP revision with respect to the fine particles (PM<sub>2.5</sub>) NAAQS and the 8-hour ozone NAAQS meeting the requirements of paragraphs (b) through (ee) of this section; and

(ii) Will not carry out any of the functions set forth for the Administrator in subparts AA through II and AAAA through IIII of part 96 of this chapter, subparts AA through II and AAAA through IIII of part 97 of this chapter, or in any emissions trading program provisions in a State’s SIP approved under this section;

(2) The Administrator will not deduct for excess emissions any CAIR NO<sub>x</sub> allowances or CAIR NO<sub>x</sub> Ozone Season allowances allocated for 2012 or any year thereafter;

(3) By November 7, 2011, the Administrator will remove from the CAIR NO<sub>x</sub> Allowance Tracking System accounts all CAIR NO<sub>x</sub> allowances allocated for a control period in 2012 and any subsequent year, and, thereafter, no holding or surrender of CAIR NO<sub>x</sub> allowances will be required with regard to emissions or excess emissions for such control periods; and

(4) By November 7, 2011, the Administrator will remove from the CAIR NO<sub>x</sub> Ozone Season Allowance Tracking System accounts all CAIR NO<sub>x</sub> Ozone Season allowances allocated for a control period in 2012 and any subsequent year, and, thereafter, no holding or surrender of CAIR NO<sub>x</sub> Ozone Season allowances will be required with regard to emissions or excess emissions for such control periods.

■ 4. Section 51.124 is amended by adding a new paragraph (s) to read as follows:

**§ 51.124 Findings and requirements for submission of State implementation plan revisions relating to emissions of sulfur dioxide pursuant to the Clean Air Interstate Rule.**

\* \* \* \* \*

(s) Notwithstanding any provisions of paragraphs (a) through (r) of this section, subparts AAA through III of part 96 of this chapter, subparts AAA through III of part 97 of this chapter, and any State’s SIP to the contrary:

(1) With regard to any control period that begins after December 31, 2011, the Administrator:

(i) Rescinds the determination in paragraph (a) of this section that the States identified in paragraph (c) of this

section must submit a SIP revision with respect to the fine particles (PM<sub>2.5</sub>) NAAQS meeting the requirements of paragraphs (b) through (r) of this section; and

(ii) Will not carry out any of the functions set forth for the Administrator in subparts AAA through III of part 96 of this chapter, subparts AAA through III of part 97 of this chapter, or in any emissions trading program in a State’s SIP approved under this section; and

(2) The Administrator will not deduct for excess emissions any CAIR SO<sub>2</sub> allowances allocated for 2012 or any year thereafter.

**§ 51.125 [Reserved]**

■ 5. Section 51.125 is removed and reserved.

**PART 52—[AMENDED]**

■ 6. The authority citation for part 52 continues to read as follows:

**Authority:** 42 U.S.C. 7401, *et seq.*

**Subpart A—General Provisions**

■ 7. Section 52.35 is amended by adding a new paragraph (f) to read as follows:

**§ 52.35 What are the requirements of the Federal Implementation Plans (FIPs) for the Clean Air Interstate Rule (CAIR) relating to emissions of nitrogen oxides?**

\* \* \* \* \*

(f) Notwithstanding any provisions of paragraphs (a) through (d) of this section, subparts AA through II and AAAA through IIII of part 97 of this chapter, and any State’s SIP to the contrary:

(1) With regard to any control period that begins after December 31, 2011,

(i) The provisions in paragraphs (a) through (d) of this section relating to NO<sub>x</sub> annual or ozone season emissions shall not be applicable; and

(ii) The Administrator will not carry out any of the functions set forth for the Administrator in subparts AA through II and AAAA through IIII of part 97 of this chapter;

(2) The Administrator will not deduct for excess emissions any CAIR NO<sub>x</sub> allowances or CAIR NO<sub>x</sub> Ozone Season allowances allocated for 2012 or any year thereafter;

(3) By November 7, 2011, the Administrator will remove from the CAIR NO<sub>x</sub> Allowance Tracking System accounts all CAIR NO<sub>x</sub> allowances allocated for a control period in 2012 and any subsequent year, and, thereafter, no holding or surrender of CAIR NO<sub>x</sub> allowances will be required with regard to emissions or excess emissions for such control periods; and

(4) By November 7, 2011, the Administrator will remove from the CAIR NO<sub>x</sub> Ozone Season Allowance Tracking System accounts all CAIR NO<sub>x</sub> Ozone Season allowances allocated for a control period in 2012 and any subsequent year, and, thereafter, no holding or surrender of CAIR NO<sub>x</sub> allowances will be required with regard to emissions or excess emissions for such control periods.

■ 8. Section 52.36 is amended by adding a new paragraph (e) to read as follows:

**§ 52.36 What are the requirements of the Federal Implementation Plans (FIPs) for the Clean Air Interstate Rule (CAIR) relating to emissions of sulfur dioxide?**

\* \* \* \* \*

(e) Notwithstanding any provisions of paragraphs (a) through (c) of this section, subparts AAA through III of part 97 of this chapter and any State's SIP to the contrary:

(1) With regard to any control period that begins after December 31, 2011,

(i) The provisions of paragraphs (a) through (e) of this section relating to SO<sub>2</sub> emissions shall not be applicable; and

(ii) The Administrator will not carry out any of the functions set forth for the Administrator in subparts AAA through III of part 97 of this chapter; and

(2) The Administrator will not deduct for excess emissions any CAIR SO<sub>2</sub> allowances allocated for 2012 or any year thereafter.

■ 9. Sections §§ 52.38 and 52.39 are added to subpart A to read as follows:

**§ 52.38 What are the requirements of the Federal Implementation Plans (FIPs) under the Transport Rule (TR) relating to emissions of nitrogen oxides?**

(a)(1) The TR NO<sub>x</sub> Annual Trading Program provisions set forth in subpart AAAAA of part 97 of this chapter constitute the TR Federal Implementation Plan provisions that relate to annual emissions of nitrogen oxides (NO<sub>x</sub>).

(2) The provisions of subpart AAAAA of part 97 of this chapter apply to the sources in the following States and Indian country located within the borders of such States: Alabama, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Michigan, Minnesota, Missouri, Nebraska, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, West Virginia, and Wisconsin.

(3) Notwithstanding the provisions of paragraph (a)(1) of this section, a State listed in paragraph (a)(2) of this section may adopt and include in a SIP revision, and the Administrator will

approve, as TR NO<sub>x</sub> Annual allowance allocation provisions replacing the provisions in § 97.411(a) of this chapter with regard to the State and the control period in 2013, a list of TR NO<sub>x</sub> Annual units and the amount of TR NO<sub>x</sub> Annual allowances allocated to each unit on such list, provided that the list of units and allocations meets the following requirements:

(i) All of the units on the list must be units that are in the State and commenced commercial operation before January 1, 2010;

(ii) The total amount of TR NO<sub>x</sub> Annual allowance allocations on the list must not exceed the amount, under § 97.410(a) of this chapter for the State and the control period in 2013, of TR NO<sub>x</sub> Annual trading budget minus the sum of the new unit set-aside and Indian country new unit set-aside;

(iii) The list must be submitted electronically in a format specified by the Administrator; and

(iv) The SIP revision must not provide for any change in the units and allocations on the list after approval of the SIP revision by the Administrator and must not provide for any change in any allocation determined and recorded by the Administrator under subpart AAAAA of part 97 of this chapter;

(v) Provided that:

(A) By October 17, 2011, the State must notify the Administrator electronically in a format specified by the Administrator of the State's intent to submit to the Administrator a complete SIP revision meeting the requirements of paragraph (a)(3)(i) through (iv) of this section by April 1, 2012; and

(B) The State must submit to the Administrator a complete SIP revision described in paragraph (a)(3)(v)(A) of this section by April 1, 2012.

(4) Notwithstanding the provisions of paragraph (a)(1) of this section, a State listed in paragraph (a)(2) of this section may adopt and include in a SIP revision, and the Administrator will approve, regulations revising subpart AAAAA of part 97 of this chapter as follows and not making any other substantive revisions of that subpart:

(i) The State may adopt, as TR NO<sub>x</sub> Annual allowance allocation or auction provisions replacing the provisions in §§ 97.411(a) and (b)(1) and 97.412(a) of this chapter with regard to the State and the control period in 2014 or any subsequent year, any methodology under which the State or the permitting authority allocates or auctions TR NO<sub>x</sub> Annual allowances, and may adopt, in addition to the definitions in § 97.402 of this chapter, one or more definitions that shall apply only to terms as used in the adopted TR NO<sub>x</sub> Annual allowance

allocation or auction provisions, if such methodology—

(A) Requires the State or the permitting authority to allocate and, if applicable, auction a total amount of TR NO<sub>x</sub> Annual allowances for any such control period not exceeding the amount, under §§ 97.410(a) and 97.421 of this chapter for the State and such control period, of the TR NO<sub>x</sub> Annual trading budget minus the sum of the Indian country new unit set-aside and the amount of any TR NO<sub>x</sub> Annual allowances already allocated and recorded by the Administrator.

(B) Requires, to the extent the State adopts provisions for allocations or auctions of TR NO<sub>x</sub> Annual allowances for any such control period to any TR NO<sub>x</sub> Annual units covered by § 97.411(a) of this chapter, that the State or the permitting authority submit such allocations or the results of such auctions for such control period (except allocations or results of auctions to such units of TR NO<sub>x</sub> Annual allowances remaining in a set-aside after completion of the allocations or auctions for which the set-aside was created) to the Administrator no later than the following dates:

Year of the control period for which TR NO <sub>x</sub> annual allowances are allocated or auctioned	Deadline for submission of allocations or auction results to administrator
2014 .....	June 1, 2013.
2015 .....	June 1, 2013.
2016 .....	June 1, 2014.
2017 .....	June 1, 2014.
2018 .....	June 1, 2015.
2019 .....	June 1, 2015.
2020 and any year thereafter.	June 1 of the fourth year before the year of the control period.

(C) Requires, to the extent the State adopts provisions for allocations or auctions of TR NO<sub>x</sub> Annual allowances for any such control period to any TR NO<sub>x</sub> Annual units covered by §§ 97.411(b)(1) and 97.412(a) of this chapter, that the State or the permitting authority submit such allocations or the results of such auctions (except allocations or results of auctions to such units of TR NO<sub>x</sub> Annual allowances remaining in a set-aside after completion of the allocations or auctions for which the set-aside was created) to the Administrator by July 1 of the year of such control period.

(D) Does not provide for any change, after the submission deadlines in paragraphs (a)(4)(i)(B) and (C) of this section, in the allocations submitted to the Administrator by such deadlines and does not provide for any change in

any allocation determined and recorded by the Administrator under subpart AAAAA of part 97 of this chapter;

(ii) Provided that the State must submit a complete SIP revision meeting the requirements of paragraph (a)(4)(i) of this section by December 1 of the year before the year of the deadlines for submission of allocations or auction results under paragraphs (a)(4)(i)(B) and (C) of this section for the first control period for which the State wants to make allocations or hold an auction under paragraph (a)(4)(i) of this section.

(5) Notwithstanding the provisions of paragraph (a)(1) of this section, a State listed in paragraph (a)(2) of this section may adopt and include in a SIP revision, and the Administrator will approve, as correcting in whole or in part, as appropriate, the deficiency in the SIP that is the basis for the TR Federal Implementation Plan set forth in paragraphs (a)(1) through (4) of this section, regulations that are substantively identical to the provisions of the TR NO<sub>x</sub> Annual Trading Program set forth in §§ 97.402 through 97.435 of this chapter, except that the SIP revision:

(i) May adopt, as TR NO<sub>x</sub> Annual allowance allocation or auction provisions replacing the provisions in §§ 97.411(a) and (b)(1) and 97.412(a) of this chapter with regard to the State and the control period in 2014 or any subsequent year, any methodology under which the State or the permitting authority allocates or auctions TR NO<sub>x</sub> Annual allowances and that—

(A) Requires the State or the permitting authority to allocate and, if applicable, auction a total amount of TR NO<sub>x</sub> Annual allowances for any such control period not exceeding the amount, under §§ 97.410(a) and 97.421 of this chapter for the State and such control period, of the TR NO<sub>x</sub> Annual trading budget minus the sum of the Indian country new unit set-aside and the amount of any TR NO<sub>x</sub> Annual allowances already allocated and recorded by the Administrator.

(B) Requires, to the extent the State adopts provisions for allocations or auctions of TR NO<sub>x</sub> Annual allowances for any such control period to any TR NO<sub>x</sub> Annual units covered by § 97.411(a) of this chapter, that the State or the permitting authority submit such allocations or the results of such auctions for such control period (except allocations or results of auctions to such units of TR NO<sub>x</sub> Annual allowances remaining in a set-aside after completion of the allocations or auctions for which the set-aside was created) to the Administrator no later than the following dates:

Year of the control period for which TR NO <sub>x</sub> annual allowances are allocated or auctioned	Deadline for submission of allocations or auction results to administrator
2014 .....	June 1, 2013.
2015 .....	June 1, 2013.
2016 .....	June 1, 2014.
2017 .....	June 1, 2014.
2018 .....	June 1, 2015.
2019 .....	June 1, 2015.
2020 and any year thereafter.	June 1 of the fourth year before the year of the control period.

(C) Requires, to the extent the State adopts provisions for allocations or auctions of TR NO<sub>x</sub> Annual allowances for any such control period to any TR NO<sub>x</sub> Annual units covered by §§ 97.411(b)(1) and 97.412(a) of this chapter, that the State or the permitting authority submit such allocations or the results of such auctions (except allocations or results of auctions to such units of TR NO<sub>x</sub> Annual allowances remaining in a set-aside after completion of the allocations or auctions for which the set-aside was created) to the Administrator by July 1 of the year of such control period.

(D) Does not provide for any change, after the submission deadlines in paragraphs (a)(5)(i)(B) and (C) of this section, in the allocations submitted to the Administrator by such deadlines and does not provide for any change in any allocation determined and recorded by the Administrator under subpart AAAAA of part 97 of this chapter;

(ii) May adopt, in addition to the definitions in § 97.402 of this chapter, one or more definitions that shall apply only to terms as used in the TR NO<sub>x</sub> Annual allowance allocation or auction provisions adopted under paragraph (a)(5)(i) of this section;

(iii) May substitute the name of the State for the term “State” as used in subpart AAAAA of part 97 of this chapter, to the extent the Administrator determines that such substitutions do not make substantive changes in the provisions in §§ 97.402 through 97.435 of this chapter; and

(iv) Must not include any of the references to, or requirements imposed on, any unit in Indian country within the borders of the State in the provisions in §§ 97.402 through 97.435 of this chapter and must not include the provisions in §§ 97.411(b)(2) and 97.412(b), all of which provisions will continue to apply under the portion of the TR Federal Implementation Plan that is not replaced by the SIP revision;

(v) Provided that, if and when any covered unit is located in Indian

country within the borders of the State, the Administrator may modify his or her approval of the SIP revision to exclude the provisions in §§ 97.402 (definitions of “common designated representative”, “common designated representative’s assurance level”, and “common designated representative’s share”), 97.406(c)(2), 97.425, and the portions of other provisions referencing these sections and may modify the portion of the TR Federal Implementation Plan that is not replaced by the SIP revision to include these provisions;

(vi) Provided that the State must submit a complete SIP revision meeting the requirements of paragraphs (a)(5)(i) through (iv) of this section by December 1 of the year before the year of the deadlines for submission of allocations or auction results under paragraphs (a)(5)(i)(B) and (C) of this section applicable to the first control period for which the State wants to make allocations or hold an auction under paragraphs (a)(5)(i) and (ii) of this section.

(6) Following promulgation of an approval by the Administrator of a State’s SIP revision as correcting in whole or in part, as appropriate, the SIP’s deficiency that is the basis for the TR Federal Implementation Plan described in paragraphs (a)(1) through (5) of this section, the provisions of paragraph (a)(2) of this section will no longer apply to the sources in the State, unless the Administrator’s approval of the SIP revision is partial or conditional, and will continue to apply to sources in any Indian country within the borders of the State.

(7) Notwithstanding the provisions of paragraph (a)(6) of this section, if, at the time of such approval of the State’s SIP revision, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Annual allowances under subpart AAAAA of part 97 of this chapter to units in a State for a control period in any year, the provisions of subpart AAAAA of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Annual allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State’s SIP revision.

(b)(1) The TR NO<sub>x</sub> Ozone Season Trading Program provisions set forth in part 97 of this chapter constitute the TR Federal Implementation Plan provisions that relate to emissions of NO<sub>x</sub> during the ozone season, defined as May 1 through September 30 of a calendar year.

(2) The provisions of subpart BBBB of part 97 of this chapter apply to

sources in each of the following States and Indian country located within the borders of such States: Alabama, Arkansas, Florida, Georgia, Illinois, Indiana, Kentucky, Louisiana, Maryland, Mississippi, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

(3) Notwithstanding the provisions of paragraph (b)(1) of this section, a State listed in paragraph (b)(2) of this section may adopt and include in a SIP revision, and the Administrator will approve, as TR NO<sub>x</sub> Ozone Season allowance allocation provisions replacing the provisions in § 97.511(a) of this chapter with regard to the State and the control period in 2013, a list of TR NO<sub>x</sub> Ozone Season units and the amount of TR NO<sub>x</sub> Ozone Season allowances allocated to each unit on such list, provided that the list of units and allocations meets the following requirements:

(i) All of the units on the list must be units that are in the State and commenced commercial operation before January 1, 2010;

(ii) The total amount of TR NO<sub>x</sub> Ozone Season allowance allocations on the list must not exceed the amount, under § 97.510(a) of this chapter for the State and the control period in 2013, of TR NO<sub>x</sub> Ozone Season trading budget minus the sum of the new unit set-aside and Indian country new unit set-aside;

(iii) The list must be submitted electronically in a format specified by the Administrator; and

(iv) The SIP revision must not provide for any change in the units and allocations on the list after approval of the SIP revision by the Administrator and must not provide for any change in any allocation determined and recorded by the Administrator under subpart BBBBB of part 97 of this chapter;

(v) Provided that:

(A) By October 17, 2011, the State must notify the Administrator electronically in a format specified by the Administrator of the State's intent to submit to the Administrator a complete SIP revision meeting the requirements of paragraph (b)(3)(i) through (iv) of this section by April 1, 2012; and

(B) The State must submit to the Administrator a complete SIP revision described in paragraph (b)(3)(v)(A) of this section by April 1, 2012.

(4) Notwithstanding the provisions of paragraph (b)(1) of this section, a State listed in paragraph (b)(2) of this section may adopt and include in a SIP revision, and the Administrator will approve, regulations revising subpart BBBBB of part 97 of this chapter as

follows and not making any other substantive revisions of that subpart:

(i) The State may adopt, as applicability provisions replacing the provisions in §§ 97.504(a)(1) and (2) of this chapter, provisions substantively identical to those provisions, except that the words "more than 25 MWe" are replaced, whenever such words appear, by words specifying a uniform lower limit on the amount of megawatts that is not greater than the amount specified by the words "more than 25 MWe" and is not less than the amount specified by the words "15 MWe or more"; or

(ii) The State may adopt, as TR NO<sub>x</sub> Ozone Season allowance allocation or auction provisions replacing the provisions in §§ 97.511(a) and (b)(1) and 97.512(a) of this chapter with regard to the control period in 2014 or any subsequent year, any methodology under which the State or the permitting authority allocates or auctions TR NO<sub>x</sub> Ozone Season allowances, and may adopt, in addition to the definitions in § 97.502 of this chapter, one or more definitions that shall apply only to terms as used in the adopted TR NO<sub>x</sub> Ozone Season allowance allocation or auction provisions, if such methodology—

(A) Requires the State or the permitting authority to allocate and, if applicable, auction a total amount of TR NO<sub>x</sub> Ozone Season allowances for any such control period not exceeding the amount, under §§ 97.510(a) and 97.521 of this chapter for the State and such control period, of the TR NO<sub>x</sub> Ozone Season trading budget minus the sum of the Indian country new unit set-aside and the amount of any TR NO<sub>x</sub> Ozone Season allowances already allocated and recorded by the Administrator.

(B) Requires, to the extent the State adopts provisions for allocations or auctions of TR NO<sub>x</sub> Ozone Season allowances for any such control period to any TR NO<sub>x</sub> Ozone Season units covered by § 97.511(a) of this chapter, that the State or the permitting authority submit such allocations or the results of such auctions for such control period (except allocations or results of auctions to such units of TR NO<sub>x</sub> Ozone Season allowances remaining in a set-aside after completion of the allocations or auctions for which the set-aside was created) to the Administrator no later than the following dates:

Year of the control period for which TR NO <sub>x</sub> Ozone Season allowances are allocated or auctioned	Deadline for submission of allocations or auction results to administrator
2014 .....	June 1, 2013.
2015 .....	June 1, 2013.

Year of the control period for which TR NO <sub>x</sub> Ozone Season allowances are allocated or auctioned	Deadline for submission of allocations or auction results to administrator
2016 .....	June 1, 2014.
2017 .....	June 1, 2014.
2018 .....	June 1, 2015.
2019 .....	June 1, 2015.
2020 and any year thereafter.	June 1 of the fourth year before the year of the control period.

(C) Requires, to the extent the State adopts provisions for allocations or auctions of TR NO<sub>x</sub> Ozone Season allowances for any such control period to any TR NO<sub>x</sub> Ozone Season units covered by §§ 97.511(b)(1) and 97.512(a) of this chapter, that the State or the permitting authority submit such allocations or the results of such auctions (except allocations or results of auctions to such units of TR NO<sub>x</sub> Ozone Season allowances remaining in a set-aside after completion of the allocations or auctions for which the set-aside was created) to the Administrator by July 1 of the year of such control period.

(D) Does not provide for any change, after the submission deadlines in paragraphs (b)(4)(ii)(B) and (C) of this section, in the allocations submitted to the Administrator by such deadlines and does not provide for any change in any allocation determined and recorded by the Administrator under subpart BBBBB of part 97 of this chapter;

(iii) Provided that the State must submit a complete SIP revision meeting the requirements of paragraph (b)(4)(i) or (ii) of this section by December 1 of the year before the year of the deadlines for submission of allocations or auction results under paragraphs (b)(4)(ii)(B) and (C) of this section applicable to the first control period for which the State wants to replace the applicability provisions, make allocations, or hold an auction under paragraph (b)(4)(i) or (ii) of this section.

(5) Notwithstanding the provisions of paragraph (b)(1) of this section, a State listed in paragraph (b)(2) of this section may adopt and include in a SIP revision, and the Administrator will approve, as correcting in whole or in part, as appropriate, the deficiency in the SIP that is the basis for the TR Federal Implementation Plan set forth in paragraphs (b)(1) through (4) of this section, regulations that are substantively identical to the provisions of the TR NO<sub>x</sub> Ozone Season Trading Program set forth in §§ 97.502 through 97.535 of this chapter, except that the SIP revision:

(i) May adopt, as applicability provisions replacing the provisions in §§ 97.504(a)(1) and (2) of this chapter, provisions substantively identical to those provisions, except that the words “more than 25 MWe” are replaced, whenever such words appear, by words specifying a uniform lower limit on the amount of megawatts that is not greater than the amount specified by the words “more than 25 MWe” and is not less than the amount specified by the words “15 MWe or more”;

(ii) May adopt, as TR NO<sub>x</sub> Ozone Season allowance allocation provisions replacing the provisions in §§ 97.511(a) and (b)(1) and 97.512(a) of this chapter with regard to the control period in 2014 and any subsequent year, any methodology under which the State or the permitting authority allocates auctions TR NO<sub>x</sub> Ozone Season allowances and that—

(A) Requires the State or the permitting authority to allocate and, if applicable, auction a total amount of TR NO<sub>x</sub> Ozone Season allowances for any such control period not exceeding the amount, under §§ 97.510(a) and 97.521 of this chapter for the State and such control period, of the TR NO<sub>x</sub> Ozone Season trading budget minus the sum of the Indian country new unit set-aside and the amount of any TR NO<sub>x</sub> Ozone Season allowances already allocated and recorded by the Administrator.

(B) Requires, to the extent the State adopts provisions for allocations or auction of TR NO<sub>x</sub> Ozone Season allowances for any such control period to any TR NO<sub>x</sub> Ozone Season units covered by § 97.511(a) of this chapter, that the State or the permitting authority submit such allocations or the results of such auctions for such control period (except allocations or results of auctions to such units of TR NO<sub>x</sub> Ozone Season allowances remaining in a set-aside after completion of the allocations or auctions for which the set-aside was created) to the Administrator no later than the following dates:

Year of the control period for which TR NO <sub>x</sub> Ozone Season allowances are allocated or auctioned	Deadline for submission of allocations or auction results to administrator
2014 .....	June 1, 2013.
2015 .....	June 1, 2013.
2016 .....	June 1, 2014.
2017 .....	June 1, 2014.
2018 .....	June 1, 2015.
2019 .....	June 1, 2015.
2020 and any year thereafter.	June 1 of the fourth year before the year of the control period.

(C) Requires, to the extent the State adopts provisions for allocations or auctions of TR NO<sub>x</sub> Ozone Season allowances for any control period to any TR NO<sub>x</sub> Ozone Season units covered by §§ 97.511(b)(1) and 97.512(a) of this chapter, that the State or the permitting authority submit such allocations or the results of such auctions (except allocations or results of auctions to such units of TR NO<sub>x</sub> Ozone Season allowances remaining in a set-aside after completion of the allocations or auctions for which the set-aside was created) to the Administrator by July 1 of the year of such control period.

(D) Does not provide for any change, after the submission deadlines in paragraphs (b)(5)(ii)(B) and (C) of this section, in the allocations submitted to the Administrator by such deadlines and does not provide for any change in any allocation determined and recorded by the Administrator under subpart BBBBB of part 97 of this chapter;

(iii) May adopt in addition to the definitions in § 97.502 of this chapter, one or more definitions that shall apply only to terms as used in the TR NO<sub>x</sub> Ozone Season allowance allocation or auction provisions adopted under paragraph (b)(5)(ii) of this section;

(iv) May substitute the name of the State for the term “State” as used in subpart BBBBB of part 97 of this chapter, to the extent the Administrator determines that such substitutions do not make substantive changes in the provisions in §§ 97.502 through 97.535 of this chapter; and

(v) Must not include any of the references to, or requirements imposed on, any unit in Indian country within the borders of the State in the provisions in §§ 97.502 through 97.535 of this chapter and must not include the provisions in §§ 97.511(b)(2) and 97.512(b), all of which provisions will continue to apply under the portion of the TR Federal Implementation Plan that is not replaced by the SIP revision;

(vi) Provided that, if and when any covered unit is located in Indian country within the borders of the State, the Administrator may modify his or her approval of the SIP revision to exclude the provisions in §§ 97.502 (definitions of “common designated representative”, “common designated representative’s assurance level”, and “common designated representative’s share”), 97.506(c)(2), 97.525, and the portions of other provisions referencing these sections and may modify the portion of the TR Federal Implementation Plan that is not replaced by the SIP revision to include these provisions;

(vii) Provided that the State must submit a complete SIP revision meeting

the requirements of paragraph (b)(5)(i) through (v) of this section by December 1 of the year before the year of the deadlines for submission of allocations or auction results under paragraphs (5)(ii)(B) and (C) of this section applicable to the first control period for which the State wants to replace the applicability provisions, make allocations, or hold an auction under paragraphs (b)(5)(ii) and (iii) of this section.

(6) Following promulgation of an approval by the Administrator of a State’s SIP revision as correcting in whole or in part, as appropriate, the SIP’s deficiency that is the basis for the TR Federal Implementation Plan set forth in paragraphs (b)(1) through (5) of this section, the provisions of paragraph (b)(2) of this section will no longer apply to sources in the State, unless the Administrator’s approval of the SIP revision is partial or conditional, and will continue to apply to sources in any Indian country within the borders of the State.

(7) Notwithstanding the provisions of paragraph (b)(6) of this section, if, at the time of such approval of the State’s SIP revision, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Ozone Season allowances under subpart BBBBB of part 97 of this chapter to units in a State for a control period in any year, the provisions of subpart BBBBB of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Ozone Season allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State’s SIP revision.

**§ 52.39 What are the requirements of the Federal Implementation Plans (FIPs) for the Transport Rule (TR) relating to emissions of sulfur dioxide?**

(a) The TR SO<sub>2</sub> Group 1 Trading Program provisions and the TR SO<sub>2</sub> Group 2 Trading Program provisions set forth respectively in subparts CCCCC and DDDDD of part 97 of this chapter constitute the TR Federal Implementation Plan provisions that relate to emissions of sulfur dioxide (SO<sub>2</sub>).

(b) The provisions of subpart CCCCC of part 97 of this chapter apply to sources in each of the following States and Indian country located within the borders of such States: Illinois, Indiana, Iowa, Kentucky, Maryland, Michigan, Missouri, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia, and Wisconsin.

(c) The provisions of subpart DDDDD of part 97 of this chapter apply to sources in each of the following States and Indian country located within the borders of such States: Alabama, Georgia, Kansas, Minnesota, Nebraska, South Carolina, and Texas.

(d) Notwithstanding the provisions of paragraph (a) of this section, a State listed in paragraph (b) of this section may adopt and include in a SIP revision, and the Administrator will approve, as TR SO<sub>2</sub> Group 1 allowance allocation provisions replacing the provisions in § 97.611(a) of this chapter with regard to the State and the control period in 2013, a list of TR SO<sub>2</sub> Group 1 units and the amount of TR SO<sub>2</sub> Group 1 allowances allocated to each unit on such list, provided that the list of units and allocations meets the following requirements:

(1) All of the units on the list must be units that are in the State and commenced commercial operation before January 1, 2010;

(2) The total amount of TR SO<sub>2</sub> Group 1 allowance allocations on the list must not exceed the amount, under § 97.610(a) of this chapter for the State and the control period in 2013, of TR SO<sub>2</sub> Group 1 trading budget minus the sum of the new unit set-aside and Indian country new unit set-aside;

(3) The list must be submitted electronically in a format specified by the Administrator; and

(4) The SIP revision must not provide for any change in the units and allocations on the list after approval of the SIP revision by the Administrator and must not provide for any change in any allocation determined and recorded by the Administrator under subpart CCCCC of part 97 of this chapter;

(5) Provided that:

(i) By October 17, 2011, the State must notify the Administrator electronically in a format specified by the Administrator of the State's intent to submit to the Administrator a complete SIP revision meeting the requirements of paragraph (d)(1) through (4) of this section by April 1, 2012; and

(ii) The State must submit to the Administrator a complete SIP revision described in paragraph (d)(5)(i) of this section by April 1, 2012.

(e) Notwithstanding the provisions of paragraph (a) of this section, a State listed in paragraph (b) of this section may adopt and include in a SIP revision, and the Administrator will approve, regulations revising subpart CCCCC of part 97 of this chapter as follows and not making any other substantive revisions of that subpart:

(1) The State may adopt, as TR SO<sub>2</sub> Group 1 allowance allocation or auction

provisions replacing the provisions in §§ 97.611(a) and (b)(1) and 97.612(a) of this chapter with regard to the control period in 2014 or any subsequent year, any methodology under which the State or the permitting authority allocates or auctions TR SO<sub>2</sub> Group 1 allowances and may adopt, in addition to the definitions in § 97.602 of this chapter, one or more definitions that shall apply only to terms as used in the adopted TR SO<sub>2</sub> Group 1 allowance allocation or auction provisions, if such methodology—

(i) Requires the State or the permitting authority to allocate and, if applicable, auction a total amount of TR SO<sub>2</sub> Group 1 allowances for any such control period not exceeding the amount, under §§ 97.610(a) and 97.621 of this chapter for the State and such control period, of the TR SO<sub>2</sub> Group 1 trading budget minus the sum of the Indian country new unit set-aside and the amount of any TR SO<sub>2</sub> Group 1 allowances already allocated and recorded by the Administrator.

(ii) Requires, to the extent the State adopts provisions for allocations or auction of TR SO<sub>2</sub> Group 1 allowances for any such control period to any TR SO<sub>2</sub> Group 1 units covered by § 97.611(a) of this chapter, that the State or the permitting authority submit such allocations or the results of such auctions for such control period (except allocations or results of auctions to such units of TR SO<sub>2</sub> Group 1 allowances remaining in a set-aside after completion of the allocations or auctions for which the set-aside was created) to the Administrator no later than the following dates:

Year of the control period for which TR SO <sub>2</sub> Group 1 allowances are allocated or auctioned	Deadline for submission of allocations or auction results to administrator
2014 .....	June 1, 2013.
2015 .....	June 1, 2013.
2016 .....	June 1, 2014.
2017 .....	June 1, 2014.
2018 .....	June 1, 2015.
2019 .....	June 1, 2015.
2020 and any year thereafter.	June 1 of the fourth year before the year of the control period.

(iii) Requires, to the extent the State adopts provisions for allocations or auctions of TR SO<sub>2</sub> Group 1 allowances for any such control period to any TR SO<sub>2</sub> Group 1 units covered by §§ 97.611(b)(1) and 97.612(a) of this chapter, that the State or the permitting authority submit such allocations or the results of such auctions (except allocations or results of auctions to such

units of TR SO<sub>2</sub> Group 1 allowances remaining in a set-aside after completion of the allocations or auctions for which the set-aside was created) to the Administrator by July 1 of the year of such control period.

(iv) Does not provide for any change, after the submission deadlines in paragraphs (e)(1)(ii) and (iii) of this section, in the allocations submitted to the Administrator by such deadlines and does not provide for any change in any allocation determined and recorded by the Administrator under subpart CCCCC of part 97 of this chapter;

(2) Provided that the State must submit a complete SIP revision meeting the requirements of paragraph (e)(1) of this section by December 1 of the year before the year of the deadlines for submission of allocations or auction results under paragraphs (e)(1)(ii) and (iii) of this section applicable to the first control period for which the State wants to make allocations or hold an auction under paragraph (e)(1) of this section.

(f) Notwithstanding the provisions of paragraph (a) of this section, a State listed in paragraph (b) of this section may adopt and include in a SIP revision, and the Administrator will approve, as correcting in whole or in part, as appropriate, the deficiency in the SIP that is the basis for the TR Federal Implementation Plan set forth in paragraphs (a), (b), (d), and (e) of this section, regulations that are substantively identical to the provisions of the TR SO<sub>2</sub> Group 1 Trading Program set forth in §§ 97.602 through 97.635 of this chapter, except that the SIP revision:

(1) May adopt, as TR SO<sub>2</sub> Group 1 allowance allocation or auction provisions replacing the provisions in §§ 97.611(a) and (b)(1) and 97.612(a) of this chapter with regard to the control period in 2014 and any subsequent year, any methodology under which the State or the permitting authority allocates or auctions TR SO<sub>2</sub> Group 1 allowances and that—

(i) Requires the State or the permitting authority to allocate and, if applicable, auction a total amount of TR SO<sub>2</sub> Group 1 allowances for such control period not exceeding the amount, under §§ 97.610(a) and 97.621 of this chapter for the State and such control period, of the TR SO<sub>2</sub> Group 1 trading budget minus the sum of the Indian country new unit set-aside and the amount of any TR SO<sub>2</sub> Group 1 allowances already allocated and recorded by the Administrator.

(ii) Requires, to the extent the State adopts provisions for allocations or auction of TR SO<sub>2</sub> Group 1 allowances for any such control period to any TR



SO<sub>2</sub> Group 1 units covered by § 97.611(a) of this chapter, that the State or the permitting authority submit such allocations or the results of such auctions for such control period (except allocations or results of auctions to such units of TR SO<sub>2</sub> Group 1 allowances remaining in a set-aside after completion of the allocations or auctions for which the set-aside was created) to the Administrator no later than the following dates:

Year of the control period for which TR SO <sub>2</sub> Group 1 allowances are allocated or auctioned	Deadline for submission of allocations or auction results to administrator
2014 .....	June 1, 2013.
2015 .....	June 1, 2013.
2016 .....	June 1, 2014.
2017 .....	June 1, 2014.
2018 .....	June 1, 2015.
2019 .....	June 1, 2015.
2020 and any year thereafter.	June 1 of the fourth year before the year of the control period.

(iii) Requires, to the extent the State adopts provisions for allocations or auctions of TR SO<sub>2</sub> Group 1 allowances for any such control period to any TR SO<sub>2</sub> Group 1 units covered by §§ 97.611(b)(1) and 97.612(a) of this chapter, that the State or the permitting authority submit such allocations or the results of such auctions (except allocations or results of auctions to such units of TR SO<sub>2</sub> Group 1 allowances remaining in a set-aside after completion of the allocations or auctions for which the set-aside was created) to the Administrator by July 1 of the year of such control period.

(iv) Does not provide for any change, after the submission deadlines in paragraphs (f)(2)(ii) and (iii) of this section, in the allocations submitted to the Administrator by such deadlines and does not provide for any change in any allocation determined and recorded by the Administrator under subpart CCCCC of part 97 of this chapter;

(2) May adopt, in addition to the definitions in § 97.602 of this chapter, one or more definitions that shall apply only to terms as used in the TR SO<sub>2</sub> Group 1 allowance allocation or auction provisions adopted under paragraph (f)(1) of this section;

(3) May substitute the name of the State for the term “State” as used in subpart CCCCC of part 97 of this chapter, to the extent the Administrator determines that such substitutions do not make substantive changes in the provisions in §§ 97.602 through 97.635 of this chapter; and

(4) Must not include any of the references to, or requirements imposed on, any unit in Indian country within the borders of the State in the provisions in §§ 97.602 through 97.635 of this chapter and must not include the provisions in §§ 97.611(b)(2) and 97.612(b), all of which provisions will continue to apply under the portion of the TR Federal Implementation Plan that is not replaced by the SIP revision;

(5) Provided that, if and when any covered unit is located in Indian country within the borders of the State, the Administrator may modify his or her approval of the SIP revision to exclude the provisions in §§ 97.602 (definitions of “common designated representative”, “common designated representative’s assurance level”, and “common designated representative’s share”), 97.606(c)(2), 97.625, and the portions of other provisions referencing these sections and may modify the portion of the TR Federal Implementation Plan that is not replaced by the SIP revision to include these provisions;

(6) Provided that the State must submit a complete SIP revision meeting the requirements of paragraphs (f)(1) through (4) of this section by December 1 of the year before the year of the deadlines for submission of allocations or auction results under paragraphs (f)(1)(ii) and (iii) of this section applicable to the first control period for which the State wants to make allocations or hold an auction under paragraph (f)(1)(ii) and (iii) of this section.

(g) Notwithstanding the provisions of paragraph (a) of this section, a State listed in paragraph (c) of this section may adopt and include in a SIP revision, and the Administrator will approve, as TR SO<sub>2</sub> Group 2 allowance allocation provisions replacing the provisions in § 97.711(a) of this chapter with regard to the control period in 2013, a list of TR SO<sub>2</sub> Group 2 units and the amount of TR SO<sub>2</sub> Group 2 allowances allocated to each unit on such list, provided that the list of units and allocations meets the following requirements:

(1) All of the units on the list must be units that are in the State and commenced commercial operation before January 1, 2010;

(2) The total amount of TR SO<sub>2</sub> Group 2 allowance allocations on the list must not exceed the amount, under § 97.710(a) of this chapter for the State and the control period in 2013, of TR SO<sub>2</sub> Group 2 trading budget minus the sum of the new unit set-aside and Indian country new unit set-aside;

(3) The list must be submitted electronically in a format specified by the Administrator; and

(4) The SIP revision must not provide for any change in the units and allocations on the list after approval of the SIP revision by the Administrator and must not provide for any change in any allocation determined and recorded by the Administrator under subpart DDDDD of part 97 of this chapter;

(5) Provided that:

(i) By October 17, 2011, the State must notify the Administrator electronically in a format specified by the Administrator of the State’s intent to submit to the Administrator a complete SIP revision meeting the requirements of paragraph (g)(1) through (4) of this section by April 1, 2012; and

(ii) The State must submit to the Administrator a complete SIP revision described in paragraph (g)(5)(i) of this section by April 1, 2012.

(h) Notwithstanding the provisions of paragraph (a) of this section, a State listed in paragraph (c) of this section may adopt and include in a SIP revision, and the Administrator will approve, regulations revising subpart DDDDD of part 97 of this chapter as follows and not making any other substantive revisions of that subpart:

(1) The State may adopt, as TR SO<sub>2</sub> Group 2 allowance allocation or auction provisions replacing the provisions in §§ 97.711(a) and (b)(1) and 97.712(a) of this chapter with regard to the control period in 2014 and any subsequent year, any methodology under which the State or the permitting authority allocates or auctions TR SO<sub>2</sub> Group 2 allowances and may adopt, in addition to the definitions in § 97.702 of this chapter, one or more definitions that shall apply only to terms as used in the adopted TR SO<sub>2</sub> Group 2 allowance allocation or auction provisions, if such methodology—

(i) Requires the State or the permitting authority to allocate and, if applicable, auction a total amount of TR SO<sub>2</sub> Group 2 allowances for any such control period not exceeding the amount, under §§ 97.710(a) and 97.721 of this chapter for the State and such control period, of the TR SO<sub>2</sub> Group 2 trading budget minus the sum of the Indian country new unit set-aside and the amount of any TR SO<sub>2</sub> Group 2 allowances already allocated and recorded by the Administrator.

(ii) Requires, to the extent the State adopts provisions for allocations or auction of TR SO<sub>2</sub> Group 2 allowances for any such control period to any TR SO<sub>2</sub> Group 2 units covered by § 97.711(a) of this chapter, that the State or the permitting authority submit such

allocations or the results of such auctions for such control period (except allocations or results of auctions to such units of TR SO<sub>2</sub> Group 2 allowances remaining in a set-aside after completion of the allocations or auctions for which the set-aside was created) to the Administrator no later than the following dates:

Year of the control period for which TR SO <sub>2</sub> Group 2 allowances are allocated or auctioned	Deadline for submission of allocations or auction results to administrator
2014 .....	June 1, 2013.
2015 .....	June 1, 2013.
2016 .....	June 1, 2014.
2017 .....	June 1, 2014.
2018 .....	June 1, 2015.
2019 .....	June 1, 2015.
2020 and any year thereafter.	June 1 of the fourth year before the year of the control period.

(iii) Requires, to the extent the State adopts provisions for allocations or auctions of TR SO<sub>2</sub> Group 2 allowances for any such control period to any TR SO<sub>2</sub> Group 2 units covered by §§ 97.711(b)(1) and 97.712(a) of this chapter, that the State or the permitting authority submit such allocations or the results of such auctions (except allocations or results of auctions to such units of TR SO<sub>2</sub> Group 2 allowances remaining in a set-aside after completion of the allocations or auctions for which the set-aside was created) to the Administrator by July 1 of the year of such control period.

(iv) Does not provide for any change, after the submission deadlines in paragraphs (h)(1)(ii) and (iii) of this section, in the allocations submitted to the Administrator by such deadlines and does not provide for any change in any allocation determined and recorded by the Administrator under subpart DDDDD of part 97 of this chapter;

(2) Provided that the State must submit a complete SIP revision meeting the requirements of paragraph (h)(1) of this section by December 1 of the year before the year of the deadlines for submission of allocations or auction results under paragraphs (h)(1)(ii) and (iii) of this section applicable to the first control period for which the State wants to make allocations or hold an auction under paragraph (h)(1)(ii) and (iii) of this section.

(i) Notwithstanding the provisions of paragraph (a) of this section, a State listed in paragraph (c) of this section may adopt and include in a SIP revision, and the Administrator will approve, as correcting in whole or in part, as appropriate, the deficiency in

the SIP that is the basis for the TR Federal Implementation Plan set forth in paragraphs (a), (c), (g), and (h) of this section, regulations that are substantively identical to the provisions of the TR SO<sub>2</sub> Group 2 Trading Program set forth in §§ 97.702 through 97.735 of this chapter, except that the SIP revision:

(1) May adopt, as TR SO<sub>2</sub> Group 2 allowance allocation or auction provisions replacing the provisions in §§ 97.711(a) and (b)(1) and 97.712(a) of this chapter with regard to the control period in 2014 and any subsequent year, any methodology under which the State or the permitting authority allocates or auctions TR SO<sub>2</sub> Group 2 allowances and that—

(i) Requires the State or the permitting authority to allocate and, if applicable, auction a total amount of TR SO<sub>2</sub> Group 2 allowances for any such control period not exceeding the amount, under §§ 97.710(a) and 97.721 of this chapter for the State and such control period, of the TR SO<sub>2</sub> Group 2 trading budget minus the sum of the Indian country new unit set-aside and the amount of any TR SO<sub>2</sub> Group 2 allowances already allocated and recorded by the Administrator.

(ii) Requires, to the extent the State adopts provisions for allocations or auction of TR SO<sub>2</sub> Group 2 allowances for any such control period to any TR SO<sub>2</sub> Group 2 units covered by § 97.711(a) of this chapter, that the State or the permitting authority submit such allocations or the results of such auctions for such control period (except allocations or results of auctions to such units of TR SO<sub>2</sub> Group 1 allowances remaining in a set-aside after completion of the allocations or auctions for which the set-aside was created) to the Administrator no later than the following dates:

Year of the control period for which TR SO <sub>2</sub> Group 2 allowances are allocated or auctioned	Deadline for submission of allocations or auction results to administrator
2014 .....	June 1, 2013.
2015 .....	June 1, 2013.
2016 .....	June 1, 2014.
2017 .....	June 1, 2014.
2018 .....	June 1, 2015.
2019 .....	June 1, 2015.
2020 and any year thereafter.	June 1 of the fourth year before the year of the control period.

(iii) Requires, to the extent the State adopts provisions for allocations or auctions of TR SO<sub>2</sub> Group 2 allowances for any such control period to any TR SO<sub>2</sub> Group 2 units covered by

§§ 97.711(b)(1) and 97.712(a) of this chapter, that the State or the permitting authority submit such allocations or the results of such auctions (except allocations or results of auctions to such units of TR SO<sub>2</sub> Group 2 allowances remaining in a set-aside after completion of the allocations or auctions for which the set-aside was created) to the Administrator by July 1 of the year of such control period.

(iv) Does not provide for any change, after the submission deadlines in paragraphs (i)(1)(ii) and (iii) of this section, in the allocations submitted to the Administrator by such deadlines and does not provide for any change in any allocation determined and recorded by the Administrator under subpart DDDDD of part 97 of this chapter;

(2) May adopt, in addition to the definitions in § 97.702 of this chapter, one or more definitions that shall apply only to terms as used in the TR SO<sub>2</sub> Group 2 allowance allocation or auction provisions adopted under paragraph (i)(1) of this section;

(3) May substitute the name of the State for the term “State” as used in subpart DDDDD of part 97 of this chapter, to the extent the Administrator determines that such substitutions do not make substantive changes in the provisions in §§ 97.702 through 97.735 of this chapter; and

(4) Must not include any of the references to, or requirements imposed on, any unit in Indian country within the borders of the State in the provisions in §§ 97.702 through 97.735 of this chapter and must not include the provisions in §§ 97.711(b)(2) and 97.712(b), all of which provisions will continue to apply under the portion of the TR Federal Implementation Plan that is not replaced by the SIP revision;

(5) Provided that, if and when any covered unit is located in Indian country within the borders of the State, the Administrator may modify his or her approval of the SIP revision to exclude the provisions in §§ 97.702 (definitions of “common designated representative”, “common designated representative’s assurance level”, and “common designated representative’s share”), 97.706(c)(2), 97.725, and the portions of other provisions referencing these sections and may modify the portion of the TR Federal Implementation Plan that is not replaced by the SIP revision to include these provisions;

(6) Provided that the State must submit a complete SIP revision meeting the requirements of paragraphs (i)(1) through (4) of this section by December 1 of the year before the year of the deadlines for submission of allocations or auction results under paragraphs

(i)(1)(ii) and (iii) of this section applicable to the first control period for which the State wants to make allocations or hold an auction under paragraphs (i)(1)(ii) and (iii) of this section.

(j) Following promulgation of an approval by the Administrator of a State's SIP revision as correcting in whole or in part, as appropriate, the SIP's deficiency that is the basis for the TR Federal Implementation Plan, the provisions of paragraph (b) and (c) of this section, as applicable, will no longer apply to sources in the State, unless the Administrator's approval of the SIP revision is partial or conditional, and will continue to apply to sources in any Indian country within the borders of the State.

(k) Notwithstanding the provisions of paragraph (j) of this section, if, at the time of such approval of the State's SIP revision, the Administrator has already started recording any allocations of TR SO<sub>2</sub> Group 1 allowances under subpart CCCCC of part 97 of this chapter, or allocations of TR SO<sub>2</sub> Group 2 allowances under subpart DDDDD of part 97 of this chapter, to units in a State for a control period in any year, the provisions of subpart CCCCC of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR SO<sub>2</sub> Group 1 allowances, or of subpart DDDDD of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR SO<sub>2</sub> Group 2 allowances, as applicable, to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

#### Subpart B—Alabama

■ 10. Section 52.54 is added to read as follows:

##### § 52.54 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?

(a)(1) The owner and operator of each source and each unit located in the State of Alabama and for which requirements are set forth under the TR NO<sub>x</sub> Annual Trading Program in subpart AAAAA of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Alabama's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(a), except to the extent the

Administrator's approval is partial or conditional.

(2) Notwithstanding the provisions of paragraph (a)(1) of this section, if, at the time of the approval of Alabama's SIP revision described in paragraph (a)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Annual allowances under subpart AAAAA of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart AAAAA of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Annual allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

(b)(1) The owner and operator of each source and each unit located in the State of Alabama and for which requirements are set forth under the TR NO<sub>x</sub> Ozone Season Trading Program in subpart BBBBB of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Alabama's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(b), except to the extent the Administrator's approval is partial or conditional.

(2) Notwithstanding the provisions of paragraph (b)(1) of this section, if, at the time of the approval of the Alabama's SIP revision described in paragraph (b)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Ozone Season allowances under subpart BBBBB of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart BBBBB of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Ozone Season allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

■ 11. Section 52.55 is added to read as follows:

##### § 52.55 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of sulfur dioxide?

(a) The owner and operator of each source and each unit located in the State of Alabama and for which requirements are set forth under the TR SO<sub>2</sub> Group 2 Trading Program in subpart DDDDD of part 97 of this chapter must comply

with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Alabama's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.39, except to the extent the Administrator's approval is partial or conditional.

(b) Notwithstanding the provisions of paragraph (a) of this section, if, at the time of the approval of Alabama's SIP revision described in paragraph (a) of this section, the Administrator has already started recording any allocations of TR SO<sub>2</sub> Group 2 allowances under subpart DDDDD of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart DDDDD of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR SO<sub>2</sub> Group 2 allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

#### Subpart E—Arkansas

■ 12. Section 52.184 is added to read as follows:

##### § 52.184 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?

(a) The owner and operator of each source and each unit located in the State of Arkansas and for which requirements are set forth under the TR NO<sub>x</sub> Ozone Season Trading Program in subpart BBBBB of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Arkansas' State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(b), except to the extent the Administrator's approval is partial or conditional.

(b) Notwithstanding the provisions of paragraph (a) of this section, if, at the time of the approval of Arkansas' SIP revision described in paragraph (a) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Ozone Season allowances under subpart BBBBB of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart BBBBB of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Ozone Season allowances to

units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

**Subpart I—Delaware**

■ 13. Section 52.440 is amended by adding a new paragraph (c) to read as follows:

**§ 52.440 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?**

\* \* \* \* \*

(c) Notwithstanding any provisions of paragraphs (a) and (b) of this section and subparts AA through II and AAAA through IIII of part 97 of this chapter to the contrary:

(1) With regard to any control period that begins after December 31, 2011,

(i) The provisions in paragraphs (a) and (b) of this section relating to NO<sub>x</sub> annual or ozone season emissions shall not be applicable; and

(ii) The Administrator will not carry out any of the functions set forth for the Administrator in subparts AA through II and AAAA through IIII of part 97 of this chapter; and

(2) The Administrator will not deduct for excess emissions any CAIR NO<sub>x</sub> allowances or CAIR NO<sub>x</sub> Ozone Season allowances allocated for 2012 or any year thereafter;

(3) By November 7, 2011, the Administrator will remove from the CAIR NO<sub>x</sub> Allowance Tracking System accounts all CAIR NO<sub>x</sub> allowances allocated for a control period in 2012 and any subsequent year, and, thereafter, no holding or surrender of CAIR NO<sub>x</sub> allowances will be required with regard to emissions or excess emissions for such control periods; and

(4) By November 7, 2011, the Administrator will remove from the CAIR NO<sub>x</sub> Ozone Season Allowance Tracking System accounts all CAIR NO<sub>x</sub> Ozone Season allowances allocated for a control period in 2012 and any subsequent year, and, thereafter, no holding or surrender of CAIR NO<sub>x</sub> Ozone Season allowances will be required with regard to emissions or excess emissions for such control periods.

■ 14. Section 52.441 is amended by designating the existing text as paragraph (a) and adding a new paragraph (b) to read as follows:

**§ 52.441 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of sulfur dioxide?**

\* \* \* \* \*

(b) Notwithstanding any provisions of paragraph (a) of this section and subparts AAA through III of part 97 of this chapter and any State's SIP to the contrary:

(1) With regard to any control period that begins after December 31, 2011,

(i) The provisions of paragraph (a) of this section relating to SO<sub>2</sub> emissions shall not be applicable; and

(ii) The Administrator will not carry out any of the functions set forth for the Administrator in subparts AAA through III of part 97 of this chapter; and

(2) The Administrator will not deduct for excess emissions any CAIR SO<sub>2</sub> allowances allocated for 2012 or any year thereafter.

**Subpart J—District of Columbia**

■ 15. Section 52.484 is amended by adding a new paragraph (c) to read as follows:

**§ 52.484 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?**

\* \* \* \* \*

(c) Notwithstanding any provisions of paragraphs (a) and (b) of this section and subparts AA through II and AAAA through IIII of part 97 of this chapter to the contrary:

(1) With regard to any control period that begins after December 31, 2011,

(i) The provisions in paragraphs (a) and (b) of this section relating to NO<sub>x</sub> annual or ozone season emissions shall not be applicable; and

(ii) The Administrator will not carry out any of the functions set forth for the Administrator in subparts AA through II and AAAA through IIII of part 97 of this chapter; and

(2) The Administrator will not deduct for excess emissions any CAIR NO<sub>x</sub> allowances or CAIR NO<sub>x</sub> Ozone Season allowances allocated for 2012 or any year thereafter;

(3) By November 7, 2011, the Administrator will remove from the CAIR NO<sub>x</sub> Allowance Tracking System accounts all CAIR NO<sub>x</sub> allowances allocated for a control period in 2012 and any subsequent year, and, thereafter, no holding or surrender of CAIR NO<sub>x</sub> allowances will be required with regard to emissions or excess emissions for such control periods; and

(4) By November 7, 2011, the Administrator will remove from the CAIR NO<sub>x</sub> Ozone Season Allowance Tracking System accounts all CAIR NO<sub>x</sub> Ozone Season allowances allocated for a control period in 2012 and any subsequent year, and, thereafter, no holding or surrender of CAIR NO<sub>x</sub> Ozone Season allowances will be

required with regard to emissions or excess emissions for such control periods.

■ 16. Section 52.485 is amended by designating the existing text as paragraph (a) and adding a new paragraph (b) to read as follows:

**§ 52.485 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of sulfur dioxide?**

\* \* \* \* \*

(b) Notwithstanding any provisions of paragraph (a) of this section and subparts AAA through III of part 97 of this chapter and any State's SIP to the contrary:

(1) With regard to any control period that begins after December 31, 2011,

(i) The provisions of paragraph (a) of this section relating to SO<sub>2</sub> emissions shall not be applicable; and

(ii) The Administrator will not carry out any of the functions set forth for the Administrator in subparts AAA through III of part 97 of this chapter; and

(2) The Administrator will not deduct for excess emissions any CAIR SO<sub>2</sub> allowances allocated for 2012 or any year thereafter.

**Subpart K—Florida**

■ 17. Section 52.540 is added to read as follows:

**§ 52.540 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?**

(a) The owner and operator of each source and each unit located in the State of Florida and Indian country within the borders of the State and for which requirements are set forth under the TR NO<sub>x</sub> Ozone Season Trading Program in subpart BBBB of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements with regard to sources and units located in the State will be eliminated by the promulgation of an approval by the Administrator of a revision to Florida's State Implementation Plan (SIP) as correcting in part the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(b), except to the extent the Administrator's approval is partial or conditional. The obligation to comply with such requirements with regard to sources and units located in Indian country within the borders of the State will not be eliminated by the promulgation of an approval by the Administrator of a revision to Florida's SIP.

(b) Notwithstanding the provisions of paragraph (a) of this section, if, at the

time of the approval of Florida's SIP revision described in paragraph (a) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Ozone Season allowances under subpart BBBB of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart BBBB of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Ozone Season allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

#### Subpart L—Georgia

■ 18. Section 52.584 is added to read as follows:

**§ 52.584 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?**

(a)(1) The owner and operator of each source and each unit located in the State of Georgia and for which requirements are set forth under the TR NO<sub>x</sub> Annual Trading Program in subpart AAAAA of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Georgia's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(a), except to the extent the Administrator's approval is partial or conditional.

(2) Notwithstanding the provisions of paragraph (a)(1) of this section, if, at the time of the approval of Georgia's SIP revision described in paragraph (a)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Annual allowances under subpart AAAAA of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart AAAAA of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Annual allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

(b)(1) The owner and operator of each source and each unit located in the State of Georgia and for which requirements are set forth under the TR NO<sub>x</sub> Ozone Season Trading Program in subpart BBBB of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the

promulgation of an approval by the Administrator of a revision to Georgia's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(b), except to the extent the Administrator's approval is partial or conditional.

(2) Notwithstanding the provisions of paragraph (b)(1) of this section, if, at the time of the approval of Georgia's SIP revision described in paragraph (b)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Ozone Season allowances under subpart BBBB of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart BBBB of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Ozone Season allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

■ 19. Section 52.585 is added to read as follows:

**§ 52.585 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of sulfur dioxide?**

(a) The owner and operator of each source and each unit located in the State of Georgia and for which requirements are set forth under the TR SO<sub>2</sub> Group 2 Trading Program in subpart DDDDD of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Georgia's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.39, except to the extent the Administrator's approval is partial or conditional.

(b) Notwithstanding the provisions of paragraph (a) of this section, if, at the time of the approval of Georgia's SIP revision described in paragraph (a) of this section, the Administrator has already started recording any allocations of TR SO<sub>2</sub> Group 2 allowances under subpart DDDDD of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart DDDDD of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR SO<sub>2</sub> Group 2 allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

#### Subpart O—Illinois

■ 20. Section 52.745 is added to read as follows:

**§ 52.745 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?**

(a)(1) The owner and operator of each source and each unit located in the State of Illinois and for which requirements are set forth under the TR NO<sub>x</sub> Annual Trading Program in subpart AAAAA of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Illinois' State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(a), except to the extent the Administrator's approval is partial or conditional.

(2) Notwithstanding the provisions of paragraph (a)(1) of this section, if, at the time of the approval of Illinois' SIP revision described in paragraph (a)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Annual allowances under subpart AAAAA of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart AAAAA of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Annual allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

(b)(1) The owner and operator of each source and each unit located in the State of Illinois and for which requirements are set forth under the TR NO<sub>x</sub> Ozone Season Trading Program in subpart BBBB of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Illinois' State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(b), except to the extent the Administrator's approval is partial or conditional.

(2) Notwithstanding the provisions of paragraph (b)(1) of this section, if, at the time of the approval of Illinois' SIP revision described in paragraph (b)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Ozone Season allowances under subpart BBBB of part 97 of this

chapter to units in the State for a control period in any year, the provisions of subpart BBBB of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Ozone Season allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

■ 21. Section 52.746 is added to read as follows:

**§ 52.746 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of sulfur dioxide?**

(a) The owner and operator of each source and each unit located in the State of Illinois and for which requirements are set forth under the TR SO<sub>2</sub> Group 1 Trading Program in subpart CCCCC of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Illinois' State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.39, except to the extent the Administrator's approval is partial or conditional.

(b) Notwithstanding the provisions of paragraph (a) of this section, if, at the time of the approval of Illinois' SIP revision described in paragraph (a) of this section, the Administrator has already started recording any allocations of TR SO<sub>2</sub> Group 1 allowances under subpart CCCCC of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart CCCCC of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR SO<sub>2</sub> Group 1 allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

**Subpart P—Indiana**

■ 22. Section 52.789 is added to read as follows:

**§ 52.789 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?**

(a)(1) The owner and operator of each source and each unit located in the State of Indiana and for which requirements are set forth under the TR NO<sub>x</sub> Annual Trading Program in subpart AAAA of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will

be eliminated by the promulgation of an approval by the Administrator of a revision to Indiana's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(a), except to the extent the Administrator's approval is partial or conditional.

(2) Notwithstanding the provisions of paragraph (a)(1) of this section, if, at the time of the approval of Indiana's SIP revision described in paragraph (a)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Annual allowances under subpart AAAA of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart AAAA of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Annual allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

(b)(1) The owner and operator of each source and each unit located in the State of Indiana and for which requirements are set forth under the TR NO<sub>x</sub> Ozone Season Trading Program in subpart BBBB of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Indiana's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(b), except to the extent the Administrator's approval is partial or conditional.

(2) Notwithstanding the provisions of paragraph (b)(1) of this section, if, at the time of the approval of Indiana's SIP revision described in paragraph (b)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Ozone Season allowances under subpart BBBB of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart BBBB of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Ozone Season allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

■ 23. Section 52.790 is added to read as follows:

**§ 52.790 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of sulfur dioxide?**

(a) The owner and operator of each source and each unit located in the State of Indiana and for which requirements are set forth under the TR SO<sub>2</sub> Group 1 Trading Program in subpart CCCCC of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Indiana's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.39 except to the extent the Administrator's approval is partial or conditional.

(b) Notwithstanding the provisions of paragraph (a) of this section, if, at the time of the approval of Indiana's SIP revision described in paragraph (a) of this section, the Administrator has already started recording any allocations of TR SO<sub>2</sub> Group 1 allowances under subpart CCCCC of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart CCCCC of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR SO<sub>2</sub> Group 1 allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

**Subpart Q—Iowa**

■ 24. Section 52.840 is added to read as follows:

**§ 52.840 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?**

(a)(1) The owner and operator of each source and each unit located in the State of Iowa and Indian country within the borders of the State and for which requirements are set forth under the TR NO<sub>x</sub> Annual Trading Program in subpart AAAA of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements with regard to sources and units in the State will be eliminated by the promulgation of an approval by the Administrator of a revision to Iowa's State Implementation Plan (SIP) as correcting in part the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(a), except to the extent the Administrator's approval is partial or conditional. The obligation to comply with such requirements with regard to

sources and units located in Indian country within the borders of the State will not be eliminated by the promulgation of an approval by the Administrator of a revision to Iowa's SIP.

(2) Notwithstanding the provisions of paragraph (a)(1) of this section, if, at the time of the approval of Iowa's SIP revision described in paragraph (a)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Annual allowances under subpart AAAAA of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart AAAAA of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Annual allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

(b) [Reserved]

■ 25. Section 52.841 is added to read as follows:

**§ 52.841 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of sulfur dioxide?**

(a) The owner and operator of each source and each unit located in the State of Iowa and Indian country within the borders of the State and for which requirements are set forth under the TR SO<sub>2</sub> Group 1 Trading Program in subpart CCCCC of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements with regard to sources and units in the State will be eliminated by the promulgation of an approval by the Administrator of a revision to Iowa's State Implementation Plan (SIP) as correcting in part the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.39, except to the extent the Administrator's approval is partial or conditional. The obligation to comply with such requirements with regard to sources and units located in Indian country within the borders of the State will not be eliminated by the promulgation of an approval by the Administrator of a revision to Iowa's SIP.

(b) Notwithstanding the provisions of paragraph (a) of this section, if, at the time of the approval of Iowa's SIP revision described in paragraph (a) of this section, the Administrator has already started recording any allocations of TR SO<sub>2</sub> Group 1 allowances under subpart CCCCC of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart CCCCC of part 97 of this chapter

authorizing the Administrator to complete the allocation and recordation of TR SO<sub>2</sub> Group 1 allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

**Subpart R—Kansas**

■ 26. Section 52.882 is added to read as follows:

**§ 52.882 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?**

(a)(1) The owner and operator of each source and each unit located in the State of Kansas and Indian country within the borders of the State and for which requirements are set forth under the TR NO<sub>x</sub> Annual Trading Program in subpart AAAAA of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements with regard to sources and units in the State will be eliminated by the promulgation of an approval by the Administrator of a revision to Kansas' State Implementation Plan (SIP) as correcting in part the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(a), except to the extent the Administrator's approval is partial or conditional. The obligation to comply with such requirements with regard to sources and units located in Indian country within the borders of the State will not be eliminated by the promulgation of an approval by the Administrator of a revision to Kansas' SIP.

(2) Notwithstanding the provisions of paragraph (a)(1) of this section, if, at the time of the approval of Kansas' SIP revision described in paragraph (a)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Annual allowances under subpart AAAAA of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart AAAAA of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Annual allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

(b) [Reserved]

■ 27. Section 52.883 is added to read as follows:

**§ 52.883 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of sulfur dioxide?**

(a) The owner and operator of each source and each unit located in the State of Kansas and Indian country within the borders of the State and for which requirements are set forth under the TR SO<sub>2</sub> Group 2 Trading Program in subpart DDDDD of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated with regard to sources and units in the State by the promulgation of an approval by the Administrator of a revision to Kansas' State Implementation Plan (SIP) as correcting in part the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.39, except to the extent the Administrator's approval is partial or conditional. The obligation to comply with such requirements with regard to sources and units located in Indian country within the borders of the State will not be eliminated by the promulgation of an approval by the Administrator of a revision to Kansas' SIP.

(b) Notwithstanding the provisions of paragraph (a) of this section, if, at the time of the approval of Kansas' SIP revision described in paragraph (a) of this section, the Administrator has already started recording any allocations of TR SO<sub>2</sub> Group 2 allowances under subpart DDDDD of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart DDDDD of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR SO<sub>2</sub> Group 2 allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

**Subpart S—Kentucky**

■ 28. Section 52.940 is added to read as follows:

**§ 52.940 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?**

(a)(1) The owner and operator of each source and each unit located in the State of Kentucky and for which requirements are set forth under the TR NO<sub>x</sub> Annual Trading Program in subpart AAAAA of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Kentucky's State

Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(a), except to the extent the Administrator's approval is partial or conditional.

(2) Notwithstanding the provisions of paragraph (a)(1) of this section, if, at the time of the approval of Kentucky's SIP revision described in paragraph (a)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Annual allowances under subpart AAAAA of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart AAAAA of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Annual allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

(b)(1) The owner and operator of each source and each unit located in the State of Kentucky and for which requirements are set forth under the TR NO<sub>x</sub> Ozone Season Trading Program in subpart BBBBB of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Kentucky's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(b), except to the extent the Administrator's approval is partial or conditional.

(2) Notwithstanding the provisions of paragraph (b)(1) of this section, if, at the time of the approval of Kentucky's SIP revision described in paragraph (b)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Ozone Season allowances under subpart BBBBB of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart BBBBB of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Ozone Season allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

■ 29. Section 52.941 is added to read as follows:

**§ 52.941 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of sulfur dioxide?**

(a) The owner and operator of each source and each unit located in the State of Kentucky and for which requirements

are set forth under the TR SO<sub>2</sub> Group 1 Trading Program in subpart CCCCC of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Kentucky's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.39, except to the extent the Administrator's approval is partial or conditional.

(b) Notwithstanding the provisions of paragraph (a) of this section, if, at the time of the approval of Kentucky's SIP revision described in paragraph (a) of this section, the Administrator has already started recording any allocations of TR SO<sub>2</sub> Group 1 allowances under subpart CCCCC of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart CCCCC of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR SO<sub>2</sub> Group 1 allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

**Subpart T—Louisiana**

■ 30. Section 52.984 is amended by adding new paragraphs (c) and (d) to read as follows:

**§ 52.984 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?**

\* \* \* \* \*

(c) Notwithstanding any provisions of paragraphs (a) and (b) of this section and subparts AA through II and AAAA through IIII of part 97 of this chapter to the contrary:

(1) With regard to any control period that begins after December 31, 2011,

(i) The provisions in paragraphs (a) and (b) of this section relating to NO<sub>x</sub> annual or ozone season emissions shall not be applicable; and

(ii) The Administrator will not carry out any of the functions set forth for the Administrator in subparts AA through II and AAAA through IIII of part 97 of this chapter;

(2) The Administrator will not deduct for excess emissions any CAIR NO<sub>x</sub> allowances or CAIR NO<sub>x</sub> Ozone Season allowances allocated for 2012 or any year thereafter;

(3) By November 7, 2011, the Administrator will remove from the CAIR NO<sub>x</sub> Allowance Tracking System accounts all CAIR NO<sub>x</sub> allowances allocated for a control period in 2012

and any subsequent year, and, thereafter, no holding or surrender of CAIR NO<sub>x</sub> allowances will be required with regard to emissions or excess emissions for such control periods; and

(4) By November 7, 2011, the Administrator will remove from the CAIR NO<sub>x</sub> Ozone Season Allowance Tracking System accounts all CAIR NO<sub>x</sub> Ozone Season allowances allocated for a control period in 2012 and any subsequent year, and, thereafter, no holding or surrender of CAIR NO<sub>x</sub> Ozone Season allowances will be required with regard to emissions or excess emissions for such control periods.

(d)(1) The owner and operator of each source and each unit located in the State of Louisiana and Indian country within the borders of the State and for which requirements are set forth under the TR NO<sub>x</sub> Ozone Season Trading Program in subpart BBBBB of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements with regard to sources and units in the State will be eliminated by the promulgation of an approval by the Administrator of a revision to Louisiana's State Implementation Plan (SIP) as correcting in part the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(b), except to the extent the Administrator's approval is partial or conditional. The obligation to comply with such requirements with regard to sources and units located in Indian country within the borders of the State will not be eliminated by the promulgation of an approval by the Administrator of a revision to Louisiana's SIP.

(2) Notwithstanding the provisions of paragraph (d)(1) of this section, if, at the time of the approval of Louisiana's SIP revision described in paragraph (d)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Ozone Season allowances under subpart BBBBB of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart BBBBB of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Ozone Season allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

**Subpart V—Maryland**

■ 31. Section 52.1084 is added to read as follows:



**§ 52.1084 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?**

(a)(1) The owner and operator of each source and each unit located in the State of Maryland and for which requirements are set forth under the TR NO<sub>x</sub> Annual Trading Program in subpart AAAAA of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Maryland's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(a), except to the extent the Administrator's approval is partial or conditional.

(2) Notwithstanding the provisions of paragraph (a)(1) of this section, if, at the time of the approval of Maryland's SIP revision described in paragraph (a)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Annual allowances under subpart AAAAA of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart AAAAA of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Annual allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

(b)(1) The owner and operator of each source and each unit located in the State of Maryland and for which requirements are set forth under the TR NO<sub>x</sub> Ozone Season Trading Program in subpart BBBBB of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Maryland's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(b), except to the extent the Administrator's approval is partial or conditional.

(2) Notwithstanding the provisions of paragraph (b)(1) of this section, if, at the time of the approval of Maryland's SIP revision described in paragraph (b)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Ozone Season allowances under subpart BBBBB of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart BBBBB of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation

of TR NO<sub>x</sub> Ozone Season allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

■ 32. Section 52.1085 is added to read as follows:

**§ 52.1085 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of sulfur dioxide?**

(a) The owner and operator of each source and each unit located in the State of Maryland and for which requirements are set forth under the TR SO<sub>2</sub> Group 1 Trading Program in subpart CCCC of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Maryland's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.39, except to the extent the Administrator's approval is partial or conditional.

(b) Notwithstanding the provisions of paragraph (a) of this section, if, at the time of the approval of Maryland's SIP revision described in paragraph (a) of this section, the Administrator has already started recording any allocations of TR SO<sub>2</sub> Group 1 allowances under subpart CCCC of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart CCCC of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR SO<sub>2</sub> Group 1 allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

**Subpart X—Michigan**

■ 33. Section 52.1186 is amended by adding new paragraphs (c) and (d) to read as follows:

**§ 52.1186 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?**

\* \* \* \* \*

(c) Notwithstanding any provisions of paragraphs (a) and (b) of this section and subparts AA through II and AAAA through IIII of part 97 of this chapter to the contrary:

(1) With regard to any control period that begins after December 31, 2011,

(i) The provisions in paragraphs (a) and (b) of this section relating to NO<sub>x</sub> annual or ozone season emissions shall not be applicable; and

(ii) The Administrator will not carry out any of the functions set forth for the Administrator in subparts AA through II and AAAA through IIII of part 97 of this chapter;

(2) The Administrator will not deduct for excess emissions any CAIR NO<sub>x</sub> allowances or CAIR NO<sub>x</sub> Ozone Season allowances allocated for 2012 or any year thereafter;

(3) By November 7, 2011, the Administrator will remove from the CAIR NO<sub>x</sub> Allowance Tracking System accounts all CAIR NO<sub>x</sub> allowances allocated for a control period in 2012 and any subsequent year, and, thereafter, no holding or surrender of CAIR NO<sub>x</sub> allowances will be required with regard to emissions or excess emissions for such control periods; and

(4) By November 7, 2011, the Administrator will remove from the CAIR NO<sub>x</sub> Ozone Season Allowance Tracking System accounts all CAIR NO<sub>x</sub> Ozone Season allowances allocated for a control period in 2012 and any subsequent year, and, thereafter, no holding or surrender of CAIR NO<sub>x</sub> Ozone Season allowances will be required with regard to emissions or excess emissions for such control periods.

(d)(1) The owner and operator of each source and each unit located in the State of Michigan and Indian country within the borders of the State and for which requirements are set forth under the TR NO<sub>x</sub> Annual Trading Program in subpart AAAAA of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements with regard to sources and units in the State will be eliminated by the promulgation of an approval by the Administrator of a revision to Michigan's State Implementation Plan (SIP) as correcting in part the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(a), except to the extent the Administrator's approval is partial or conditional. The obligation to comply with such requirements with regard to sources and units located in Indian country within the borders of the State will not be eliminated by the promulgation of an approval by the Administrator of a revision to Michigan's SIP.

(2) Notwithstanding the provisions of paragraph (d)(1) of this section, if, at the time of the approval of Michigan's SIP revision described in paragraph (d)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Annual allowances under subpart AAAAA of part 97 of this chapter to units in the State for a control period in any year, the provisions of

subpart AAAAA of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Annual allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

(e) [Reserved]

■ 34. Section 52.1187 is amended by designating the existing text as paragraph (a) and adding new paragraphs (b) and (c) to read as follows:

**§ 52.1187 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of sulfur dioxide?**

\* \* \* \* \*

(b) Notwithstanding any provisions of paragraph (a) of this section and subparts AAA through III of part 97 of this chapter and any State's SIP to the contrary:

(1) With regard to any control period that begins after December 31, 2011,

(i) The provisions of paragraph (a) of this section relating to SO<sub>2</sub> emissions shall not be applicable; and

(ii) The Administrator will not carry out any of the functions set forth for the Administrator in subparts AAA through III of part 97 of this chapter; and

(2) The Administrator will not deduct for excess emissions any CAIR SO<sub>2</sub> allowances allocated for 2012 or any year thereafter.

(c)(1) The owner and operator of each source and each unit located in the State of Michigan and Indian country within the borders of the State and for which requirements are set forth under the TR SO<sub>2</sub> Group 1 Trading Program in subpart CCCCC of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements with regard to sources and units in the State will be eliminated by the promulgation of an approval by the Administrator of a revision to Michigan's State Implementation Plan (SIP) as correcting in part the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.39, except to the extent the Administrator's approval is partial or conditional. The obligation to comply with such requirements with regard to sources and units located in Indian country within the borders of the State will not be eliminated by the promulgation of an approval by the Administrator of a revision to Michigan's SIP.

(2) Notwithstanding the provisions of paragraph (c)(1) of this section, if, at the time of the approval of Maryland's SIP revision described in paragraph (c)(1) of this section, the Administrator has

already started recording any allocations of TR SO<sub>2</sub> Group 1 allowances under subpart CCCCC of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart CCCCC of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR SO<sub>2</sub> Group 1 allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

**Subpart Y—Minnesota**

■ 35. Section 52.1240 is amended by adding paragraph (c) to read as follows:

**§ 52.1240 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?**

\* \* \* \* \*

(c)(1) The owner and operator of each source and each unit located in the State of Minnesota and Indian country within the borders of the State and for which requirements are set forth under the TR NO<sub>x</sub> Annual Trading Program in subpart AAAAA of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements with regard to sources and units in the State will be eliminated by the promulgation of an approval by the Administrator of a revision to Minnesota's State Implementation Plan (SIP) as correcting in part the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(a), except to the extent the Administrator's approval is partial or conditional. The obligation to comply with such requirements with regard to sources and units located in Indian country within the borders of the State will not be eliminated by the promulgation of an approval by the Administrator of a revision to Minnesota's SIP.

(2) Notwithstanding the provisions of paragraph (c)(1) of this section, if, at the time of the approval of Minnesota's SIP revision described in paragraph (c)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Annual allowances under subpart AAAAA of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart AAAAA of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Annual allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

■ 36. Section 52.1241 is amended by adding paragraph (c) to read as follows:

**§ 52.1241 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of sulfur dioxide?**

\* \* \* \* \*

(c)(1) The owner and operator of each source and each unit located in the State of Minnesota and Indian country within the borders of the State and for which requirements are set forth under the TR SO<sub>2</sub> Group 2 Trading Program in subpart DDDDD of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements with regard to sources and units in the State will be eliminated by the promulgation of an approval by the Administrator of a revision to Minnesota's State Implementation Plan (SIP) as correcting in part the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.39, except to the extent the Administrator's approval is partial or conditional. The obligation to comply with such requirements with regard to sources and units located in Indian country within the borders of the State will not be eliminated by the promulgation of an approval by the Administrator of a revision to Minnesota's SIP.

(2) Notwithstanding the provisions of paragraph (c)(1) of this section, if, at the time of the approval of Minnesota's SIP revision described in paragraph (c)(1) of this section, the Administrator has already started recording any allocations of TR SO<sub>2</sub> Group 2 allowances under subpart DDDDD of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart DDDDD of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR SO<sub>2</sub> Group 2 allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

**Subpart Z—Mississippi**

■ 37. Section 52.1284 is added to read as follows:

**§ 52.1284 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?**

(a) The owner and operator of each source and each unit located in the State of Mississippi and Indian country within the borders of the State and for which requirements are set forth under the TR NO<sub>x</sub> Ozone Season Trading Program in subpart BBBBB of part 97 of

this chapter must comply with such requirements. The obligation to comply with such requirements with regard to sources and units in the State will be eliminated by the promulgation of an approval by the Administrator of a revision to Mississippi's State Implementation Plan (SIP) as correcting in part the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(b), except to the extent the Administrator's approval is partial or conditional. The obligation to comply with such requirements with regard to sources and units located in Indian country within the borders of the State will not be eliminated by the promulgation of an approval by the Administrator of a revision to Mississippi's SIP.

(b) Notwithstanding the provisions of paragraph (a) of this section, if, at the time of the approval of Mississippi's SIP revision described in paragraph (a) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Ozone Season allowances under subpart BBBBBB of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart BBBBBB of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Ozone Season allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

#### Subpart AA—Missouri

■ 38. Section 52.1326 is added to read as follows:

##### **§ 52.1326 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?**

(a)(1) The owner and operator of each source and each unit located in the State of Missouri and for which requirements are set forth under the TR NO<sub>x</sub> Annual Trading Program in subpart AAAAAA of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Missouri's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(a), except to the extent the Administrator's approval is partial or conditional.

(2) Notwithstanding the provisions of paragraph (a)(1) of this section, if, at the time of the approval of Missouri's SIP revision described in paragraph (a)(1) of this section, the Administrator has

already started recording any allocations of TR NO<sub>x</sub> Annual allowances under subpart AAAAAA of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart AAAAAA of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Annual allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

(b) [Reserved]

■ 39. Section 52.1327 is added to read as follows:

##### **§ 52.1327 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of sulfur dioxide?**

(a) The owner and operator of each source and each unit located in the State of Missouri and for which requirements are set forth under the TR SO<sub>2</sub> Group 1 Trading Program in subpart CCCCC of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Missouri's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.39, except to the extent the Administrator's approval is partial or conditional.

(b) Notwithstanding the provisions of paragraph (a) of this section, if, at the time of the approval of Missouri's SIP revision described in paragraph (a) of this section, the Administrator has already started recording any allocations of TR SO<sub>2</sub> Group 1 allowances under subpart CCCCC of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart CCCCC of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR SO<sub>2</sub> Group 1 allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

#### Subpart CC—Nebraska

■ 40. Section 52.1428 is added to read as follows:

##### **§ 52.1428 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?**

(a) The owner and operator of each source and each unit located in the State of Nebraska and Indian country within the borders of the State and for which

requirements are set forth under the TR NO<sub>x</sub> Annual Trading Program in subpart AAAAAA of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements with regard to sources and units in the State will be eliminated by the promulgation of an approval by the Administrator of a revision to Nebraska's State Implementation Plan (SIP) as correcting in part the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(a), except to the extent the Administrator's approval is partial or conditional. The obligation to comply with such requirements with regard to sources and units located in Indian country within the borders of the State will not be eliminated by the promulgation of an approval by the Administrator of a revision to Nebraska's SIP.

(b) Notwithstanding the provisions of paragraph (a) of this section, if, at the time of the approval of Nebraska's SIP revision described in paragraph (a) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Annual allowances under subpart AAAAAA of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart AAAAAA of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Annual allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

■ 41. Section 52.1429 is added to read as follows:

##### **§ 52.1429 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of sulfur dioxide?**

(a) The owner and operator of each source and each unit located in the State of Nebraska and Indian country within the borders of the State and for which requirements are set forth under the TR SO<sub>2</sub> Group 2 Trading Program in subpart DDDDD of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements with regard to sources and units in the State will be eliminated by the promulgation of an approval by the Administrator of a revision to Nebraska's State Implementation Plan (SIP) as correcting in part the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.39, except to the extent the Administrator's approval is partial or conditional. The obligation to comply with such requirements with regard to

sources and units located in Indian country within the borders of the State will not be eliminated by the promulgation of an approval by the Administrator of a revision to Nebraska's SIP.

(b) Notwithstanding the provisions of paragraph (a) of this section, if, at the time of the approval of Nebraska's SIP revision described in paragraph (a) of this section, the Administrator has already started recording any allocations of TR SO<sub>2</sub> Group 2 allowances under subpart DDDDD of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart DDDDD of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR SO<sub>2</sub> Group 2 allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

**Subpart FF—New Jersey**

■ 42. Section 52.1584 is amended by adding new paragraphs (c), (d), and (e) to read as follows:

**§ 52.1584 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?**

\* \* \* \* \*

(c) Notwithstanding any provisions of paragraphs (a) and (b) of this section and subparts AA through II and AAAA through IIII of part 97 of this chapter to the contrary:

(1) With regard to any control period that begins after December 31, 2011,

(i) The provisions in paragraphs (a) and (b) of this section relating to NO<sub>x</sub> annual or ozone season emissions shall not be applicable; and

(ii) The Administrator will not carry out any of the functions set forth for the Administrator in subparts AA through II and AAAA through IIII of part 97 of this chapter;

(2) The Administrator will not deduct for excess emissions any CAIR NO<sub>x</sub> allowances or CAIR NO<sub>x</sub> Ozone Season allowances allocated for 2012 or any year thereafter;

(3) By November 7, 2011, the Administrator will remove from the CAIR NO<sub>x</sub> Allowance Tracking System accounts all CAIR NO<sub>x</sub> allowances allocated for a control period in 2012 and any subsequent year, and, thereafter, no holding or surrender of CAIR NO<sub>x</sub> allowances will be required with regard to emissions or excess emissions for such control periods; and

(4) By November 7, 2011, the Administrator will remove from the CAIR NO<sub>x</sub> Ozone Season Allowance

Tracking System accounts all CAIR NO<sub>x</sub> Ozone Season allowances allocated for a control period in 2012 and any subsequent year, and, thereafter, no holding or surrender of CAIR NO<sub>x</sub> Ozone Season allowances will be required with regard to emissions or excess emissions for such control periods.

(d)(1) The owner and operator of each source and each unit located in the State of New Jersey and for which requirements are set forth under the TR NO<sub>x</sub> Annual Trading Program in subpart AAAAA of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator as a revision to New Jersey's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(a), except to the extent the Administrator's approval is partial or conditional.

(2) Notwithstanding the provisions of paragraph (d)(1) of this section, if, at the time of the approval of New Jersey's SIP revision described in paragraph (d)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Annual allowances under subpart AAAAA of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart AAAAA of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Annual allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

(e)(1) The owner and operator of each source and each unit located in the State of New Jersey and for which requirements are set forth under the TR NO<sub>x</sub> Ozone Season Trading Program in subpart BBBBB of part 97 of this chapter must comply with such requirements.

The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to New Jersey's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(b), except to the extent the Administrator's approval is partial or conditional.

(2) Notwithstanding the provisions of paragraph (e)(1) of this section, if, at the time of the approval of New Jersey's SIP revision described in paragraph (e)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Ozone Season allowances

under subpart BBBBB of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart BBBBB of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Ozone Season allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

■ 43. Section 52.1585 is amended by designating the existing text as paragraph (a) and adding new paragraphs (b) and (c) to read as follows:

**§ 52.1585 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of sulfur dioxide?**

\* \* \* \* \*

(b) Notwithstanding any provisions of paragraph (a) of this section and subparts AAA through III of part 97 of this chapter and any State's SIP to the contrary:

(1) With regard to any control period that begins after December 31, 2011,

(i) The provisions of paragraph (a) of this section relating to SO<sub>2</sub> emissions shall not be applicable; and

(ii) The Administrator will not carry out any of the functions set forth for the Administrator in subparts AAA through III of part 97 of this chapter; and

(2) The Administrator will not deduct for excess emissions any CAIR SO<sub>2</sub> allowances allocated for 2012 or any year thereafter.

(c)(1) The owner and operator of each source and each unit located in the State of New Jersey and for which requirements are set forth under the TR SO<sub>2</sub> Group 1 Trading Program in subpart CCCCC of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to New Jersey's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.39, except to the extent the Administrator's approval is partial or conditional.

(2) Notwithstanding the provisions of paragraph (c)(1) of this section, if, at the time of the approval of New Jersey's SIP revision described in paragraph (c)(1) of this section, the Administrator has already started recording any allocations of TR SO<sub>2</sub> Group 1 allowances under subpart CCCCC of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart CCCCC of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation

of TR SO<sub>2</sub> Group 1 allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

#### Subpart HH—New York

■ 44. Section 52.1684 is revised to read as follows:

**§ 52.1684 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?**

(a)(1) The owner and operator of each source and each unit located in the State of New York and Indian country within the borders of the State and for which requirements are set forth under the TR NO<sub>x</sub> Annual Trading Program in subpart AAAAA of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements with regard to sources and units in the State will be eliminated by the promulgation of an approval by the Administrator of a revision to New York's State Implementation Plan (SIP) as correcting in part the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(a), except to the extent the Administrator's approval is partial or conditional. The obligation to comply with such requirements with regard to sources and units located in Indian country within the borders of the State will not be eliminated by the promulgation of an approval by the Administrator of a revision to New York's SIP.

(2) Notwithstanding the provisions of paragraph (a)(1) of this section, if, at the time of the approval of New York's SIP revision described in paragraph (a)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Annual allowances under subpart AAAAA of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart AAAAA of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Annual allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

(b)(1) The owner and operator of each source and each unit located in the State of New York and Indian country within the borders of the State and for which requirements are set forth under the TR NO<sub>x</sub> Ozone Season Trading Program in subpart BBBBB of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements with regard to sources and

units in the State will be eliminated by the promulgation of an approval by the Administrator of a revision to New York's State Implementation Plan (SIP) as correcting in part the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(b), except to the extent the Administrator's approval is partial or conditional. The obligation to comply with such requirements with regard to sources and units located in Indian country within the borders of the State will not be eliminated by the promulgation of an approval by the Administrator of a revision to New York's SIP.

(2) Notwithstanding the provisions of paragraph (b)(1) of this section, if, at the time of the approval of New York's SIP revision described in paragraph (b)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Ozone Season allowances under subpart BBBBB of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart BBBBB of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Ozone Season allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

■ 45. Section 52.1685 is added to read as follows:

**§ 52.1685 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of sulfur dioxide?**

(a) The owner and operator of each source and each unit located in the State of New York and Indian country within the borders of the State and for which requirements are set forth under the TR SO<sub>2</sub> Group 1 Trading Program in subpart CCCCC of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements with regard to sources and units in the State will be eliminated by the promulgation of an approval by the Administrator of a revision to New York's State Implementation Plan (SIP) as correcting in part the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.39, except to the extent the Administrator's approval is partial or conditional. The obligation to comply with such requirements with regard to sources and units located in Indian country within the borders of the State will not be eliminated by the promulgation of an approval by the Administrator of a revision to New York's SIP.

(b) Notwithstanding the provisions of paragraph (a) of this section, if, at the

time of the approval of New York's SIP revision described in paragraph (a) of this section, the Administrator has already started recording any allocations of TR SO<sub>2</sub> Group 1 allowances under subpart CCCCC of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart CCCCC of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR SO<sub>2</sub> Group 1 allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

#### Subpart II—North Carolina

■ 46. Section 52.1784 is revised to read as follows:

**§ 52.1784 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?**

(a)(1) The owner and operator of each source and each unit located in the State of North Carolina and Indian country within the borders of the State and for which requirements are set forth under the TR NO<sub>x</sub> Annual Trading Program in subpart AAAAA of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements with regard to sources and units in the State will be eliminated by the promulgation of an approval by the Administrator of a revision to North Carolina's State Implementation Plan (SIP) as correcting in part the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(a), except to the extent the Administrator's approval is partial or conditional. The obligation to comply with such requirements with regard to sources and units located in Indian country within the borders of the State will not be eliminated by the promulgation of an approval by the Administrator of a revision to North Carolina's SIP.

(2) Notwithstanding the provisions of paragraph (a)(1) of this section, if, at the time of the approval of North Carolina's SIP revision described in paragraph (a)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Annual allowances under subpart AAAAA of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart AAAAA of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Annual allowances to units in the State for each such control period shall

continue to apply, unless provided otherwise by such approval of the State's SIP revision.

(b)(1) The owner and operator of each source and each unit located in the State of North Carolina and Indian country within the borders of the State and for which requirements are set forth under the TR NO<sub>x</sub> Ozone Season Trading Program in subpart BBBBB of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements with regard to sources and units in the State will be eliminated by the promulgation of an approval by the Administrator of a revision to North Carolina's State Implementation Plan (SIP) as correcting in part the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(b), except to the extent the Administrator's approval is partial or conditional. The obligation to comply with such requirements with regard to sources and units located in Indian country within the borders of the State will not be eliminated by the promulgation of an approval by the Administrator of a revision to North Carolina's SIP.

(2) Notwithstanding the provisions of paragraph (b)(1) of this section, if, at the time of the approval of North Carolina's SIP revision described in paragraph (b)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Ozone Season allowances under subpart BBBBB of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart BBBBB of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Ozone Season allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

■ 47. Section 52.1785 is revised to read as follows:

**§ 52.1785 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of sulfur dioxide?**

(a) The owner and operator of each source and each unit located in the State of North Carolina and Indian country within the borders of the State and for which requirements are set forth under the TR SO<sub>2</sub> Group 1 Trading Program in subpart CCCCC of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements with regard to sources and units in the State will be eliminated by the promulgation of an approval by the Administrator of a revision to North

Carolina's State Implementation Plan (SIP) as correcting in part the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.39, except to the extent the Administrator's approval is partial or conditional. The obligation to comply with such requirements with regard to sources and units located in Indian country within the borders of the State will not be eliminated by the promulgation of an approval by the Administrator of a revision to North Carolina's SIP.

(b) Notwithstanding the provisions of paragraph (a) of this section, if, at the time of the approval of North Carolina's SIP revision described in paragraph (a) of this section, the Administrator has already started recording any allocations of TR SO<sub>2</sub> Group 1 allowances under subpart CCCCC of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart CCCCC of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR SO<sub>2</sub> Group 1 allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

**Subpart KK—Ohio**

■ 48. Section 52.1882 is added to read as follows:

**§ 52.1882 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?**

(a)(1) The owner and operator of each source and each unit located in the State of Ohio and for which requirements are set forth under the TR NO<sub>x</sub> Annual Trading Program in subpart AAAAA of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Ohio's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(a), except to the extent the Administrator's approval is partial or conditional.

(2) Notwithstanding the provisions of paragraph (a)(1) of this section, if, at the time of the approval of Ohio's SIP revision described in paragraph (a)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Annual allowances under subpart AAAAA of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart AAAAA of part 97 of this

chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Annual allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

(b)(1) The owner and operator of each source and each unit located in the State of Ohio and for which requirements are set forth under the TR NO<sub>x</sub> Ozone Season Trading Program in subpart BBBBB of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Ohio's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(b), except to the extent the Administrator's approval is partial or conditional.

(2) Notwithstanding the provisions of paragraph (b)(1) of this section, if, at the time of the approval of Ohio's SIP revision described in paragraph (b)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Ozone Season allowances under subpart BBBBB of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart BBBBB of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Ozone Season allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

■ 49. Section 52.1883 is added to read as follows:

**§ 52.1883 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of sulfur dioxide?**

(a) The owner and operator of each source and each unit located in the State of Ohio and for which requirements are set forth under the TR SO<sub>2</sub> Group 1 Trading Program in subpart CCCCC of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Ohio's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.39, except to the extent the Administrator's approval is partial or conditional.

(b) Notwithstanding the provisions of paragraph (a) of this section, if, at the time of the approval of Ohio's SIP

revision described in paragraph (a) of this section, the Administrator has already started recording any allocations of TR SO<sub>2</sub> Group 1 allowances under subpart CCCCC of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart CCCCC of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR SO<sub>2</sub> Group 1 allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

#### Subpart NN—Pennsylvania

■ 50. Section 52.2040 is added to read as follows:

**§ 52.2040 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?**

(a)(1) The owner and operator of each source and each unit located in the State of Pennsylvania and for which requirements are set forth under the TR NO<sub>x</sub> Annual Trading Program in subpart AAAAA of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Pennsylvania's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(a), except to the extent the Administrator's approval is partial or conditional.

(2) Notwithstanding the provisions of paragraph (a)(1) of this section, if, at the time of the approval of Pennsylvania's SIP revision described in paragraph (a)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Annual allowances under subpart AAAAA of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart AAAAA of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Annual allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

(b)(1) The owner and operator of each source and each unit located in the State of Pennsylvania and for which requirements are set forth under the TR NO<sub>x</sub> Ozone Season Trading Program in subpart BBBBB of part 97 of this chapter must comply with such requirements. The obligation to comply with such

requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Pennsylvania's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(b), except to the extent the Administrator's approval is partial or conditional.

(2) Notwithstanding the provisions of paragraph (b)(1) of this section, if, at the time of the approval of Pennsylvania's SIP revision described in paragraph (b)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Ozone Season allowances under subpart BBBBB of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart BBBBB of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Ozone Season allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

■ 51. Section 52.2041 is added to read as follows:

**§ 52.2041 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of sulfur dioxide?**

(a) The owner and operator of each source and each unit located in the State of Pennsylvania and for which requirements are set forth under the TR SO<sub>2</sub> Group 1 Trading Program in subpart CCCCC of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Pennsylvania's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.39, except to the extent the Administrator's approval is partial or conditional.

(b) Notwithstanding the provisions of paragraph (a) of this section, if, at the time of the approval of Pennsylvania's SIP revision described in paragraph (a) of this section, the Administrator has already started recording any allocations of TR SO<sub>2</sub> Group 1 allowances under subpart CCCCC of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart CCCCC of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR SO<sub>2</sub> Group 1 allowances to units in the State for each such control period

shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

#### Subpart PP—South Carolina

■ 52. Section 52.2140 is revised to read as follows:

**§ 52.2140 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?**

(a)(1) The owner and operator of each source and each unit located in the State of South Carolina and Indian country within the borders of the State and for which requirements are set forth under the TR NO<sub>x</sub> Annual Trading Program in subpart AAAAA of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements with regard to sources and units in the State will be eliminated by the promulgation of an approval by the Administrator of a revision to South Carolina's State Implementation Plan (SIP) as correcting in part the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(a), except to the extent the Administrator's approval is partial or conditional. The obligation to comply with such requirements with regard to sources and units located in Indian country within the borders of the State will not be eliminated by the promulgation of an approval by the Administrator of a revision to South Carolina's SIP.

(2) Notwithstanding the provisions of paragraph (a)(1) of this section, if, at the time of the approval of South Carolina's SIP revision described in paragraph (a)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Annual allowances under subpart AAAAA of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart AAAAA of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Annual allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

(b)(1) The owner and operator of each source and each unit located in the State of South Carolina and Indian country within the borders of the State and for which requirements are set forth under the TR NO<sub>x</sub> Ozone Season Trading Program in subpart BBBBB of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements with regard to sources and units in the State will be

eliminated by the promulgation of an approval by the Administrator of a revision to South Carolina's State Implementation Plan (SIP) as correcting in part the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(b), except to the extent the Administrator's approval is partial or conditional. The obligation to comply with such requirements with regard to sources and units located in Indian country within the borders of the State will not be eliminated by the promulgation of an approval by the Administrator of a revision to South Carolina's SIP.

(2) Notwithstanding the provisions of paragraph (b)(1) of this section, if, at the time of the approval of South Carolina's SIP revision described in paragraph (b)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Ozone Season allowances under subpart BBBBB of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart BBBBB of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Ozone Season allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

■ 53. Section 52.2141 is revised to read as follows:

**§ 52.2141 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of sulfur dioxide?**

(a) The owner and operator of each source and each unit located in the State of South Carolina and Indian country within the borders of the State and for which requirements are set forth under the TR SO<sub>2</sub> Group 2 Trading Program in subpart DDDDD of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements with regard to sources and units in the State will be eliminated by the promulgation of an approval by the Administrator of a revision to South Carolina's State Implementation Plan (SIP) as correcting in part the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.39, except to the extent the Administrator's approval is partial or conditional. The obligation to comply with such requirements with regard to sources and units located in Indian country within the borders of the State will not be eliminated by the promulgation of an approval by the Administrator of a revision to South Carolina's SIP.

(b) Notwithstanding the provisions of paragraph (a) of this section, if, at the time of the approval of South Carolina's SIP revision described in paragraph (a) of this section, the Administrator has already started recording any allocations of TR SO<sub>2</sub> Group 1 allowances under subpart CCCCC of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart CCCCC of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR SO<sub>2</sub> Group 1 allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

**Subpart RR—Tennessee**

■ 54. Section 52.2240 is amended by adding new paragraphs (c), (d), and (e) to read as follows:

**§ 52.2240 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?**

\* \* \* \* \*

(c) Notwithstanding any provisions of paragraphs (a) and (b) of this section and subparts AA through II and AAAA through IIII of part 97 of this chapter to the contrary:

(1) With regard to any control period that begins after December 31, 2011,

(i) The provisions in paragraphs (a) and (b) of this section relating to NO<sub>x</sub> annual or ozone season emissions shall not be applicable; and

(ii) The Administrator will not carry out any of the functions set forth for the Administrator in subparts AA through II and AAAA through IIII of part 97 of this chapter; and

(2) The Administrator will not deduct for excess emissions any CAIR NO<sub>x</sub> allowances or CAIR NO<sub>x</sub> Ozone Season allowances allocated for 2012 or any year thereafter;

(3) By November 7, 2011, the Administrator will remove from the CAIR NO<sub>x</sub> Allowance Tracking System accounts all CAIR NO<sub>x</sub> allowances allocated for a control period in 2012 and any subsequent year, and, thereafter, no holding or surrender of CAIR NO<sub>x</sub> allowances will be required with regard to emissions or excess emissions for such control periods; and

(4) By November 7, 2011, the Administrator will remove from the CAIR NO<sub>x</sub> Ozone Season Allowance Tracking System accounts all CAIR NO<sub>x</sub> Ozone Season allowances allocated for a control period in 2012 and any subsequent year, and, thereafter, no holding or surrender of CAIR NO<sub>x</sub> Ozone Season allowances will be

required with regard to emissions or excess emissions for such control periods.

(d)(1) The owner and operator of each source and each unit located in the State of Tennessee and for which requirements are set forth under the TR NO<sub>x</sub> Annual Trading Program in subpart AAAAA of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Tennessee's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(a), except to the extent the Administrator's approval is partial or conditional. The obligation to comply with such requirements with regard to sources and units located in Indian country within the borders of the State will not be eliminated by the promulgation of an approval by the Administrator of a revision to Tennessee's SIP.

(2) Notwithstanding the provisions of paragraph (d)(1) of this section, if, at the time of the approval of Tennessee's SIP revision described in paragraph (d)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Annual allowances under subpart AAAAA of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart AAAAA of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Annual allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

(e)(1) The owner and operator of each source and each unit located in the State of Tennessee and for which requirements are set forth under the TR NO<sub>x</sub> Ozone Season Trading Program in subpart BBBBB of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Tennessee's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(b), except to the extent the Administrator's approval is partial or conditional. The obligation to comply with such requirements with regard to sources and units located in Indian country within the borders of the State will not be eliminated by the promulgation of an



approval by the Administrator of a revision to Tennessee's SIP.

(2) Notwithstanding the provisions of paragraph (e)(1) of this section, if, at the time of the approval of Tennessee's SIP revision described in paragraph (e)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Ozone Season allowances under subpart BBBB of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart BBBB of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Ozone Season allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

■ 55. Section 52.2241 is amended by designating the existing text as paragraph (a) and adding new paragraphs (b) and (c) to read as follows:

**§ 52.2241 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of sulfur dioxide?**

\* \* \* \* \*

(b) Notwithstanding any provisions of paragraph (a) of this section and subparts AAA through III of part 97 of this chapter and any State's SIP to the contrary:

(1) With regard to any control period that begins after December 31, 2011,

(i) The provisions of paragraph (a) of this section relating to SO<sub>2</sub> emissions shall not be applicable; and

(ii) The Administrator will not carry out any of the functions set forth for the Administrator in subparts AAA through III of part 97 of this chapter; and

(2) The Administrator will not deduct for excess emissions any CAIR SO<sub>2</sub> allowances allocated for 2012 or any year thereafter.

(c)(1) The owner and operator of each source and each unit located in the State of Tennessee and for which requirements are set forth under the TR SO<sub>2</sub> Group 1 Trading Program in subpart CCCCC of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Tennessee's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.39, except to the extent the Administrator's approval is partial or conditional. The obligation to comply with such requirements with regard to sources and units located in Indian country within the borders of the State will not be

eliminated by the promulgation of an approval by the Administrator of a revision to Tennessee's SIP.

(2) Notwithstanding the provisions of paragraph (c)(1) of this section, if, at the time of the approval of Tennessee's SIP revision described in paragraph (c)(1) of this section, the Administrator has already started recording any allocations of TR SO<sub>2</sub> Group 1 allowances under subpart CCCCC of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart CCCCC of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR SO<sub>2</sub> Group 1 allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

**Subpart SS—Texas**

■ 56. Section 52.2283 is amended by adding new paragraphs (b), (c) and (d) to read as follows:

**§ 52.2283 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?**

\* \* \* \* \*

(b) Notwithstanding any provisions of paragraph (a) of this section and subparts AA through II of part 97 of this chapter to the contrary:

(1) With regard to any control period that begins after December 31, 2011,

(i) The provisions in paragraph (a) of this section relating to NO<sub>x</sub> annual emissions shall not be applicable; and

(ii) The Administrator will not carry out any of the functions set forth for the Administrator in subparts AA through II of part 97 of this chapter;

(2) The Administrator will not deduct for excess emissions any CAIR NO<sub>x</sub> allowances allocated for 2012 or any year thereafter;

(3) By November 7, 2011, the Administrator will remove from the CAIR NO<sub>x</sub> Allowance Tracking System accounts all CAIR NO<sub>x</sub> allowances allocated for a control period in 2012 and any subsequent year, and, thereafter, no holding or surrender of CAIR NO<sub>x</sub> allowances will be required with regard to emissions or excess emissions for such control periods.

(c)(1) The owner and operator of each source and each unit located in the State of Texas and Indian country within the borders of the State and for which requirements are set forth under the TR NO<sub>x</sub> Annual Trading Program in subpart AAAAA of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements with regard to

sources and units in the State will be eliminated by the promulgation of an approval by the Administrator of a revision to Texas' State Implementation Plan (SIP) as correcting in part the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(a), except to the extent the Administrator's approval is partial or conditional. The obligation to comply with such requirements with regard to sources and units located in Indian country within the borders of the State will not be eliminated by the promulgation of an approval by the Administrator of a revision to Texas' SIP.

(2) Notwithstanding the provisions of paragraph (c)(1) of this section, if, at the time of the approval of Texas' SIP revision described in paragraph (c)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Annual allowances under subpart AAAAA of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart AAAAA of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Annual allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

(d)(1) The owner and operator of each source and each unit located in the State of Texas and Indian country within the borders of the State and for which requirements are set forth under the TR NO<sub>x</sub> Ozone Season Trading Program in subpart BBBB of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements with regard to sources and units in the State will be eliminated by the promulgation of an approval by the Administrator of a revision to Texas' State Implementation Plan (SIP) as correcting in part the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(b), except to the extent the Administrator's approval is partial or conditional. The obligation to comply with such requirements with regard to sources and units located in Indian country within the borders of the State will not be eliminated by the promulgation of an approval by the Administrator of a revision to Texas' SIP.

(2) Notwithstanding the provisions of paragraph (d)(1) of this section, if, at the time of the approval of Texas' SIP revision described in paragraph (d)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Ozone Season allowances under subpart BBBB of part 97 of this

chapter to units in the State for a control period in any year, the provisions of subpart BBBB of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Ozone Season allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

■ 57. Section 52.2284 is amended by designating the existing text as paragraph (a) and adding new paragraphs (b) and (c) to read as follows:

**§ 52.2284 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of sulfur dioxide?**

\* \* \* \* \*

(b) Notwithstanding any provisions of paragraph (a) of this section and subparts AAA through III of part 97 of this chapter and any State's SIP to the contrary:

(1) With regard to any control period that begins after December 31, 2011,

(i) The provisions of paragraph (a) of this section relating to SO<sub>2</sub> emissions shall not be applicable; and

(ii) The Administrator will not carry out any of the functions set forth for the Administrator in subparts AAA through III of part 97 of this chapter; and

(2) The Administrator will not deduct for excess emissions any CAIR SO<sub>2</sub> allowances allocated for 2012 or any year thereafter.

(c)(1) The owner and operator of each source and each unit located in the State of Texas and Indian country within the borders of the State and for which requirements are set forth under the TR SO<sub>2</sub> Group 2 Trading Program in subpart DDDDD of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements with regard to sources and units in the State will be eliminated by the promulgation of an approval by the Administrator of a revision to Texas' State Implementation Plan (SIP) as correcting in part the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.39, except to the extent the Administrator's approval is partial or conditional. The obligation to comply with such requirements with regard to sources and units located in Indian country within the borders of the State will not be eliminated by the promulgation of an approval by the Administrator of a revision to Texas' SIP.

(2) Notwithstanding the provisions of paragraph (c)(1) of this section, if, at the time of the approval of Texas' SIP revision described in paragraph (c)(1) of

this section, the Administrator has already started recording any allocations of TR SO<sub>2</sub> Group 2 allowances under subpart DDDDD of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart DDDDD of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR SO<sub>2</sub> Group 2 allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

**Subpart VV—Virginia**

■ 58. Section 52.2440 is added to read as follows:

**§ 52.2440 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?**

(a)(1) The owner and operator of each source and each unit located in the State of Virginia and for which requirements are set forth under the TR NO<sub>x</sub> Annual Trading Program in subpart AAAAA of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Virginia's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(a), except to the extent the Administrator's approval is partial or conditional.

(2) Notwithstanding the provisions of paragraph (a)(1) of this section, if, at the time of the approval of Virginia's SIP revision described in paragraph (a)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Annual allowances under subpart AAAAA of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart AAAAA of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Annual allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

(b)(1) The owner and operator of each source and each unit located in the State of Virginia and for which requirements are set forth under the TR NO<sub>x</sub> Ozone Season Trading Program in subpart BBBB of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Virginia's

State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(b), except to the extent the Administrator's approval is partial or conditional.

(2) Notwithstanding the provisions of paragraph (b)(1) of this section, if, at the time of the approval of Virginia's SIP revision described in paragraph (b)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Ozone Season allowances under subpart BBBB of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart BBBB of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Ozone Season allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

■ 59. Section 52.2241 is added to read as follows:

**§ 52.2241 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of sulfur dioxide?**

(a) The owner and operator of each source and each unit located in the State of Virginia and for which requirements are set forth under the TR SO<sub>2</sub> Group 1 Trading Program in subpart CCCCC of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Virginia's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.39, except to the extent the Administrator's approval is partial or conditional.

(b) Notwithstanding the provisions of paragraph (a) of this section, if, at the time of the approval of Virginia's SIP revision described in paragraph (a) of this section, the Administrator has already started recording any allocations of TR SO<sub>2</sub> Group 1 allowances under subpart CCCCC of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart CCCCC of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR SO<sub>2</sub> Group 1 allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

**Subpart XX—West Virginia**

■ 60. Section 52.2540 is added to read as follows:

**§ 52.2540 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?**

(a)(1) The owner and operator of each source and each unit located in the State of West Virginia and for which requirements are set forth under the TR NO<sub>x</sub> Annual Trading Program in subpart AAAAA of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to West Virginia's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(a), except to the extent the Administrator's approval is partial or conditional.

(2) Notwithstanding the provisions of paragraph (a)(1) of this section, if, at the time of the approval of West Virginia's SIP revision described in paragraph (a)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Annual allowances under subpart AAAAA of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart AAAAA of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Annual allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

(b)(1) The owner and operator of each source and each unit located in the State of West Virginia and for which requirements are set forth under the TR NO<sub>x</sub> Ozone Season Trading Program in subpart BBBBB of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to West Virginia's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(b), except to the extent the Administrator's approval is partial or conditional.

(2) Notwithstanding the provisions of paragraph (b)(1) of this section, if, at the time of the approval of West Virginia's SIP revision described in paragraph (b)(1) of this section, the Administrator has already started recording any

allocations of TR NO<sub>x</sub> Ozone Season allowances under subpart BBBBB of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart BBBBB of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Ozone Season allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

■ 61. Section 52.2541 is added to read as follows:

**§ 52.2541 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of sulfur dioxide?**

(a) The owner and operator of each source and each unit located in the State of West Virginia and for which requirements are set forth under the TR SO<sub>2</sub> Group 1 Trading Program in subpart CCCCC of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to West Virginia's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.39, except to the extent the Administrator's approval is partial or conditional.

(b) Notwithstanding the provisions of paragraph (a) of this section, if, at the time of the approval of West Virginia's SIP revision described in paragraph (a) of this section, the Administrator has already started recording any allocations of TR SO<sub>2</sub> Group 1 allowances under subpart CCCCC of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart CCCCC of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR SO<sub>2</sub> Group 1 allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

**Subpart YY—Wisconsin**

■ 62. Section 52.2587 is amended by adding new paragraphs (c) and (d) to read as follows:

**§ 52.2587 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?**

\* \* \* \* \*

(c) Notwithstanding any provisions of paragraphs (a) and (b) of this section and subparts AA through II and AAAA

through III of part 97 of this chapter to the contrary:

(1) With regard to any control period that begins after December 31, 2011,

(i) The provisions in paragraphs (a) and (b) of this section relating to NO<sub>x</sub> annual or ozone season emissions shall not be applicable; and

(ii) The Administrator will not carry out any of the functions set forth for the Administrator in subparts AA through II and AAAA through III of part 97 of this chapter; and

(2) The Administrator will not deduct for excess emissions any CAIR NO<sub>x</sub> allowances or CAIR NO<sub>x</sub> Ozone Season allowances allocated for 2012 or any year thereafter;

(3) By November 7, 2011, the Administrator will remove from the CAIR NO<sub>x</sub> Allowance Tracking System accounts all CAIR NO<sub>x</sub> allowances allocated for a control period in 2012 and any subsequent year, and, thereafter, no holding or surrender of CAIR NO<sub>x</sub> allowances will be required with regard to emissions or excess emissions for such control periods; and

(4) By November 7, 2011, the Administrator will remove from the CAIR NO<sub>x</sub> Ozone Season Allowance Tracking System accounts all CAIR NO<sub>x</sub> Ozone Season allowances allocated for a control period in 2012 and any subsequent year, and, thereafter, no holding or surrender of CAIR NO<sub>x</sub> Ozone Season allowances will be required with regard to emissions or excess emissions for such control periods.

(d)(1) The owner and operator of each source and each unit located in the State of Wisconsin and Indian country within the borders of the State and for which requirements are set forth under the TR NO<sub>x</sub> Annual Trading Program in subpart AAAAA of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements with regard to sources and units in the State will be eliminated by the promulgation of an approval by the Administrator of a revision to Wisconsin's State Implementation Plan (SIP) as correcting in part the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.38(a), except to the extent the Administrator's approval is partial or conditional. The obligation to comply with such requirements with regard to sources and units located in Indian country within the borders of the State will not be eliminated by the promulgation of an approval by the Administrator of a revision to Wisconsin's SIP.

(2) Notwithstanding the provisions of paragraph (d)(1) of this section, if, at the

time of the approval of Wisconsin's SIP revision described in paragraph (d)(1) of this section, the Administrator has already started recording any allocations of TR NO<sub>x</sub> Annual allowances under subpart AAAAA of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart AAAAA of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR NO<sub>x</sub> Annual allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

■ 63. Section 52.2588 is amended by designating the existing text as paragraph (a) and adding new paragraphs (b) and (c) to read as follows:

**§ 52.2588 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of sulfur dioxide?**

\* \* \* \* \*

(b) Notwithstanding any provisions of paragraph (a) of this section and subparts AAA through III of part 97 of this chapter and any State's SIP to the contrary:

(1) With regard to any control period that begins after December 31, 2011,

(i) The provisions of paragraph (a) of this section relating to SO<sub>2</sub> emissions shall not be applicable; and

(ii) The Administrator will not carry out any of the functions set forth for the Administrator in subparts AAA through III of part 97 of this chapter; and

(2) The Administrator will not deduct for excess emissions any CAIR SO<sub>2</sub> allowances allocated for 2012 or any year thereafter.

(c)(1) The owner and operator of each source and each unit located in the State of Wisconsin and Indian country within the borders of the State and for which requirements are set forth under the TR SO<sub>2</sub> Group 1 Trading Program in subpart CCCCC of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements with regard to sources and units in the State will be eliminated by the promulgation of an approval by the Administrator of a revision to Wisconsin's State Implementation Plan (SIP) as correcting in part the SIP's deficiency that is the basis for the TR Federal Implementation Plan under § 52.39, except to the extent the Administrator's approval is partial or conditional. The obligation to comply with such requirements with regard to sources and units located in Indian country within the borders of the State will not be eliminated by the promulgation of an approval by the

Administrator of a revision to Wisconsin's SIP.

(2) Notwithstanding the provisions of paragraph (c)(1) of this section, if, at the time of the approval of Wisconsin's SIP revision described in paragraph (c)(1) of this section, the Administrator has already started recording any allocations of TR SO<sub>2</sub> Group 1 allowances under subpart CCCCC of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart CCCCC of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of TR SO<sub>2</sub> Group 1 allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

**PART 72—[AMENDED]**

■ 64. The authority citation for part 72 is revised to read as follows:

**Authority:** 42 U.S.C. 7401, 7403, 7410, 7411, 7426, 7601, *et seq.*

**§ 72.2 [Amended]**

■ 65. Section 72.2 is amended by removing the definition of "Interested person".

**PART 78—[AMENDED]**

■ 66. The authority citation for part 78 continues to read as follows:

**Authority:** 42 U.S.C. 7401, 7403, 7410, 7411, 7426, 7601, *et seq.*

■ 67. Section 78.1 is amended by adding paragraphs (b)(13) through (b)(16) to read as follows:

**§ 78.1 Purpose and scope.**

\* \* \* \* \*

(b) \* \* \*

(13) Under subpart AAAAA of part 97 of this chapter,

(i) The decision on allocation of TR NO<sub>x</sub> Annual allowances under § 97.411(a)(2) and (b) of this chapter.

(ii) The decision on the transfer of TR NO<sub>x</sub> Annual allowances under § 97.423 of this chapter.

(iii) The decision on the deduction of TR NO<sub>x</sub> Annual allowances under §§ 97.424 and 97.425 of this chapter.

(iv) The correction of an error in an Allowance Management System account under § 97.427 of this chapter.

(v) The adjustment of information in a submission and the decision on the deduction and transfer of TR NO<sub>x</sub> Annual allowances based on the information as adjusted under § 97.428 of this chapter.

(vi) The finalization of control period emissions data, including retroactive adjustment based on audit.

(vii) The approval or disapproval of a petition under § 97.435 of this chapter.

(14) Under subpart BBBB of part 97 of this chapter,

(i) The decision on allocation of TR NO<sub>x</sub> Ozone Season allowances under § 97.511(a)(2) and (b) of this chapter.

(ii) The decision on the transfer of TR NO<sub>x</sub> Ozone Season allowances under § 97.523 of this chapter.

(iii) The decision on the deduction of TR NO<sub>x</sub> Ozone Season allowances under §§ 97.524 and 97.525 of this chapter.

(iv) The correction of an error in an Allowance Management System account under § 97.527 of this chapter.

(v) The adjustment of information in a submission and the decision on the deduction and transfer of TR NO<sub>x</sub> Ozone Season allowances based on the information as adjusted under § 97.528 of this chapter.

(vi) The finalization of control period emissions data, including retroactive adjustment based on audit.

(vii) The approval or disapproval of a petition under § 97.535 of this chapter.

(15) Under subpart CCCCC of part 97 of this chapter,

(i) The decision on allocation of TR SO<sub>2</sub> Group 1 allowances under § 97.611(a)(2) and (b) of this chapter.

(ii) The decision on the transfer of TR SO<sub>2</sub> Group 1 allowances under § 97.623 of this chapter.

(iii) The decision on the deduction of TR SO<sub>2</sub> Group 1 allowances under §§ 97.624 and 97.625 of this chapter.

(iv) The correction of an error in an Allowance Management System account under § 97.627 of this chapter.

(v) The adjustment of information in a submission and the decision on the deduction and transfer of TR SO<sub>2</sub> Group 1 allowances based on the information as adjusted under § 97.628 of this chapter.

(vi) The finalization of control period emissions data, including retroactive adjustment based on audit.

(vii) The approval or disapproval of a petition under § 97.635 of this chapter.

(16) Under subpart DDDDD of part 97 of this chapter,

(i) The decision on allocation of TR SO<sub>2</sub> Group 2 allowances under § 97.711(a)(2) and (b) of this chapter.

(ii) The decision on the transfer of TR SO<sub>2</sub> Group 1 allowances under § 97.723 of this chapter.

(iii) The decision on the deduction of TR SO<sub>2</sub> Group 1 allowances under §§ 97.724 and 97.725 of this chapter.

(iv) The correction of an error in an Allowance Management System account under § 97.727 of this chapter.

(v) The adjustment of information in a submission and the decision on the

deduction and transfer of TR SO<sub>2</sub> Group 1 allowances based on the information as adjusted under § 97.728 of this chapter.

(vi) The finalization of control period emissions data, including retroactive adjustment based on audit.

(vii) The approval or disapproval of a petition under § 97.735 of this chapter.

\* \* \* \* \*

■ 68. Section 78.2 is revised to read as follows:

#### § 78.2 General.

(a) *Definitions.* (1) The terms used in this subpart with regard to a decision of the Administrator that is appealed under this section shall have the meaning as set forth in the regulations under which the Administrator made such decision and as set forth in paragraph (a)(2) of this section.

(2) *Interested person* means, with regard to a decision of the Administrator:

(i) Any person who submitted comments, or testified at a public hearing, pursuant to an opportunity for comment provided by the Administrator as part of the process of making such decision;

(ii) Who submitted objections pursuant to an opportunity for objections provided by the Administrator as part of the process of making such decision; or

(iii) Who submitted, to the Administrator and in a format prescribed by the Administrator, his or her name, service address, telephone number, and facsimile number and identified such decision in order to be placed on a list of persons interested in such decision;

(iv) Provided that the Administrator may update the list of interested persons from time to time by requesting additional written indication of continued interest from the persons listed and may delete from the list the name of any person failing to respond as requested.

(b) *Availability of information.* The availability to the public of information provided to, or otherwise obtained by, the Administrator under this subpart shall be governed by part 2 of this chapter.

(c) *Computation of time.* (1) In computing any period of time prescribed or allowed under this part, except as otherwise provided, the day of the event from which the period begins to run shall not be included, and Saturdays, Sundays, and federal holidays shall be included. When the period ends on a Saturday, Sunday, or federal holiday, the stated period shall

be extended to include the next business day.

(2) Where a document is served by first class mail or commercial delivery service, but not by overnight or same-day delivery, 5 days shall be added to the time prescribed or allowed under this part for the filing of a responsive document or for otherwise responding.

■ 69. Section 78.3 is amended by:

■ a. In paragraphs (a)(1)(iii), (a)(3)(ii), (a)(4)(ii), (a)(5)(ii), (a)(6)(ii), (a)(7)(ii), (a)(8)(ii), and (a)(9)(ii), adding, after the word “person”, the words “with regard to the decision”.

■ b. Adding paragraph (a)(10);

■ c. In paragraph (b)(3)(i), removing the words “paragraph (a)(1) and (2)” and adding, in their place, the words “paragraph (a)(1), (2), and (10)”; and

■ d. Adding paragraph (d)(11) to read as follows:

#### § 78.3 Petition for administrative review and request or evidentiary hearing.

(a) \* \* \*

(10) The following persons may petition for administrative review of a decision of the Administrator that is made under subparts AAAAA, BBBBB, CCCCC, and DDDDD of part 97 of this chapter:

(i) The designated representative for a unit or source, or the authorized account representative for any Allowance Management System account, covered by the decision; or

(ii) Any interested person with regard to the decision.

\* \* \* \* \*

(d) \* \* \*

(11) Any provision or requirement of subparts AAAAA, BBBBB, CCCCC, or DDDDD of part 97 of this chapter, including the standard requirements under § 97.406, § 97.506, § 97.606, or § 97.706 of this chapter and any emission monitoring or reporting requirements.

\* \* \* \* \*

■ 70. Section 78.4 is amended by:

■ a. Revising paragraph (a) by:

■ i. Removing the first, second, third, fourth, fifth, and last sentences;

■ ii. In the sixth and seventh sentences, removing the words “interest in” and adding, in their place, the words “ownership interest with respect to”;

■ iii. Redesignating the paragraph as paragraph (a)(1)(iii); and

■ b. Adding paragraphs (a)(1) introductory text, (a)(1)(i), and (a)(1)(ii); and

■ c. Revising paragraph (a)(2) to read as follows:

#### § 78.4 Filings.

(a)(1) All original filings made under this part shall be signed by the person

making the filing or by an attorney or authorized representative, in accordance with the following requirements:

(i) Any filings on behalf of owners and operators of a affected unit or affected source, TR NO<sub>x</sub> Annual unit or TR NO<sub>x</sub> Annual source, TR NO<sub>x</sub> Ozone Season unit or TR NO<sub>x</sub> Ozone Season source, TR SO<sub>2</sub> Group 1 unit or TR SO<sub>2</sub> Group 1 source, TR SO<sub>2</sub> Group 2 unit or TR SO<sub>2</sub> Group 2 source, or a unit for which a TR opt-in application is submitted and not withdrawn shall be signed by the designated representative. Any filing on behalf of persons with an ownership interest with respect to allowances, TR NO<sub>x</sub> Annual allowances, TR NO<sub>x</sub> Ozone Season allowances, TR SO<sub>2</sub> Group 1 allowances, or TR SO<sub>2</sub> Group 2 allowances in a general account shall be signed by the authorized account representative.

(ii) Any filings on behalf of owners and operators of a NO<sub>x</sub> Budget unit or NO<sub>x</sub> Budget source shall be signed by the NO<sub>x</sub> authorized account representative. Any filing on behalf of persons with an ownership interest with respect to NO<sub>x</sub> allowances in a general account shall be signed by the NO<sub>x</sub> authorized account representative.

\* \* \* \* \*

(2) The name, address, e-mail address (if any), telephone number, and facsimile number (if any) of the person making the filing shall be provided with the filing.

\* \* \* \* \*

#### § 78.5 [Amended]

■ 71. Section 78.5 is amended by, in paragraph (a):

■ a. Removing the words “public comment prior to” and adding, in their place, the words “submission of public comments or objections prior to”;

■ b. Removing the words “public comment period” whenever they appear and adding, in their place, the words “period for submission of public comments or objections”.

#### § 78.12 [Amended]

■ 72. Section 78.12 is amended by, in paragraph (a), removing the words “public comment” and adding, in their place, the words “submission of public comments or objections”.

#### PART 97—[AMENDED]

■ 73. The authority citation for part 97 continues to read as follows:

Authority: 42 U.S.C. 7401, 7403, 7410, 7426, 7601, and 7651, *et seq.*

■ 74. Part 97 is amended by adding subpart AAAAA to read as follows:

**Subpart AAAAA—TR NO<sub>x</sub> Annual Trading Program**

- 97.401 Purpose.
- 97.402 Definitions.
- 97.403 Measurements, abbreviations, and acronyms.
- 97.404 Applicability.
- 97.405 Retired unit exemption.
- 97.406 Standard requirements.
- 97.407 Computation of time.
- 97.408 Administrative appeal procedures.
- 97.409 [Reserved]
- 97.410 State NO<sub>x</sub> Annual trading budgets, new unit set-asides, Indian country new unit set-asides and variability limits.
- 97.411 Timing requirements for TR NO<sub>x</sub> Annual allowance allocations.
- 97.412 TR NO<sub>x</sub> Annual allowance allocations to new units.
- 97.413 Authorization of designated representative and alternate designated representative.
- 97.414 Responsibilities of designated representative and alternate designated representative.
- 97.415 Changing designated representative and alternate designated representative; changes in owners and operators.
- 97.416 Certificate of representation.
- 97.417 Objections concerning designated representative and alternate designated representative.
- 97.418 Delegation by designated representative and alternate designated representative.
- 97.419 [Reserved]
- 97.420 Establishment of compliance accounts and general accounts.
- 97.421 Recordation of TR NO<sub>x</sub> Annual allowance allocations.
- 97.422 Submission of TR NO<sub>x</sub> Annual allowance transfers.
- 97.423 Recordation of TR NO<sub>x</sub> Annual allowance transfers.
- 97.424 Compliance with TR NO<sub>x</sub> Annual emissions limitation.
- 97.425 Compliance with TR NO<sub>x</sub> Annual assurance provisions.
- 97.426 Banking.
- 97.427 Account error.
- 97.428 Administrator's action on submissions.
- 97.429 [RESERVED]
- 97.430 General monitoring, recordkeeping, and reporting requirements.
- 97.431 Initial monitoring system certification and recertification procedures.
- 97.432 Monitoring system out-of-control periods.
- 97.433 Notifications concerning monitoring.
- 97.434 Recordkeeping and reporting.
- 97.435 Petitions for alternatives to monitoring, recordkeeping, or reporting requirements.

**Subpart AAAAA—TR NO<sub>x</sub> Annual Trading Program****§ 97.401 Purpose.**

This subpart sets forth the general, designated representative, allowance, and monitoring provisions for the Transport Rule (TR) NO<sub>x</sub> Annual

Trading Program, under section 110 of the Clean Air Act and § 52.38 of this chapter, as a means of mitigating interstate transport of fine particulates and nitrogen oxides.

**§ 97.402 Definitions.**

The terms used in this subpart shall have the meanings set forth in this section as follows:

*Acid Rain Program* means a multi-state SO<sub>2</sub> and NO<sub>x</sub> air pollution control and emission reduction program established by the Administrator under title IV of the Clean Air Act and parts 72 through 78 of this chapter.

*Administrator* means the Administrator of the United States Environmental Protection Agency or the Director of the Clean Air Markets Division (or its successor determined by the Administrator) of the United States Environmental Protection Agency, the Administrator's duly authorized representative under this subpart.

*Allocate* or *allocation* means, with regard to TR NO<sub>x</sub> Annual allowances, the determination by the Administrator, State, or permitting authority, in accordance with this subpart and any SIP revision submitted by the State and approved by the Administrator under § 52.38(a)(3), (4), or (5) of this chapter, of the amount of such TR NO<sub>x</sub> Annual allowances to be initially credited, at no cost to the recipient, to:

- (1) A TR NO<sub>x</sub> Annual unit;
- (2) A new unit set-aside;
- (3) An Indian country new unit set-aside; or
- (4) An entity not listed in paragraphs (1) through (3) of this definition;

(5) Provided that, if the Administrator, State, or permitting authority initially credits, to a TR NO<sub>x</sub> Annual unit qualifying for an initial credit, a credit in the amount of zero TR NO<sub>x</sub> Annual allowances, the TR NO<sub>x</sub> Annual unit will be treated as being allocated an amount (*i.e.*, zero) of TR NO<sub>x</sub> Annual allowances.

*Allowable NO<sub>x</sub> emission rate* means, for a unit, the most stringent State or federal NO<sub>x</sub> emission rate limit (in lb/MWhr or, if in lb/mmBtu, converted to lb/MWhr by multiplying it by the unit's heat rate in mmBtu/MWhr) that is applicable to the unit and covers the longest averaging period not exceeding one year.

*Allowance Management System* means the system by which the Administrator records allocations, deductions, and transfers of TR NO<sub>x</sub> Annual allowances under the TR NO<sub>x</sub> Annual Trading Program. Such allowances are allocated, recorded, held, deducted, or transferred only as whole allowances.

*Allowance Management System account* means an account in the Allowance Management System established by the Administrator for purposes of recording the allocation, holding, transfer, or deduction of TR NO<sub>x</sub> Annual allowances.

*Allowance transfer deadline* means, for a control period in a given year, midnight of March 1 (if it is a business day), or midnight of the first business day thereafter (if March 1 is not a business day), immediately after such control period and is the deadline by which a TR NO<sub>x</sub> Annual allowance transfer must be submitted for recordation in a TR NO<sub>x</sub> Annual source's compliance account in order to be available for use in complying with the source's TR NO<sub>x</sub> Annual emissions limitation for such control period in accordance with §§ 97.406 and 97.424.

*Alternate designated representative* means, for a TR NO<sub>x</sub> Annual source and each TR NO<sub>x</sub> Annual unit at the source, the natural person who is authorized by the owners and operators of the source and all such units at the source, in accordance with this subpart, to act on behalf of the designated representative in matters pertaining to the TR NO<sub>x</sub> Annual Trading Program. If the TR NO<sub>x</sub> Annual source is also subject to the Acid Rain Program, TR NO<sub>x</sub> Ozone Season Trading Program, TR SO<sub>2</sub> Group 1 Trading Program, or TR SO<sub>2</sub> Group 2 Trading Program, then this natural person shall be the same natural person as the alternate designated representative, as defined in the respective program.

*Assurance account* means an Allowance Management System account, established by the Administrator under § 97.425(b)(3) for certain owners and operators of a group of one or more TR NO<sub>x</sub> Annual sources and units in a given State (and Indian country within the borders of such State), in which are held TR NO<sub>x</sub> Annual allowances available for use for a control period in a given year in complying with the TR NO<sub>x</sub> Annual assurance provisions in accordance with §§ 97.406 and 97.425.

*Authorized account representative* means, for a general account, the natural person who is authorized, in accordance with this subpart, to transfer and otherwise dispose of TR NO<sub>x</sub> Annual allowances held in the general account and, for a TR NO<sub>x</sub> Annual source's compliance account, the designated representative of the source.

*Automated data acquisition and handling system* or *DAHS* means the component of the continuous emission monitoring system, or other emissions monitoring system approved for use

under this subpart, designed to interpret and convert individual output signals from pollutant concentration monitors, flow monitors, diluent gas monitors, and other component parts of the monitoring system to produce a continuous record of the measured parameters in the measurement units required by this subpart.

*Biomass* means—

(1) Any organic material grown for the purpose of being converted to energy;

(2) Any organic byproduct of agriculture that can be converted into energy; or

(3) Any material that can be converted into energy and is nonmerchantable for other purposes, that is segregated from other material that is nonmerchantable for other purposes, and that is;

(i) A forest-related organic resource, including mill residues, precommercial thinnings, slash, brush, or byproduct from conversion of trees to merchantable material; or

(ii) A wood material, including pallets, crates, dunnage, manufacturing and construction materials (other than pressure-treated, chemically-treated, or painted wood products), and landscape or right-of-way tree trimmings.

*Boiler* means an enclosed fossil- or other-fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or other medium.

*Bottoming-cycle unit* means a unit in which the energy input to the unit is first used to produce useful thermal energy, where at least some of the reject heat from the useful thermal energy application or process is then used for electricity production.

*Business day* means a day that does not fall on a weekend or a federal holiday.

*Certifying official* means a natural person who is:

(1) For a corporation, a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function or any other person who performs similar policy- or decision-making functions for the corporation;

(2) For a partnership or sole proprietorship, a general partner or the proprietor respectively; or

(3) For a local government entity or State, federal, or other public agency, a principal executive officer or ranking elected official.

*Clean Air Act* means the Clean Air Act, 42 U.S.C. 7401, *et seq.*

*Coal* means “coal” as defined in § 72.2 of this chapter.

*Coal-derived fuel* means any fuel (whether in a solid, liquid, or gaseous state) produced by the mechanical, thermal, or chemical processing of coal.

*Cogeneration system* means an integrated group, at a source, of equipment (including a boiler, or combustion turbine, and a steam turbine generator) designed to produce useful thermal energy for industrial, commercial, heating, or cooling purposes and electricity through the sequential use of energy.

*Cogeneration unit* means a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine that is a topping-cycle unit or a bottoming-cycle unit:

(1) Operating as part of a cogeneration system; and

(2) Producing on an annual average basis—

(i) For a topping-cycle unit,

(A) Useful thermal energy not less than 5 percent of total energy output; and

(B) Useful power that, when added to one-half of useful thermal energy produced, is not less than 42.5 percent of total energy input, if useful thermal energy produced is 15 percent or more of total energy output, or not less than 45 percent of total energy input, if useful thermal energy produced is less than 15 percent of total energy output.

(ii) For a bottoming-cycle unit, useful power not less than 45 percent of total energy input;

(3) Provided that the requirements in paragraph (2) of this definition shall not apply to a calendar year referenced in paragraph (2) of this definition during which the unit did not operate at all;

(4) Provided that the total energy input under paragraphs (2)(i)(B) and (2)(ii) of this definition shall equal the unit's total energy input from all fuel, except biomass if the unit is a boiler; and

(5) Provided that, if, throughout its operation during the 12-month period or a calendar year referenced in paragraph (2) of this definition, a unit is operated as part of a cogeneration system and the cogeneration system meets on a system-wide basis the requirement in paragraph (2)(i)(B) or (2)(ii) of this definition, the unit shall be deemed to meet such requirement during that 12-month period or calendar year.

*Combustion turbine* means an enclosed device comprising:

(1) If the device is simple cycle, a compressor, a combustor, and a turbine and in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine; and

(2) If the device is combined cycle, the equipment described in paragraph (1) of this definition and any associated duct burner, heat recovery steam generator, and steam turbine.

*Commence commercial operation* means, with regard to a unit:

(1) To have begun to produce steam, gas, or other heated medium used to generate electricity for sale or use, including test generation, except as provided in § 97.405.

(i) For a unit that is a TR NO<sub>x</sub> Annual unit under § 97.404 on the later of January 1, 2005 or the date the unit commences commercial operation as defined in the introductory text of paragraph (1) of this definition and that subsequently undergoes a physical change or is moved to a new location or source, such date shall remain the date of commencement of commercial operation of the unit, which shall continue to be treated as the same unit.

(ii) For a unit that is a TR NO<sub>x</sub> Annual unit under § 97.404 on the later of January 1, 2005 or the date the unit commences commercial operation as defined in the introductory text of paragraph (1) of this definition and that is subsequently replaced by a unit at the same or a different source, such date shall remain the replaced unit's date of commencement of commercial operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of commercial operation as defined in paragraph (1) or (2) of this definition as appropriate.

(2) Notwithstanding paragraph (1) of this definition and except as provided in § 97.405, for a unit that is not a TR NO<sub>x</sub> Annual unit under § 97.404 on the later of January 1, 2005 or the date the unit commences commercial operation as defined in introductory text of paragraph (1) of this definition, the unit's date for commencement of commercial operation shall be the date on which the unit becomes a TR NO<sub>x</sub> Annual unit under § 97.404.

(i) For a unit with a date for commencement of commercial operation as defined in the introductory text of paragraph (2) of this definition and that subsequently undergoes a physical change or is moved to a different location or source, such date shall remain the date of commencement of commercial operation of the unit, which shall continue to be treated as the same unit.

(ii) For a unit with a date for commencement of commercial operation as defined in the introductory text of paragraph (2) of this definition and that is subsequently replaced by a unit at the same or a different source, such date shall remain the replaced unit's date of commencement of commercial operation, and the replacement unit shall be treated as a separate unit with a separate date for

commencement of commercial operation as defined in paragraph (1) or (2) of this definition as appropriate.

*Common designated representative* means, with regard to a control period in a given year, a designated representative where, as of April 1 immediately after the allowance transfer deadline for such control period, the same natural person is authorized under §§ 97.413(a) and 97.415(a) as the designated representative for a group of one or more TR NO<sub>x</sub> Annual sources and units located in a State (and Indian country within the borders of such State).

*Common designated representative's assurance level* means, with regard to a specific common designated representative and a State (and Indian country within the borders of such State) and control period in a given year for which the State assurance level is exceeded as described in § 97.406(c)(2)(iii), the common designated representative's share of the State NO<sub>x</sub> Annual trading budget with the variability limit for the State for such control period.

*Common designated representative's share* means, with regard to a specific common designated representative for a control period in a given year:

(1) With regard to a total amount of NO<sub>x</sub> emissions from all TR NO<sub>x</sub> Annual units in a State (and Indian country within the borders of such State) during such control period, the total tonnage of NO<sub>x</sub> emissions during such control period from a group of one or more TR NO<sub>x</sub> Annual units located in such State (and such Indian country) and having the common designated representative for such control period;

(2) With regard to a State NO<sub>x</sub> Annual trading budget with the variability limit for such control period, the amount (rounded to the nearest allowance) equal to the sum of the total amount of TR NO<sub>x</sub> Annual allowances allocated for such control period to a group of one or more TR NO<sub>x</sub> Annual units located in the State (and Indian country within the borders of such State) and having the common designated representative for such control period and of the total amount of TR NO<sub>x</sub> Annual allowances purchased by an owner or operator of such TR NO<sub>x</sub> Annual units in an auction for such control period and submitted by the State or the permitting authority to the Administrator for recordation in the compliance accounts for such TR NO<sub>x</sub> Annual units in accordance with the TR NO<sub>x</sub> Annual allowance auction provisions in a SIP revision approved by the Administrator under § 52.38(a)(4) or (5) of this chapter, multiplied by the sum of the State NO<sub>x</sub>

Annual trading budget under § 97.410(a) and the State's variability limit under § 97.410(b) for such control period and divided by such State NO<sub>x</sub> Annual trading budget;

(3) Provided that, in the case of a unit that operates during, but has no amount of TR NO<sub>x</sub> Annual allowances allocated under §§ 97.411 and 97.412 for, such control period, the unit shall be treated, solely for purposes of this definition, as being allocated an amount (rounded to the nearest allowance) of TR NO<sub>x</sub> Annual allowances for such control period equal to the unit's allowable NO<sub>x</sub> emission rate applicable to such control period, multiplied by a capacity factor of 0.85 (if the unit is a boiler combusting any amount of coal or coal-derived fuel during such control period), 0.24 (if the unit is a simple combustion turbine during such control period), 0.67 (if the unit is a combined cycle turbine during such control period), 0.74 (if the unit is an integrated coal gasification combined cycle unit during such control period), or 0.36 (for any other unit), multiplied by the unit's maximum hourly load as reported in accordance with this subpart and by 8,760 hours/control period, and divided by 2,000 lb/ton.

*Common stack* means a single flue through which emissions from 2 or more units are exhausted.

*Compliance account* means an Allowance Management System account, established by the Administrator for a TR NO<sub>x</sub> Annual source under this subpart, in which any TR NO<sub>x</sub> Annual allowance allocations to the TR NO<sub>x</sub> Annual units at the source are recorded and in which are held any TR NO<sub>x</sub> Annual allowances available for use for a control period in a given year in complying with the source's TR NO<sub>x</sub> Annual emissions limitation in accordance with §§ 97.406 and 97.424.

*Continuous emission monitoring system* or *CEMS* means the equipment required under this subpart to sample, analyze, measure, and provide, by means of readings recorded at least once every 15 minutes and using an automated data acquisition and handling system (DAHS), a permanent record of NO<sub>x</sub> emissions, stack gas volumetric flow rate, stack gas moisture content, and O<sub>2</sub> or CO<sub>2</sub> concentration (as applicable), in a manner consistent with part 75 of this chapter and §§ 97.430 through 97.435. The following systems are the principal types of continuous emission monitoring systems:

(1) A flow monitoring system, consisting of a stack flow rate monitor and an automated data acquisition and handling system and providing a permanent, continuous record of stack

gas volumetric flow rate, in standard cubic feet per hour (scfh);

(2) A NO<sub>x</sub> concentration monitoring system, consisting of a NO<sub>x</sub> pollutant concentration monitor and an automated data acquisition and handling system and providing a permanent, continuous record of NO<sub>x</sub> emissions, in parts per million (ppm);

(3) A NO<sub>x</sub> emission rate (or NO<sub>x</sub>-diluent) monitoring system, consisting of a NO<sub>x</sub> pollutant concentration monitor, a diluent gas (CO<sub>2</sub> or O<sub>2</sub>) monitor, and an automated data acquisition and handling system and providing a permanent, continuous record of NO<sub>x</sub> concentration, in parts per million (ppm), diluent gas concentration, in percent CO<sub>2</sub> or O<sub>2</sub>, and NO<sub>x</sub> emission rate, in pounds per million British thermal units (lb/mmBtu);

(4) A moisture monitoring system, as defined in § 75.11(b)(2) of this chapter and providing a permanent, continuous record of the stack gas moisture content, in percent H<sub>2</sub>O;

(5) A CO<sub>2</sub> monitoring system, consisting of a CO<sub>2</sub> pollutant concentration monitor (or an O<sub>2</sub> monitor plus suitable mathematical equations from which the CO<sub>2</sub> concentration is derived) and an automated data acquisition and handling system and providing a permanent, continuous record of CO<sub>2</sub> emissions, in percent CO<sub>2</sub>; and

(6) An O<sub>2</sub> monitoring system, consisting of an O<sub>2</sub> concentration monitor and an automated data acquisition and handling system and providing a permanent, continuous record of O<sub>2</sub>, in percent O<sub>2</sub>.

*Control period* means the period starting January 1 of a calendar year, except as provided in § 97.406(c)(3), and ending on December 31 of the same year, inclusive.

*Designated representative* means, for a TR NO<sub>x</sub> Annual source and each TR NO<sub>x</sub> Annual unit at the source, the natural person who is authorized by the owners and operators of the source and all such units at the source, in accordance with this subpart, to represent and legally bind each owner and operator in matters pertaining to the TR NO<sub>x</sub> Annual Trading Program. If the TR NO<sub>x</sub> Annual source is also subject to the Acid Rain Program, TR NO<sub>x</sub> Ozone Season Trading Program, TR SO<sub>2</sub> Group 1 Trading Program, or TR SO<sub>2</sub> Group 2 Trading Program, then this natural person shall be the same natural person as the designated representative, as defined in the respective program.

*Emissions* means air pollutants exhausted from a unit or source into the atmosphere, as measured, recorded, and



reported to the Administrator by the designated representative, and as modified by the Administrator:

(1) In accordance with this subpart; and

(2) With regard to a period before the unit or source is required to measure, record, and report such air pollutants in accordance with this subpart, in accordance with part 75 of this chapter.

*Excess emissions* means any ton of emissions from the TR NO<sub>x</sub> Annual units at a TR NO<sub>x</sub> Annual source during a control period in a given year that exceeds the TR NO<sub>x</sub> Annual emissions limitation for the source for such control period.

*Fossil fuel* means—

(1) Natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material; or

(2) For purposes of applying the limitation on “average annual fuel consumption of fossil fuel” in §§ 97.404(b)(2)(i)(B) and (ii), natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material for the purpose of creating useful heat.

*Fossil-fuel-fired* means, with regard to a unit, combusting any amount of fossil fuel in 2005 or any calendar year thereafter.

*General account* means an Allowance Management System account, established under this subpart, that is not a compliance account or an assurance account.

*Generator* means a device that produces electricity.

*Gross electrical output* means, for a unit, electricity made available for use, including any such electricity used in the power production process (which process includes, but is not limited to, any on-site processing or treatment of fuel combusted at the unit and any on-site emission controls).

*Heat input* means, for a unit for a specified period of time, the product (in mmBtu/time) of the gross calorific value of the fuel (in mmBtu/lb) fed into the unit multiplied by the fuel feed rate (in lb of fuel/time), as measured, recorded, and reported to the Administrator by the designated representative and as modified by the Administrator in accordance with this subpart and excluding the heat derived from preheated combustion air, recirculated flue gases, or exhaust.

*Heat input rate* means, for a unit, the amount of heat input (in mmBtu) divided by unit operating time (in hr) or, for a unit and a specific fuel, the amount of heat input attributed to the fuel (in mmBtu) divided by the unit operating time (in hr) during which the unit combusts the fuel.

*Heat rate* means, for a unit, the unit’s maximum design heat input (in Btu/hr), divided by the product of 1,000,000 Btu/mmBtu and the unit’s maximum hourly load.

*Indian country* means “Indian country” as defined in 18 U.S.C. 1151.

*Life-of-the-unit, firm power contractual arrangement* means a unit participation power sales agreement under which a utility or industrial customer reserves, or is entitled to receive, a specified amount or percentage of nameplate capacity and associated energy generated by any specified unit and pays its proportional amount of such unit’s total costs, pursuant to a contract:

(1) For the life of the unit;

(2) For a cumulative term of no less than 30 years, including contracts that permit an election for early termination; or

(3) For a period no less than 25 years or 70 percent of the economic useful life of the unit determined as of the time the unit is built, with option rights to purchase or release some portion of the nameplate capacity and associated energy generated by the unit at the end of the period.

*Maximum design heat input* means, for a unit, the maximum amount of fuel per hour (in Btu/hr) that the unit is capable of combusting on a steady state basis as of the initial installation of the unit as specified by the manufacturer of the unit.

*Monitoring system* means any monitoring system that meets the requirements of this subpart, including a continuous emission monitoring system, an alternative monitoring system, or an excepted monitoring system under part 75 of this chapter.

*Nameplate capacity* means, starting from the initial installation of a generator, the maximum electrical generating output (in MWe, rounded to the nearest tenth) that the generator is capable of producing on a steady state basis and during continuous operation (when not restricted by seasonal or other deratings) as of such installation as specified by the manufacturer of the generator or, starting from the completion of any subsequent physical change in the generator resulting in an increase in the maximum electrical generating output that the generator is capable of producing on a steady state basis and during continuous operation (when not restricted by seasonal or other deratings), such increased maximum amount (in MWe, rounded to the nearest tenth) as of such completion as specified by the person conducting the physical change.

*Natural gas* means “natural gas” as defined in § 72.2 of this chapter.

*Newly affected TR NO<sub>x</sub> Annual unit* means a unit that was not a TR NO<sub>x</sub> Annual unit when it began operating but that thereafter becomes a TR NO<sub>x</sub> Annual unit.

*Operate* or *operation* means, with regard to a unit, to combust fuel.

*Operator* means, for a TR NO<sub>x</sub> Annual source or a TR NO<sub>x</sub> Annual unit at a source respectively, any person who operates, controls, or supervises a TR NO<sub>x</sub> Annual unit at the source or the TR NO<sub>x</sub> Annual unit and shall include, but not be limited to, any holding company, utility system, or plant manager of such source or unit.

*Owner* means, for a TR NO<sub>x</sub> Annual source or a TR NO<sub>x</sub> Annual unit at a source respectively, any of the following persons:

(1) Any holder of any portion of the legal or equitable title in a TR NO<sub>x</sub> Annual unit at the source or the TR NO<sub>x</sub> Annual unit;

(2) Any holder of a leasehold interest in a TR NO<sub>x</sub> Annual unit at the source or the TR NO<sub>x</sub> Annual unit, provided that, unless expressly provided for in a leasehold agreement, “owner” shall not include a passive lessor, or a person who has an equitable interest through such lessor, whose rental payments are not based (either directly or indirectly) on the revenues or income from such TR NO<sub>x</sub> Annual unit; and 3) Any purchaser of power from a TR NO<sub>x</sub> Annual unit at the source or the TR NO<sub>x</sub> Annual unit under a life-of-the-unit, firm power contractual arrangement.

*Permanently retired* means, with regard to a unit, a unit that is unavailable for service and that the unit’s owners and operators do not expect to return to service in the future.

*Permitting authority* means “permitting authority” as defined in §§ 70.2 and 71.2 of this chapter.

*Potential electrical output capacity* means, for a unit, 33 percent of the unit’s maximum design heat input, divided by 3,413 Btu/kWh, divided by 1,000 kWh/MWh, and multiplied by 8,760 hr/yr.

*Receive* or *receipt of* means, when referring to the Administrator, to come into possession of a document, information, or correspondence (whether sent in hard copy or by authorized electronic transmission), as indicated in an official log, or by a notation made on the document, information, or correspondence, by the Administrator in the regular course of business.

*Recordation, record, or recorded* means, with regard to TR NO<sub>x</sub> Annual allowances, the moving of TR NO<sub>x</sub>

Annual allowances by the Administrator into, out of, or between Allowance Management System accounts, for purposes of allocation, auction, transfer, or deduction.

*Reference method* means any direct test method of sampling and analyzing for an air pollutant as specified in § 75.22 of this chapter.

*Replacement, replace, or replaced* means, with regard to a unit, the demolishing of a unit, or the permanent retirement and permanent disabling of a unit, and the construction of another unit (the replacement unit) to be used instead of the demolished or retired unit (the replaced unit).

*Sequential use of energy* means:

(1) The use of reject heat from electricity production in a useful thermal energy application or process; or

(2) The use of reject heat from useful thermal energy application or process in electricity production.

*Serial number* means, for a TR NO<sub>x</sub> Annual allowance, the unique identification number assigned to each TR NO<sub>x</sub> Annual allowance by the Administrator.

*Solid waste incineration unit* means a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine that is a "solid waste incineration unit" as defined in section 129(g)(1) of the Clean Air Act.

*Source* means all buildings, structures, or installations located in one or more contiguous or adjacent properties under common control of the same person or persons. This definition does not change or otherwise affect the definition of "major source", "stationary source", or "source" as set forth and implemented in a title V operating permit program or any other program under the Clean Air Act.

*State* means one of the States that is subject to the TR NO<sub>x</sub> Annual Trading Program pursuant to § 52.38(a) of this chapter.

*Submit* or *serve* means to send or transmit a document, information, or correspondence to the person specified in accordance with the applicable regulation:

- (1) In person;
- (2) By United States Postal Service; or
- (3) By other means of dispatch or transmission and delivery;
- (4) Provided that compliance with any "submission" or "service" deadline shall be determined by the date of dispatch, transmission, or mailing and not the date of receipt.

*Topping-cycle unit* means a unit in which the energy input to the unit is first used to produce useful power, including electricity, where at least

some of the reject heat from the electricity production is then used to provide useful thermal energy.

*Total energy input* means, for a unit, total energy of all forms supplied to the unit, excluding energy produced by the unit. Each form of energy supplied shall be measured by the lower heating value of that form of energy calculated as follows:

$$\text{LHV} = \text{HHV} - 10.55(\text{W} + 9\text{H})$$

Where:

LHV = lower heating value of the form of energy in Btu/lb,

HHV = higher heating value of the form of energy in Btu/lb,

W = weight % of moisture in the form of energy, and

H = weight % of hydrogen in the form of energy.

*Total energy output* means, for a unit, the sum of useful power and useful thermal energy produced by the unit.

*TR NO<sub>x</sub> Annual allowance* means a limited authorization issued and allocated or auctioned by the Administrator under this subpart, or by a State or permitting authority under a SIP revision approved by the Administrator under § 52.38(a)(3), (4), or (5) of this chapter, to emit one ton of NO<sub>x</sub> during a control period of the specified calendar year for which the authorization is allocated or auctioned or of any calendar year thereafter under the TR NO<sub>x</sub> Annual Trading Program.

*TR NO<sub>x</sub> Annual allowance deduction* or *deduct TR NO<sub>x</sub> Annual allowances* means the permanent withdrawal of TR NO<sub>x</sub> Annual allowances by the Administrator from a compliance account (e.g., in order to account for compliance with the TR NO<sub>x</sub> Annual emissions limitation) or from an assurance account (e.g., in order to account for compliance with the assurance provisions under §§ 97.406 and 97.425).

*TR NO<sub>x</sub> Annual allowances held* or *hold TR NO<sub>x</sub> Annual allowances* means the TR NO<sub>x</sub> Annual allowances treated as included in an Allowance Management System account as of a specified point in time because at that time they:

- (1) Have been recorded by the Administrator in the account or transferred into the account by a correctly submitted, but not yet recorded, TR NO<sub>x</sub> Annual allowance transfer in accordance with this subpart; and
- (2) Have not been transferred out of the account by a correctly submitted, but not yet recorded, TR NO<sub>x</sub> Annual allowance transfer in accordance with this subpart.

*TR NO<sub>x</sub> Annual emissions limitation* means, for a TR NO<sub>x</sub> Annual source, the

tonnage of NO<sub>x</sub> emissions authorized in a control period in a given year by the TR NO<sub>x</sub> Annual allowances available for deduction for the source under § 97.424(a) for such control period.

*TR NO<sub>x</sub> Annual source* means a source that includes one or more TR NO<sub>x</sub> Annual units.

*TR NO<sub>x</sub> Annual Trading Program* means a multi-state NO<sub>x</sub> air pollution control and emission reduction program established in accordance with this subpart and § 52.38(a) of this chapter (including such a program that is revised in a SIP revision approved by the Administrator under § 52.38(a)(3) or (4) of this chapter or that is established in a SIP revision approved by the Administrator under § 52.38(a)(5) of this chapter), as a means of mitigating interstate transport of fine particulates and NO<sub>x</sub>.

*TR NO<sub>x</sub> Annual unit* means a unit that is subject to the TR NO<sub>x</sub> Annual Trading Program.

*TR NO<sub>x</sub> Ozone Season Trading Program* means a multi-state NO<sub>x</sub> air pollution control and emission reduction program established in accordance with subpart BBBB of this part and § 52.38(b) of this chapter (including such a program that is revised in a SIP revision approved by the Administrator under § 52.38(b)(3) or (4) of this chapter or that is established in a SIP revision approved by the Administrator under § 52.38(b)(5) of this chapter), as a means of mitigating interstate transport of ozone and NO<sub>x</sub>.

*TR SO<sub>2</sub> Group 1 Trading Program* means a multi-state SO<sub>2</sub> air pollution control and emission reduction program established in accordance with subpart CCCC of this part and § 52.39(a), (b), (d) through (f), (j), and (k) of this chapter (including such a program that is revised in a SIP revision approved by the Administrator under § 52.39(d) or (e) of this chapter or that is established in a SIP revision approved by the Administrator under § 52.39(f) of this chapter), as a means of mitigating interstate transport of fine particulates and SO<sub>2</sub>.

*TR SO<sub>2</sub> Group 2 Trading Program* means a multi-state SO<sub>2</sub> air pollution control and emission reduction program established in accordance with subpart DDDD of this part and 52.39(a), (c), and (g) through (k) of this chapter (including such a program that is revised in a SIP revision approved by the Administrator under § 52.39(g) or (h) of this chapter or that is established in a SIP revision approved by the Administrator under § 52.39(i) of this chapter), as a means of mitigating interstate transport of fine particulates and SO<sub>2</sub>.

*Unit* means a stationary, fossil-fuel-fired boiler, stationary, fossil-fuel-fired combustion turbine, or other stationary, fossil-fuel-fired combustion device. A unit that undergoes a physical change or is moved to a different location or source shall continue to be treated as the same unit. A unit (the replaced unit) that is replaced by another unit (the replacement unit) at the same or a different source shall continue to be treated as the same unit, and the replacement unit shall be treated as a separate unit.

*Unit operating day* means, with regard to a unit, a calendar day in which the unit combusts any fuel.

*Unit operating hour or hour of unit operation* means, with regard to a unit, an hour in which the unit combusts any fuel.

*Useful power* means, with regard to a unit, electricity or mechanical energy that the unit makes available for use, excluding any such energy used in the power production process (which process includes, but is not limited to, any on-site processing or treatment of fuel combusted at the unit and any on-site emission controls).

*Useful thermal energy* means thermal energy that is:

(1) Made available to an industrial or commercial process (not a power production process), excluding any heat contained in condensate return or makeup water;

(2) Used in a heating application (*e.g.*, space heating or domestic hot water heating); or

(3) Used in a space cooling application (*i.e.*, in an absorption chiller).

*Utility power distribution system* means the portion of an electricity grid owned or operated by a utility and dedicated to delivering electricity to customers.

#### **§ 97.403 Measurements, abbreviations, and acronyms.**

Measurements, abbreviations, and acronyms used in this subpart are defined as follows:

Btu—British thermal unit  
 CO<sub>2</sub>—carbon dioxide  
 H<sub>2</sub>O—water  
 hr—hour  
 kW—kilowatt electrical  
 kWh—kilowatt hour  
 lb—pound  
 mmBtu—million Btu  
 MWe—megawatt electrical  
 MWh—megawatt hour  
 NO<sub>x</sub>—nitrogen oxides  
 O<sub>2</sub>—oxygen  
 ppm—parts per million  
 scfh—standard cubic feet per hour  
 SO<sub>2</sub>—sulfur dioxide  
 yr—year

#### **§ 97.404 Applicability.**

(a) Except as provided in paragraph (b) of this section:

(1) The following units in a State (and Indian country within the borders of such State) shall be TR NO<sub>x</sub> Annual units, and any source that includes one or more such units shall be a TR NO<sub>x</sub> Annual source, subject to the requirements of this subpart: any stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time, on or after January 1, 2005, a generator with nameplate capacity of more than 25 MWe producing electricity for sale.

(2) If a stationary boiler or stationary combustion turbine that, under paragraph (a)(1) of this section, is not a TR NO<sub>x</sub> Annual unit begins to combust fossil fuel or to serve a generator with nameplate capacity of more than 25 MWe producing electricity for sale, the unit shall become a TR NO<sub>x</sub> Annual unit as provided in paragraph (a)(1) of this section on the first date on which it both combusts fossil fuel and serves such generator.

(b) Any unit in a State (and Indian country within the borders of such State) that otherwise is a TR NO<sub>x</sub> Annual unit under paragraph (a) of this section and that meets the requirements set forth in paragraph (b)(1)(i) or (2)(i) of this section shall not be a TR NO<sub>x</sub> Annual unit:

(1)(i) Any unit:

(A) Qualifying as a cogeneration unit throughout the later of 2005 or the 12-month period starting on the date the unit first produces electricity and continuing to qualify as a cogeneration unit throughout each calendar year ending after the later of 2005 or such 12-month period; and

(B) Not supplying in 2005 or any calendar year thereafter more than one-third of the unit's potential electric output capacity or 219,000 MWh, whichever is greater, to any utility power distribution system for sale.

(ii) If, after qualifying under paragraph (b)(1)(i) of this section as not being a TR NO<sub>x</sub> Annual unit, a unit subsequently no longer meets all the requirements of paragraph (b)(1)(i) of this section, the unit shall become a TR NO<sub>x</sub> Annual unit starting on the earlier of January 1 after the first calendar year during which the unit first no longer qualifies as a cogeneration unit or January 1 after the first calendar year during which the unit no longer meets the requirements of paragraph (b)(1)(i)(B) of this section. The unit shall thereafter continue to be a TR NO<sub>x</sub> Annual unit.

(2)(i) Any unit:

(A) Qualifying as a solid waste incineration unit throughout the later of 2005 or the 12-month period starting on the date the unit first produces electricity and continuing to qualify as a solid waste incineration unit throughout each calendar year ending after the later of 2005 or such 12-month period; and

(B) With an average annual fuel consumption of fossil fuel for the first 3 consecutive calendar years of operation starting no earlier than 2005 of less than 20 percent (on a Btu basis) and an average annual fuel consumption of fossil fuel for any 3 consecutive calendar years thereafter of less than 20 percent (on a Btu basis).

(ii) If, after qualifying under paragraph (b)(2)(i) of this section as not being a TR NO<sub>x</sub> Annual unit, a unit subsequently no longer meets all the requirements of paragraph (b)(1)(i) of this section, the unit shall become a TR NO<sub>x</sub> Annual unit starting on the earlier of January 1 after the first calendar year during which the unit first no longer qualifies as a solid waste incineration unit or January 1 after the first 3 consecutive calendar years after 2005 for which the unit has an average annual fuel consumption of fossil fuel of 20 percent or more. The unit shall thereafter continue to be a TR NO<sub>x</sub> Annual unit.

(c) A certifying official of an owner or operator of any unit or other equipment may submit a petition (including any supporting documents) to the Administrator at any time for a determination concerning the applicability, under paragraphs (a) and (b) of this section or a SIP revision approved under § 52.38(a)(4) or (5) of this chapter, of the TR NO<sub>x</sub> Annual Trading Program to the unit or other equipment.

(1) Petition content. The petition shall be in writing and include the identification of the unit or other equipment and the relevant facts about the unit or other equipment. The petition and any other documents provided to the Administrator in connection with the petition shall include the following certification statement, signed by the certifying official: "I am authorized to make this submission on behalf of the owners and operators of the unit or other equipment for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements

and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.”

(2) Response. The Administrator will issue a written response to the petition and may request supplemental information determined by the Administrator to be relevant to such petition. The Administrator’s determination concerning the applicability, under paragraphs (a) and (b) of this section, of the TR NO<sub>x</sub> Annual Trading Program to the unit or other equipment shall be binding on any State or permitting authority unless the Administrator determines that the petition or other documents or information provided in connection with the petition contained significant, relevant errors or omissions.

#### § 97.405 Retired unit exemption.

(a)(1) Any TR NO<sub>x</sub> Annual unit that is permanently retired shall be exempt from § 97.406(b) and (c)(1), § 97.424, and §§ 97.430 through 97.435.

(2) The exemption under paragraph (a)(1) of this section shall become effective the day on which the TR NO<sub>x</sub> Annual unit is permanently retired. Within 30 days of the unit’s permanent retirement, the designated representative shall submit a statement to the Administrator. The statement shall state, in a format prescribed by the Administrator, that the unit was permanently retired on a specified date and will comply with the requirements of paragraph (b) of this section.

(b) Special provisions. (1) A unit exempt under paragraph (a) of this section shall not emit any NO<sub>x</sub>, starting on the date that the exemption takes effect.

(2) For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under paragraph (a) of this section shall retain, at the source that includes the unit, records demonstrating that the unit is permanently retired. The 5-year period for keeping records may be extended for cause, at any time before the end of the period, in writing by the Administrator. The owners and operators bear the burden of proof that the unit is permanently retired.

(3) The owners and operators and, to the extent applicable, the designated representative of a unit exempt under paragraph (a) of this section shall comply with the requirements of the TR NO<sub>x</sub> Annual Trading Program concerning all periods for which the

exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.

(4) A unit exempt under paragraph (a) of this section shall lose its exemption on the first date on which the unit resumes operation. Such unit shall be treated, for purposes of applying allocation, monitoring, reporting, and recordkeeping requirements under this subpart, as a unit that commences commercial operation on the first date on which the unit resumes operation.

#### § 97.406 Standard requirements.

(a) *Designated representative requirements.* The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with §§ 97.413 through 97.418.

(b) *Emissions monitoring, reporting, and recordkeeping requirements.*

(1) The owners and operators, and the designated representative, of each TR NO<sub>x</sub> Annual source and each TR NO<sub>x</sub> Annual unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of §§ 97.430 through 97.435.

(2) The emissions data determined in accordance with §§ 97.430 through 97.435 shall be used to calculate allocations of TR NO<sub>x</sub> Annual allowances under §§ 97.411(a)(2) and (b) and 97.412 and to determine compliance with the TR NO<sub>x</sub> Annual emissions limitation and assurance provisions under paragraph (c) of this section, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with §§ 97.430 through 97.435 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) *NO<sub>x</sub> emissions requirements.* (1) TR NO<sub>x</sub> Annual emissions limitation. (i) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NO<sub>x</sub> Annual source and each TR NO<sub>x</sub> Annual unit at the source shall hold, in the source’s compliance account, TR NO<sub>x</sub> Annual allowances available for deduction for such control period under § 97.424(a) in an amount not less than the tons of total NO<sub>x</sub> emissions for such control period from all TR NO<sub>x</sub> Annual units at the source.

(ii) If total NO<sub>x</sub> emissions during a control period in a given year from the TR NO<sub>x</sub> Annual units at a TR NO<sub>x</sub>

Annual source are in excess of the TR NO<sub>x</sub> Annual emissions limitation set forth in paragraph (c)(1)(i) of this section, then:

(A) The owners and operators of the source and each TR NO<sub>x</sub> Annual unit at the source shall hold the TR NO<sub>x</sub> Annual allowances required for deduction under § 97.424(d); and

(B) The owners and operators of the source and each TR NO<sub>x</sub> Annual unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart and the Clean Air Act.

(2) TR NO<sub>x</sub> Annual assurance provisions. (i) If total NO<sub>x</sub> emissions during a control period in a given year from all TR NO<sub>x</sub> Annual units at TR NO<sub>x</sub> Annual sources in a State (and Indian country within the borders of such State) exceed the State assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative’s share of such NO<sub>x</sub> emissions during such control period exceeds the common designated representative’s assurance level for the State and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR NO<sub>x</sub> Annual allowances available for deduction for such control period under § 97.425(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with § 97.425(b), of multiplying—

(A) The quotient of the amount by which the common designated representative’s share of such NO<sub>x</sub> emissions exceeds the common designated representative’s assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the State (and Indian country within the borders of such State) for such control period, by which each common designated representative’s share of such NO<sub>x</sub> emissions exceeds the respective common designated representative’s assurance level; and

(B) The amount by which total NO<sub>x</sub> emissions from all TR NO<sub>x</sub> Annual units at TR NO<sub>x</sub> Annual sources in the State (and Indian country within the borders of such State) for such control period exceed the State assurance level.

(ii) The owners and operators shall hold the TR NO<sub>x</sub> Annual allowances required under paragraph (c)(2)(i) of this section, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.

(iii) Total NO<sub>x</sub> emissions from all TR NO<sub>x</sub> Annual units at TR NO<sub>x</sub> Annual sources in a State (and Indian country within the borders of such State) during a control period in a given year exceed the State assurance level if such total NO<sub>x</sub> emissions exceed the sum, for such control period, of the State NO<sub>x</sub> Annual trading budget under § 97.410(a) and the State's variability limit under § 97.410(b).

(iv) It shall not be a violation of this subpart or of the Clean Air Act if total NO<sub>x</sub> emissions from all TR NO<sub>x</sub> Annual units at TR NO<sub>x</sub> Annual sources in a State (and Indian country within the borders of such State) during a control period exceed the State assurance level or if a common designated representative's share of total NO<sub>x</sub> emissions from the TR NO<sub>x</sub> Annual units at TR NO<sub>x</sub> Annual sources in a State (and Indian country within the borders of such State) during a control period exceeds the common designated representative's assurance level.

(v) To the extent the owners and operators fail to hold TR NO<sub>x</sub> Annual allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) of this section,

(A) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and

(B) Each TR NO<sub>x</sub> Annual allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) of this section and each day of such control period shall constitute a separate violation of this subpart and the Clean Air Act.

(3) Compliance periods. A TR NO<sub>x</sub> Annual unit shall be subject to the requirements under paragraphs (c)(1) and (c)(2) of this section for the control period starting on the later of January 1, 2012 or the deadline for meeting the unit's monitor certification requirements under § 97.430(b) and for each control period thereafter.

(4) Vintage of allowances held for compliance. (i) A TR NO<sub>x</sub> Annual allowance held for compliance with the requirements under paragraph (c)(1)(i) of this section for a control period in a given year must be a TR NO<sub>x</sub> Annual allowance that was allocated for such

control period or a control period in a prior year.

(ii) A TR NO<sub>x</sub> Annual allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) of this section for a control period in a given year must be a TR NO<sub>x</sub> Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

(5) Allowance Management System requirements. Each TR NO<sub>x</sub> Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with this subpart.

(6) Limited authorization. A TR NO<sub>x</sub> Annual allowance is a limited authorization to emit one ton of NO<sub>x</sub> during the control period in one year. Such authorization is limited in its use and duration as follows:

(i) Such authorization shall only be used in accordance with the TR NO<sub>x</sub> Annual Trading Program; and

(ii) Notwithstanding any other provision of this subpart, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

(7) Property right. A TR NO<sub>x</sub> Annual allowance does not constitute a property right.

(d) *Title V permit requirements.* (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR NO<sub>x</sub> Annual allowances in accordance with this subpart.

(2) A description of whether a unit is required to monitor and report NO<sub>x</sub> emissions using a continuous emission monitoring system (under subpart H of part 75 of this chapter), an excepted monitoring system (under appendices D and E to part 75 of this chapter), a low mass emissions excepted monitoring methodology (under § 75.19 of this chapter), or an alternative monitoring system (under subpart E of part 75 of this chapter) in accordance with §§ 97.430 through 97.435 may be added to, or changed in, a title V permit using minor permit modification procedures in accordance with §§ 70.7(e)(2) and 71.7(e)(1) of this chapter, provided that the requirements applicable to the described monitoring and reporting (as added or changed, respectively) are already incorporated in such permit. This paragraph explicitly provides that the addition of, or change to, a unit's description as described in the prior sentence is eligible for minor permit

modification procedures in accordance with §§ 70.7(e)(2)(i)(B) and 71.7(e)(1)(i)(B) of this chapter.

(e) *Additional recordkeeping and reporting requirements.* (1) Unless otherwise provided, the owners and operators of each TR NO<sub>x</sub> Annual source and each TR NO<sub>x</sub> Annual unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.

(i) The certificate of representation under § 97.416 for the designated representative for the source and each TR NO<sub>x</sub> Annual unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under § 97.416 changing the designated representative.

(ii) All emissions monitoring information, in accordance with this subpart.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR NO<sub>x</sub> Annual Trading Program.

(2) The designated representative of a TR NO<sub>x</sub> Annual source and each TR NO<sub>x</sub> Annual unit at the source shall make all submissions required under the TR NO<sub>x</sub> Annual Trading Program, except as provided in § 97.418. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in parts 70 and 71 of this chapter.

(f) *Liability.* (1) Any provision of the TR NO<sub>x</sub> Annual Trading Program that applies to a TR NO<sub>x</sub> Annual source or the designated representative of a TR NO<sub>x</sub> Annual source shall also apply to the owners and operators of such source and of the TR NO<sub>x</sub> Annual units at the source.

(2) Any provision of the TR NO<sub>x</sub> Annual Trading Program that applies to a TR NO<sub>x</sub> Annual unit or the designated representative of a TR NO<sub>x</sub> Annual unit shall also apply to the owners and operators of such unit.

(g) *Effect on other authorities.* No provision of the TR NO<sub>x</sub> Annual Trading Program or exemption under

§ 97.405 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR NO<sub>x</sub> Annual source or TR NO<sub>x</sub> Annual unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

**§ 97.407 Computation of time.**

(a) Unless otherwise stated, any time period scheduled, under the TR NO<sub>x</sub> Annual Trading Program, to begin on the occurrence of an act or event shall begin on the day the act or event occurs.

(b) Unless otherwise stated, any time period scheduled, under the TR NO<sub>x</sub> Annual Trading Program, to begin before the occurrence of an act or event shall be computed so that the period ends the day before the act or event occurs.

(c) Unless otherwise stated, if the final day of any time period, under the TR NO<sub>x</sub> Annual Trading Program, is not a business day, the time period shall be extended to the next business day.

**§ 97.408 Administrative appeal procedures.**

The administrative appeal procedures for decisions of the Administrator under

the TR NO<sub>x</sub> Annual Trading Program are set forth in part 78 of this chapter.

**§ 97.409 [Reserved]**

**§ 97.410 State NO<sub>x</sub> Annual trading budgets, new unit set-asides, Indian country new unit set-aside, and variability limits.**

(a) The State NO<sub>x</sub> Annual trading budgets, new unit set-asides, and Indian country new unit set-asides for allocations of TR NO<sub>x</sub> Annual allowances for the control periods in 2012 and thereafter are as follows:

State	NO <sub>x</sub> Annual trading budget (tons)* for 2012 and 2013	New unit set-aside (tons) for 2012 and 2013	Indian country new unit set-aside (tons) for 2012 and 2013
Alabama	72,691	1,454	
Georgia	62,010	1,240	
Illinois	47,872	3,830	
Indiana	109,726	3,292	
Iowa	38,335	729	38
Kansas	30,714	583	31
Kentucky	85,086	3,403	
Maryland	16,633	333	
Michigan	60,193	1,144	60
Minnesota	29,572	561	30
Missouri	52,374	1,571	
Nebraska	26,440	1,825	26
New Jersey	7,266	145	
New York	17,543	508	18
North Carolina	50,587	2,984	51
Ohio	92,703	1,854	
Pennsylvania	119,986	2,400	
South Carolina	32,498	617	33
Tennessee	35,703	714	
Texas	133,595	3,874	134
Virginia	33,242	1,662	
West Virginia	59,472	2,974	
Wisconsin	31,628	1,866	32

State	NO <sub>x</sub> Annual trading budget (tons)* for 2014 and thereafter	New unit set-aside (tons) for 2014 and thereafter	Indian country new unit set-aside (tons) for 2014 and thereafter
Alabama	71,962	1,439	
Georgia	40,540	811	
Illinois	47,872	3,830	
Indiana	108,424	3,253	
Iowa	37,498	712	38
Kansas	25,560	485	26
Kentucky	77,238	3,090	
Maryland	16,574	331	
Michigan	57,812	1,098	58
Minnesota	29,572	561	30
Missouri	48,717	1,462	
Nebraska	26,440	1,825	26
New Jersey	7,266	145	
New York	17,543	508	18
North Carolina	41,553	2,451	42
Ohio	87,493	1,750	
Pennsylvania	119,194	2,384	
South Carolina	32,498	617	33
Tennessee	19,337	387	

State	NO <sub>x</sub> Annual trading budget (tons)* for 2014 and thereafter	New unit set-aside (tons) for 2014 and thereafter	Indian country new unit set-aside (tons) for 2014 and thereafter
Texas .....	133,595	3,874	134
Virginia .....	33,242	1,662	.....
West Virginia .....	54,582	2,729	.....
Wisconsin .....	30,398	1,794	30

\* Each trading budget includes the new unit set-aside and, where applicable, the Indian country new unit set-aside and does not include the variability limit.

(b) The States' variability limits for the State NO<sub>x</sub> Annual trading budgets for the control periods in 2012 and thereafter are as follows:

State	Variability limits for 2012 and 2013	Variability limits for 2014 and thereafter
Alabama .....	13,084	12,953
Georgia .....	11,162	7,297
Illinois .....	8,617	8,617
Indiana .....	19,751	19,516
Iowa .....	6,900	6,750
Kansas .....	5,529	4,601
Kentucky .....	15,315	13,903
Maryland .....	2,994	2,983
Michigan .....	10,835	10,406
Minnesota .....	5,323	5,323
Missouri .....	9,427	8,769
Nebraska .....	4,759	4,759
New Jersey .....	1,308	1,308
New York .....	3,158	3,158
North Carolina .....	9,106	7,480
Ohio .....	16,687	15,749
Pennsylvania .....	21,597	21,455
South Carolina .....	5,850	5,850
Tennessee .....	6,427	3,481
Texas .....	24,047	24,047
Virginia .....	5,984	5,984
West Virginia .....	10,705	9,825
Wisconsin .....	5,693	5,472

**§ 97.411 Timing requirements for TR NO<sub>x</sub> Annual allowance allocations.**

(a) *Existing units.* (1) TR NO<sub>x</sub> Annual allowances are allocated, for the control periods in 2012 and each year thereafter, as provided in a notice of data availability issued by the Administrator. Providing an allocation to a unit in such notice does not constitute a determination that the unit is a TR NO<sub>x</sub> Annual unit, and not providing an allocation to a unit in such notice does not constitute a determination that the unit is not a TR NO<sub>x</sub> Annual unit.

(2) Notwithstanding paragraph (a)(1) of this section, if a unit provided an allocation in the notice of data availability issued under paragraph (a)(1) of this section does not operate, starting after 2011, during the control period in two consecutive years, such unit will not be allocated the TR NO<sub>x</sub> Annual allowances provided in such notice for the unit for the control

periods in the fifth year after the first such year and in each year after that fifth year. All TR NO<sub>x</sub> Annual allowances that would otherwise have been allocated to such unit will be allocated to the new unit set-aside for the State where such unit is located and for the respective years involved. If such unit resumes operation, the Administrator will allocate TR NO<sub>x</sub> Annual allowances to the unit in accordance with paragraph (b) of this section.

(b) *New units.* (1) New unit set-asides. (i) By June 1, 2012 and June 1 of each year thereafter, the Administrator will calculate the TR NO<sub>x</sub> Annual allowance allocation to each TR NO<sub>x</sub> Annual unit in a State, in accordance with § 97.412(a)(2) through (7) and (12), for the control period in the year of the applicable calculation deadline under this paragraph and will promulgate a notice of data availability of the results of the calculations.

(ii) For each notice of data availability required in paragraph (b)(1)(i) of this section, the Administrator will provide an opportunity for submission of objections to the calculations referenced in such notice.

(A) Objections shall be submitted by the deadline specified in each notice of data availability required in paragraph (b)(1)(i) of this section and shall be limited to addressing whether the calculations (including the identification of the TR NO<sub>x</sub> Annual units) are in accordance with § 97.412(a)(2) through (7) and (12) and §§ 97.406(b)(2) and 97.430 through 97.435.

(B) The Administrator will adjust the calculations to the extent necessary to ensure that they are in accordance with the provisions referenced in paragraph (b)(1)(ii)(A) of this section. By August 1 immediately after the promulgation of each notice of data availability required in paragraph (b)(1)(i) of this section, the

Administrator will promulgate a notice of data availability of any adjustments that the Administrator determines to be necessary with regard to allocations under § 97.412(a)(2) through (7) and (12) and the reasons for accepting or rejecting any objections submitted in accordance with paragraph (b)(1)(ii)(A) of this section.

(iii) If the new unit set-aside for such control period contains any TR NO<sub>x</sub> Annual allowances that have not been allocated in the applicable notice of data availability required in paragraph (b)(1)(ii) of this section, the Administrator will promulgate, by December 15 immediately after such notice, a notice of data availability that identifies any TR NO<sub>x</sub> Annual units that commenced commercial operation during the period starting January 1 of the year before the year of such control period and ending November 30 of year of such control period.

(iv) For each notice of data availability required in paragraph (b)(1)(iii) of this section, the Administrator will provide an opportunity for submission of objections to the identification of TR NO<sub>x</sub> annual units in such notice.

(A) Objections shall be submitted by the deadline specified in each notice of data availability required in paragraph (b)(1)(iii) of this section and shall be limited to addressing whether the identification of TR NO<sub>x</sub> annual units in such notice is in accordance with paragraph (b)(1)(iii) of this section.

(B) The Administrator will adjust the identification of TR NO<sub>x</sub> Annual units in the each notice of data availability required in paragraph (b)(1)(iii) of this section to the extent necessary to ensure that it is in accordance with paragraph (b)(1)(iii) of this section and will calculate the TR NO<sub>x</sub> Annual allowance allocation to each TR NO<sub>x</sub> Annual unit in accordance with § 97.412(a)(9), (10), and (12) and §§ 97.406(b)(2) and 97.430 through 97.435. By February 15 immediately after the promulgation of each notice of data availability required in paragraph (b)(1)(iii) of this section, the Administrator will promulgate a notice of data availability of any adjustments of the identification of TR NO<sub>x</sub> Annual units that the Administrator determines to be necessary, the reasons for accepting or rejecting any objections submitted in accordance with paragraph (b)(1)(iv)(A) of this section, and the results of such calculations.

(v) To the extent any TR NO<sub>x</sub> Annual allowances are added to the new unit set-aside after promulgation of each notice of data availability required in paragraph (b)(1)(iv) of this section, the

Administrator will promulgate additional notices of data availability, as deemed appropriate, of the allocation of such TR NO<sub>x</sub> Annual allowances in accordance with § 97.412(a)(10).

(2) Indian country new unit set-asides. (i) By June 1, 2012 and June 1 of each year thereafter, the Administrator will calculate the TR NO<sub>x</sub> Annual allowance allocation to each TR NO<sub>x</sub> Annual unit in Indian country within the borders of a State, in accordance with § 97.412(b)(2) through (7) and (12), for the control period in the year of the applicable calculation deadline under this paragraph and will promulgate a notice of data availability of the results of the calculations.

(ii) For each notice of data availability required in paragraph (b)(2)(i) of this section, the Administrator will provide an opportunity for submission of objections to the calculations referenced in such notice.

(A) Objections shall be submitted by the deadline specified in each notice of data availability required in paragraph (b)(2)(i) of this section and shall be limited to addressing whether the calculations (including the identification of the TR NO<sub>x</sub> Annual units) are in accordance with § 97.412(b)(2) through (7) and (12) and §§ 97.406(b)(2) and 97.430 through 97.435.

(B) The Administrator will adjust the calculations to the extent necessary to ensure that they are in accordance with the provisions referenced in paragraph (b)(2)(ii)(A) of this section. By August 1 immediately after the promulgation of each notice of data availability required in paragraph (b)(2)(i) of this section, the Administrator will promulgate a notice of data availability of any adjustments that the Administrator determines to be necessary with regard to allocations under § 97.412(b)(2) through (7) and (12) and the reasons for accepting or rejecting any objections submitted in accordance with paragraph (b)(2)(ii)(A) of this section.

(iii) If the Indian country new unit set-aside for such control period contains any TR NO<sub>x</sub> Annual allowances that have not been allocated in the applicable notice of data availability required in paragraph (b)(2)(ii) of this section, the Administrator will promulgate, by December 15 immediately after such notice, a notice of data availability that identifies any TR NO<sub>x</sub> Annual units that commenced commercial operation during the period starting January 1 of the year before the year of such control period and ending November 30 of year of such control period.

(iv) For each notice of data availability required in paragraph (b)(2)(iii) of this section, the Administrator will provide an opportunity for submission of objections to the identification of TR NO<sub>x</sub> annual units in such notice.

(A) Objections shall be submitted by the deadline specified in each notice of data availability required in paragraph (b)(2)(iii) of this section and shall be limited to addressing whether the identification of TR NO<sub>x</sub> annual units in such notice is in accordance with paragraph (b)(2)(iii) of this section.

(B) The Administrator will adjust the identification of TR NO<sub>x</sub> Annual units in the each notice of data availability required in paragraph (b)(2)(iii) of this section to the extent necessary to ensure that it is in accordance with paragraph (b)(2)(iii) of this section and will calculate the TR NO<sub>x</sub> Annual allowance allocation to each TR NO<sub>x</sub> Annual unit in accordance with § 97.412(b)(9), (10), and (12) and §§ 97.406(b)(2) and 97.430 through 97.435. By February 15 immediately after the promulgation of each notice of data availability required in paragraph (b)(2)(iii) of this section, the Administrator will promulgate a notice of data availability of any adjustments of the identification of TR NO<sub>x</sub> Annual units that the Administrator determines to be necessary, the reasons for accepting or rejecting any objections submitted in accordance with paragraph (b)(2)(iv)(A) of this section, and the results of such calculations.

(v) To the extent any TR NO<sub>x</sub> Annual allowances are added to the Indian country new unit set-aside after promulgation of each notice of data availability required in paragraph (b)(2)(iv) of this section, the Administrator will promulgate additional notices of data availability, as deemed appropriate, of the allocation of such TR NO<sub>x</sub> Annual allowances in accordance with § 97.412(b)(10).

(c) *Units incorrectly allocated TR NO<sub>x</sub> Annual allowances.* (1) For each control period in 2012 and thereafter, if the Administrator determines that TR NO<sub>x</sub> Annual allowances were allocated under paragraph (a) of this section, or under a provision of a SIP revision approved under § 52.38(a)(3), (4), or (5) of this chapter, where such control period and the recipient are covered by the provisions of paragraph (c)(1)(i) of this section or were allocated under § 97.412(a)(2) through (7), (9), and (12) and (b)(2) through (7), (9), and (12), or under a provision of a SIP revision approved under § 52.38(a)(4) or (5) of this chapter, where such control period and the recipient are covered by the



provisions of paragraph (c)(1)(ii) of this section, then the Administrator will notify the designated representative of the recipient and will act in accordance with the procedures set forth in paragraphs (c)(2) through (5) of this section:

(i)(A) The recipient is not actually a TR NO<sub>x</sub> Annual unit under § 97.404 as of January 1, 2012 and is allocated TR NO<sub>x</sub> Annual allowances for such control period or, in the case of an allocation under a provision of a SIP revision approved under § 52.38(a)(3), (4), or (5) of this chapter, the recipient is not actually a TR NO<sub>x</sub> Annual unit as of January 1, 2012 and is allocated TR NO<sub>x</sub> Annual allowances for such control period that the SIP revision provides should be allocated only to recipients that are TR NO<sub>x</sub> Annual units as of January 1, 2012; or

(B) The recipient is not located as of January 1 of the control period in the State from whose NO<sub>x</sub> Annual trading budget the TR NO<sub>x</sub> Annual allowances allocated under paragraph (a) of this section, or under a provision of a SIP revision approved under § 52.38(a)(3), (4), or (5) of this chapter, were allocated for such control period.

(ii) The recipient is not actually a TR NO<sub>x</sub> Annual unit under § 97.404 as of January 1 of such control period and is allocated TR NO<sub>x</sub> Annual allowances for such control period or, in the case of an allocation under a provision of a SIP revision approved under § 52.38(a)(3), (4), or (5) of this chapter, the recipient is not actually a TR NO<sub>x</sub> Annual unit as of January 1 of such control period and is allocated TR NO<sub>x</sub> Annual allowances for such control period that the SIP revision provides should be allocated only to recipients that are TR NO<sub>x</sub> Annual units as of January 1 of such control period.

(2) Except as provided in paragraph (c)(3) or (4) of this section, the Administrator will not record such TR NO<sub>x</sub> Annual allowances under § 97.421.

(3) If the Administrator already recorded such TR NO<sub>x</sub> Annual allowances under § 97.421 and if the Administrator makes the determination under paragraph (c)(1) of this section before making deductions for the source that includes such recipient under § 97.424(b) for such control period, then the Administrator will deduct from the account in which such TR NO<sub>x</sub> Annual allowances were recorded an amount of TR NO<sub>x</sub> Annual allowances allocated for the same or a prior control period equal to the amount of such already recorded TR NO<sub>x</sub> Annual allowances. The authorized account representative shall ensure that there are sufficient TR NO<sub>x</sub> Annual allowances in such

account for completion of the deduction.

(4) If the Administrator already recorded such TR NO<sub>x</sub> Annual allowances under § 97.421 and if the Administrator makes the determination under paragraph (c)(1) of this section after making deductions for the source that includes such recipient under § 97.424(b) for such control period, then the Administrator will not make any deduction to take account of such already recorded TR NO<sub>x</sub> Annual allowances.

(5)(i) With regard to the TR NO<sub>x</sub> Annual allowances that are not recorded, or that are deducted as an incorrect allocation, in accordance with paragraphs (c)(2) and (3) of this section for a recipient under paragraph (c)(1)(i) of this section, the Administrator will:

(A) Transfer such TR NO<sub>x</sub> Annual allowances to the new unit set-aside for such control period for the State from whose NO<sub>x</sub> Annual trading budget the TR NO<sub>x</sub> Annual allowances were allocated; or

(B) If the State has a SIP revision approved under § 52.38(a)(4) or (5) covering such control period, include such TR NO<sub>x</sub> Annual allowances in the portion of the State NO<sub>x</sub> Annual trading budget that may be allocated for such control period in accordance with such SIP revision.

(ii) With regard to the TR NO<sub>x</sub> Annual allowances that were not allocated from the Indian country new unit set-aside for such control period and that are not recorded, or that are deducted as an incorrect allocation, in accordance with paragraphs (c)(2) and (3) of this section for a recipient under paragraph (c)(1)(ii) of this paragraph, the Administrator will:

(A) Transfer such TR NO<sub>x</sub> Annual allowances to the new unit set-aside for such control period; or

(B) If the State has a SIP revision approved under § 52.38(a)(4) or (5) covering such control period, include such TR NO<sub>x</sub> Annual allowances in the portion of the State NO<sub>x</sub> Annual trading budget that may be allocated for such control period in accordance with such SIP revision.

(iii) With regard to the TR NO<sub>x</sub> Annual allowances that were allocated from the Indian country new unit set-aside for such control period and that are not recorded, or that are deducted as an incorrect allocation, in accordance with paragraphs (c)(2) and (3) of this section for a recipient under paragraph (c)(1)(ii) of this paragraph, the Administrator will transfer such TR NO<sub>x</sub> Annual allowances to the Indian country new unit set-aside for such control period.

#### **§ 97.412 TR NO<sub>x</sub> Annual allowance allocations to new units.**

(a) For each control period in 2012 and thereafter and for the TR NO<sub>x</sub> Annual units in each State, the Administrator will allocate TR NO<sub>x</sub> Annual allowances to the TR NO<sub>x</sub> Annual units as follows:

(1) The TR NO<sub>x</sub> Annual allowances will be allocated to the following TR NO<sub>x</sub> Annual units, except as provided in paragraph (a)(10) of this section:

(i) TR NO<sub>x</sub> Annual units that are not allocated an amount of TR NO<sub>x</sub> Annual allowances in the notice of data availability issued under § 97.411(a)(1);

(ii) TR NO<sub>x</sub> Annual units whose allocation of an amount of TR NO<sub>x</sub> Annual allowances for such control period in the notice of data availability issued under § 97.411(a)(1) is covered by § 97.411(c)(2) or (3);

(iii) TR NO<sub>x</sub> Annual units that are allocated an amount of TR NO<sub>x</sub> Annual allowances for such control period in the notice of data availability issued under § 97.411(a)(1), which allocation is terminated for such control period pursuant to § 97.411(a)(2), and that operate during the control period immediately preceding such control period; or

(iv) For purposes of paragraph (a)(9) of this section, TR NO<sub>x</sub> Annual units under § 97.411(c)(1)(ii) whose allocation of an amount of TR NO<sub>x</sub> Annual allowances for such control period in the notice of data availability issued under § 97.411(b)(1)(ii)(B) is covered by § 97.411(c)(2) or (3).

(2) The Administrator will establish a separate new unit set-aside for the State for each such control period. Each such new unit set-aside will be allocated TR NO<sub>x</sub> Annual allowances in an amount equal to the applicable amount of tons of NO<sub>x</sub> emissions as set forth in § 97.410(a) and will be allocated additional TR NO<sub>x</sub> Annual allowances (if any) in accordance with §§ 97.411(a)(2) and (c)(5) and paragraph (b)(10) of this section.

(3) The Administrator will determine, for each TR NO<sub>x</sub> Annual unit described in paragraph (a)(1) of this section, an allocation of TR NO<sub>x</sub> Annual allowances for the later of the following control periods and for each subsequent control period:

(i) The control period in 2012;

(ii) The first control period after the control period in which the TR NO<sub>x</sub> Annual unit commences commercial operation;

(iii) For a unit described in paragraph (a)(1)(ii) of this section, the first control period in which the TR NO<sub>x</sub> Annual unit operates in the State after operating in another jurisdiction and for which

the unit is not already allocated one or more TR NO<sub>x</sub> Annual allowances; and

(iv) For a unit described in paragraph (a)(1)(iii) of this section, the first control period after the control period in which the unit resumes operation.

(4)(i) The allocation to each TR NO<sub>x</sub> annual unit described in paragraph (a)(1)(i) through (iii) of this section and for each control period described in paragraph (a)(3) of this section will be an amount equal to the unit's total tons of NO<sub>x</sub> emissions during the immediately preceding control period.

(ii) The Administrator will adjust the allocation amount in paragraph (a)(4)(i) in accordance with paragraphs (a)(5) through (7) and (12) of this section.

(5) The Administrator will calculate the sum of the TR NO<sub>x</sub> Annual allowances determined for all such TR NO<sub>x</sub> Annual units under paragraph (a)(4)(i) of this section in the State for such control period.

(6) If the amount of TR NO<sub>x</sub> Annual allowances in the new unit set-aside for the State for such control period is greater than or equal to the sum under paragraph (a)(5) of this section, then the Administrator will allocate the amount of TR NO<sub>x</sub> Annual allowances determined for each such TR NO<sub>x</sub> Annual unit under paragraph (a)(4)(i) of this section.

(7) If the amount of TR NO<sub>x</sub> Annual allowances in the new unit set-aside for the State for such control period is less than the sum under paragraph (a)(5) of this section, then the Administrator will allocate to each such TR NO<sub>x</sub> Annual unit the amount of the TR NO<sub>x</sub> Annual allowances determined under paragraph (a)(4)(i) of this section for the unit, multiplied by the amount of TR NO<sub>x</sub> Annual allowances in the new unit set-aside for such control period, divided by the sum under paragraph (a)(5) of this section, and rounded to the nearest allowance.

(8) The Administrator will notify the public, through the promulgation of the notices of data availability described in § 97.411(b)(1)(i) and (ii), of the amount of TR NO<sub>x</sub> Annual allowances allocated under paragraphs (a)(2) through (7) and (12) of this section for such control period to each TR NO<sub>x</sub> Annual unit eligible for such allocation.

(9) If, after completion of the procedures under paragraphs (a)(5) through (8) of this section for such control period, any unallocated TR NO<sub>x</sub> Annual allowances remain in the new unit set-aside for the State for such control period, the Administrator will allocate such TR NO<sub>x</sub> Annual allowances as follows—

(i) The Administrator will determine, for each unit described in paragraph

(a)(1) of this section that commenced commercial operation during the period starting January 1 of the year before the year of such control period and ending November 30 of year of such control period, the positive difference (if any) between the unit's emissions during such control period and the amount of TR NO<sub>x</sub> Annual allowances referenced in the notice of data availability required under § 97.411(b)(1)(ii) for the unit for such control period;

(ii) The Administrator will determine the sum of the positive differences determined under paragraph (a)(9)(i) of this section;

(iii) If the amount of unallocated TR NO<sub>x</sub> Annual allowances remaining in the new unit set-aside for the State for such control period is greater than or equal to the sum determined under paragraph (a)(9)(ii) of this section, then the Administrator will allocate the amount of TR NO<sub>x</sub> Annual allowances determined for each such TR NO<sub>x</sub> Annual unit under paragraph (a)(9)(i) of this section; and

(iv) If the amount of unallocated TR NO<sub>x</sub> Annual allowances remaining in the new unit set-aside for the State for such control period is less than the sum under paragraph (a)(9)(ii) of this section, then the Administrator will allocate to each such TR NO<sub>x</sub> Annual unit the amount of the TR NO<sub>x</sub> Annual allowances determined under paragraph (a)(9)(i) of this section for the unit, multiplied by the amount of unallocated TR NO<sub>x</sub> Annual allowances remaining in the new unit set-aside for such control period, divided by the sum under paragraph (a)(9)(ii) of this section, and rounded to the nearest allowance.

(10) If, after completion of the procedures under paragraphs (a)(9) and (12) of this section for such control period, any unallocated TR NO<sub>x</sub> Annual allowances remain in the new unit set-aside for the State for such control period, the Administrator will allocate to each TR NO<sub>x</sub> Annual unit that is in the State, is allocated an amount of TR NO<sub>x</sub> Annual allowances in the notice of data availability issued under § 97.411(a)(1), and continues to be allocated TR NO<sub>x</sub> Annual allowances for such control period in accordance with § 97.411(a)(2), an amount of TR NO<sub>x</sub> Annual allowances equal to the following: the total amount of such remaining unallocated TR NO<sub>x</sub> Annual allowances in such new unit set-aside, multiplied by the unit's allocation under § 97.411(a) for such control period, divided by the remainder of the amount of tons in the applicable State NO<sub>x</sub> Annual trading budget minus the sum of the amounts of tons in such new unit set-aside and the Indian country

new unit set-aside for the State for such control period, and rounded to the nearest allowance.

(11) The Administrator will notify the public, through the promulgation of the notices of data availability described in § 97.411(b)(1)(iii), (iv), and (v), of the amount of TR NO<sub>x</sub> Annual allowances allocated under paragraphs (a)(9), (10), and (12) of this section for such control period to each TR NO<sub>x</sub> Annual unit eligible for such allocation.

(12)(i) Notwithstanding the requirements of paragraphs (a)(2) through (11) of this section, if the calculations of allocations of a new unit set-aside for a control period in a given year under paragraph (a)(7) of this section, paragraphs (a)(6) and (9)(iv) of this section, or paragraphs (a)(6), (9)(iii), and (10) of this section would otherwise result in total allocations of such new unit set-aside exceeding the total amount of such new unit set-aside, then the Administrator will adjust the results of the calculations under paragraph (a)(7), (9)(iv), or (10) of this section, as applicable, as follows. The Administrator will list the TR NO<sub>x</sub> Annual units in descending order based on the amount of such units' allocations under paragraph (a)(7), (9)(iv), or (10) of this section, as applicable, and, in cases of equal allocation amounts, in alphabetical order of the relevant source's name and numerical order of the relevant unit's identification number, and will reduce each unit's allocation under paragraph (a)(7), (9)(iv), or (10) of this section, as applicable, by one TR NO<sub>x</sub> Annual allowance (but not below zero) in the order in which the units are listed and will repeat this reduction process as necessary, until the total allocations of such new unit set-aside equal the total amount of such new unit set-aside.

(ii) Notwithstanding the requirements of paragraphs (a)(10) and (11) of this section, if the calculations of allocations of a new unit set-aside for a control period in a given year under paragraphs (a)(6), (9)(iii), and (10) of this section would otherwise result in a total allocations of such new unit set-aside less than the total amount of such new unit set-aside, then the Administrator will adjust the results of the calculations under paragraph (a)(10) of this section, as follows. The Administrator will list the TR NO<sub>x</sub> Annual units in descending order based on the amount of such units' allocations under paragraph (a)(10) of this section and, in cases of equal allocation amounts, in alphabetical order of the relevant source's name and numerical order of the relevant unit's identification number, and will increase each unit's

allocation under paragraph (a)(10) of this section by one TR NO<sub>x</sub> Annual allowance in the order in which the units are listed and will repeat this increase process as necessary, until the total allocations of such new unit set-aside equal the total amount of such new unit set-aside.

(b) For each control period in 2012 and thereafter and for the TR NO<sub>x</sub> Annual units located in Indian country within the borders of each State, the Administrator will allocate TR NO<sub>x</sub> Annual allowances to the TR NO<sub>x</sub> Annual units as follows:

(1) The TR NO<sub>x</sub> Annual allowances will be allocated to the following TR NO<sub>x</sub> Annual units, except as provided in paragraph (b)(10) of this section:

(i) TR NO<sub>x</sub> Annual units that are not allocated an amount of TR NO<sub>x</sub> Annual allowances in the notice of data availability issued under § 97.411(a)(1); or

(ii) For purposes of paragraph (b)(9) of this section, TR NO<sub>x</sub> Annual units under § 97.411(c)(1)(ii) whose allocation of an amount of TR NO<sub>x</sub> Annual allowances for such control period in the notice of data availability issued under § 97.411(b)(2)(ii)(B) is covered by § 97.411(c)(2) or (3).

(2) The Administrator will establish a separate Indian country new unit set-aside for the State for each such control period. Each such Indian country new unit set-aside will be allocated TR NO<sub>x</sub> Annual allowances in an amount equal to the applicable amount of tons of NO<sub>x</sub> emissions as set forth in § 97.410(a) and will be allocated additional TR NO<sub>x</sub> Annual allowances (if any) in accordance with § 97.411(c)(5).

(3) The Administrator will determine, for each TR NO<sub>x</sub> Annual unit described in paragraph (b)(1) of this section, an allocation of TR NO<sub>x</sub> Annual allowances for the later of the following control periods and for each subsequent control period:

(i) The control period in 2012; and

(ii) The first control period after the control period in which the TR NO<sub>x</sub> Annual unit commences commercial operation.

(4)(i) The allocation to each TR NO<sub>x</sub> annual unit described in paragraph (b)(1)(i) of this section and for each control period described in paragraph (b)(3) of this section will be an amount equal to the unit's total tons of NO<sub>x</sub> emissions during the immediately preceding control period.

(ii) The Administrator will adjust the allocation amount in paragraph (b)(4)(i) in accordance with paragraphs (b)(5) through (7) and (12) of this section.

(5) The Administrator will calculate the sum of the TR NO<sub>x</sub> Annual

allowances determined for all such TR NO<sub>x</sub> Annual units under paragraph (b)(4)(i) of this section in Indian country within the borders of the State for such control period.

(6) If the amount of TR NO<sub>x</sub> Annual allowances in the Indian country new unit set-aside for the State for such control period is greater than or equal to the sum under paragraph (b)(5) of this section, then the Administrator will allocate the amount of TR NO<sub>x</sub> Annual allowances determined for each such TR NO<sub>x</sub> Annual unit under paragraph (b)(4)(i) of this section.

(7) If the amount of TR NO<sub>x</sub> Annual allowances in the Indian country new unit set-aside for the State for such control period is less than the sum under paragraph (b)(5) of this section, then the Administrator will allocate to each such TR NO<sub>x</sub> Annual unit the amount of the TR NO<sub>x</sub> Annual allowances determined under paragraph (b)(4)(i) of this section for the unit, multiplied by the amount of TR NO<sub>x</sub> Annual allowances in the Indian country new unit set-aside for such control period, divided by the sum under paragraph (b)(5) of this section, and rounded to the nearest allowance.

(8) The Administrator will notify the public, through the promulgation of the notices of data availability described in § 97.411(b)(2)(i) and (ii), of the amount of TR NO<sub>x</sub> Annual allowances allocated under paragraphs (b)(2) through (7) and (12) of this section for such control period to each TR NO<sub>x</sub> Annual unit eligible for such allocation.

(9) If, after completion of the procedures under paragraphs (b)(5) through (8) of this section for such control period, any unallocated TR NO<sub>x</sub> Annual allowances remain in the Indian country new unit set-aside for the State for such control period, the Administrator will allocate such TR NO<sub>x</sub> Annual allowances as follows—

(i) The Administrator will determine, for each unit described in paragraph (b)(1) of this section that commenced commercial operation during the period starting January 1 of the year before the year of such control period and ending November 30 of year of such control period, the positive difference (if any) between the unit's emissions during such control period and the amount of TR NO<sub>x</sub> Annual allowances referenced in the notice of data availability required under § 97.411(b)(2)(ii) for the unit for such control period;

(ii) The Administrator will determine the sum of the positive differences determined under paragraph (b)(9)(i) of this section;

(iii) If the amount of unallocated TR NO<sub>x</sub> Annual allowances remaining in

the Indian country new unit set-aside for the State for such control period is greater than or equal to the sum determined under paragraph (b)(9)(ii) of this section, then the Administrator will allocate the amount of TR NO<sub>x</sub> Annual allowances determined for each such TR NO<sub>x</sub> Annual unit under paragraph (b)(9)(i) of this section; and

(iv) If the amount of unallocated TR NO<sub>x</sub> Annual allowances remaining in the Indian country new unit set-aside for the State for such control period is less than the sum under paragraph (b)(9)(i) of this section, then the Administrator will allocate to each such TR NO<sub>x</sub> Annual unit the amount of the TR NO<sub>x</sub> Annual allowances determined under paragraph (b)(9)(i) of this section for the unit, multiplied by the amount of unallocated TR NO<sub>x</sub> Annual allowances remaining in the Indian country new unit set-aside for such control period, divided by the sum under paragraph (b)(9)(ii) of this section, and rounded to the nearest allowance.

(10) If, after completion of the procedures under paragraphs (b)(9) and (12) of this section for such control period, any unallocated TR NO<sub>x</sub> Annual allowances remain in the Indian country new unit set-aside for the State for such control period, the Administrator will:

(i) Transfer such unallocated TR NO<sub>x</sub> Annual allowances to the new unit set-aside for the State for such control period; or

(ii) If the State has a SIP revision approved under § 52.38(a)(4) or (5) covering such control period, include such unallocated TR NO<sub>x</sub> Annual allowances in the portion of the State NO<sub>x</sub> Annual trading budget that may be allocated for such control period in accordance with such SIP revision.

(11) The Administrator will notify the public, through the promulgation of the notices of data availability described in § 97.411(b)(2)(iii), (iv), and (v), of the amount of TR NO<sub>x</sub> Annual allowances allocated under paragraphs (b)(9), (10), and (12) of this section for such control period to each TR NO<sub>x</sub> Annual unit eligible for such allocation.

(12)(i) Notwithstanding the requirements of paragraphs (b)(2) through (11) of this section, if the calculations of allocations of an Indian country new unit set-aside for a control period in a given year under paragraph (b)(7) of this section, paragraphs (b)(6) and (9)(iv) of this section, or paragraphs (b)(6), (9)(iii), and (10) of this section would otherwise result in total allocations of such Indian country new unit set-aside exceeding the total amount of such Indian country new unit set-aside, then the Administrator will adjust the results of the calculations

under paragraph (b)(7), (9)(iv), or (10) of this section, as applicable, as follows. The Administrator will list the TR NO<sub>x</sub> Annual units in descending order based on the amount of such units' allocations under paragraph (b)(7), (9)(iv), or (10) of this section, as applicable, and, in cases of equal allocation amounts, in alphabetical order of the relevant source's name and numerical order of the relevant unit's identification number, and will reduce each unit's allocation under paragraph (b)(7), (9)(iv), or (10) of this section, as applicable, by one TR NO<sub>x</sub> Annual allowance (but not below zero) in the order in which the units are listed and will repeat this reduction process as necessary, until the total allocations of such Indian country new unit set-aside equal the total amount of such Indian country new unit set-aside.

(ii) Notwithstanding the requirements of paragraphs (b)(10) and (11) of this section, if the calculations of allocations of an Indian country new unit set-aside for a control period in a given year under paragraphs (b)(6), (9)(iii), and (10) of this section would otherwise result in a total allocations of such Indian country new unit set-aside less than the total amount of such Indian country new unit set-aside, then the Administrator will adjust the results of the calculations under paragraph (b)(10) of this section, as follows. The Administrator will list the TR NO<sub>x</sub> Annual units in descending order based on the amount of such units' allocations under paragraph (b)(10) of this section and, in cases of equal allocation amounts, in alphabetical order of the relevant source's name and numerical order of the relevant unit's identification number, and will increase each unit's allocation under paragraph (b)(10) of this section by one TR NO<sub>x</sub> Annual allowance in the order in which the units are listed and will repeat this increase process as necessary, until the total allocations of such Indian country new unit set-aside equal the total amount of such Indian country new unit set-aside.

**§ 97.413 Authorization of designated representative and alternate designated representative.**

(a) Except as provided under § 97.415, each TR NO<sub>x</sub> Annual source, including all TR NO<sub>x</sub> Annual units at the source, shall have one and only one designated representative, with regard to all matters under the TR NO<sub>x</sub> Annual Trading Program.

(1) The designated representative shall be selected by an agreement binding on the owners and operators of the source and all TR NO<sub>x</sub> Annual units

at the source and shall act in accordance with the certification statement in § 97.416(a)(4)(iii).

(2) Upon and after receipt by the Administrator of a complete certificate of representation under § 97.416:

(i) The designated representative shall be authorized and shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each owner and operator of the source and each TR NO<sub>x</sub> Annual unit at the source in all matters pertaining to the TR NO<sub>x</sub> Annual Trading Program, notwithstanding any agreement between the designated representative and such owners and operators; and

(ii) The owners and operators of the source and each TR NO<sub>x</sub> Annual unit at the source shall be bound by any decision or order issued to the designated representative by the Administrator regarding the source or any such unit.

(b) Except as provided under § 97.415, each TR NO<sub>x</sub> Annual source may have one and only one alternate designated representative, who may act on behalf of the designated representative. The agreement by which the alternate designated representative is selected shall include a procedure for authorizing the alternate designated representative to act in lieu of the designated representative.

(1) The alternate designated representative shall be selected by an agreement binding on the owners and operators of the source and all TR NO<sub>x</sub> Annual units at the source and shall act in accordance with the certification statement in § 97.416(a)(4)(iii).

(2) Upon and after receipt by the Administrator of a complete certificate of representation under § 97.416,

(i) The alternate designated representative shall be authorized;

(ii) Any representation, action, inaction, or submission by the alternate designated representative shall be deemed to be a representation, action, inaction, or submission by the designated representative; and

(iii) The owners and operators of the source and each TR NO<sub>x</sub> Annual unit at the source shall be bound by any decision or order issued to the alternate designated representative by the Administrator regarding the source or any such unit.

(c) Except in this section, § 97.402, and §§ 97.414 through 97.418, whenever the term "designated representative" (as distinguished from the term "common designated representative") is used in this subpart, the term shall be construed to include the designated representative or any alternate designated representative.

**§ 97.414 Responsibilities of designated representative and alternate designated representative.**

(a) Except as provided under § 97.418 concerning delegation of authority to make submissions, each submission under the TR NO<sub>x</sub> Annual Trading Program shall be made, signed, and certified by the designated representative or alternate designated representative for each TR NO<sub>x</sub> Annual source and TR NO<sub>x</sub> Annual unit for which the submission is made. Each such submission shall include the following certification statement by the designated representative or alternate designated representative: "I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under the penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

(b) The Administrator will accept or act on a submission made for a TR NO<sub>x</sub> Annual source or a TR NO<sub>x</sub> Annual unit only if the submission has been made, signed, and certified in accordance with paragraph (a) of this section and § 97.418.

**§ 97.415 Changing designated representative and alternate designated representative; changes in owners and operators; changes in units at the source.**

(a) *Changing designated representative.* The designated representative may be changed at any time upon receipt by the Administrator of a superseding complete certificate of representation under § 97.416. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous designated representative before the time and date when the Administrator receives the superseding certificate of representation shall be binding on the new designated representative and the owners and operators of the TR NO<sub>x</sub> Annual source and the TR NO<sub>x</sub> Annual units at the source.

(b) *Changing alternate designated representative.* The alternate designated representative may be changed at any

time upon receipt by the Administrator of a superseding complete certificate of representation under § 97.416.

Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous alternate designated representative before the time and date when the Administrator receives the superseding certificate of representation shall be binding on the new alternate designated representative, the designated representative, and the owners and operators of the TR NO<sub>x</sub> Annual source and the TR NO<sub>x</sub> Annual units at the source.

(c) *Changes in owners and operators.*

(1) In the event an owner or operator of a TR NO<sub>x</sub> Annual source or a TR NO<sub>x</sub> Annual unit at the source is not included in the list of owners and operators in the certificate of representation under § 97.416, such owner or operator shall be deemed to be subject to and bound by the certificate of representation, the representations, actions, inactions, and submissions of the designated representative and any alternate designated representative of the source or unit, and the decisions and orders of the Administrator, as if the owner or operator were included in such list.

(2) Within 30 days after any change in the owners and operators of a TR NO<sub>x</sub> Annual source or a TR NO<sub>x</sub> Annual unit at the source, including the addition or removal of an owner or operator, the designated representative or any alternate designated representative shall submit a revision to the certificate of representation under § 97.416 amending the list of owners and operators to reflect the change.

(d) *Changes in units at the source.* Within 30 days of any change in which units are located at a TR NO<sub>x</sub> Annual source (including the addition or removal of a unit), the designated representative or any alternate designated representative shall submit a certificate of representation under § 97.416 amending the list of units to reflect the change.

(1) If the change is the addition of a unit that operated (other than for purposes of testing by the manufacturer before initial installation) before being located at the source, then the certificate of representation shall identify, in a format prescribed by the Administrator, the entity from whom the unit was purchased or otherwise obtained (including name, address, telephone number, and facsimile number (if any)), the date on which the unit was purchased or otherwise obtained, and the date on which the unit became located at the source.

(2) If the change is the removal of a unit, then the certificate of representation shall identify, in a format prescribed by the Administrator, the entity to which the unit was sold or that otherwise obtained the unit (including name, address, telephone number, and facsimile number (if any)), the date on which the unit was sold or otherwise obtained, and the date on which the unit became no longer located at the source.

**§ 97.416 Certificate of representation.**

(a) A complete certificate of representation for a designated representative or an alternate designated representative shall include the following elements in a format prescribed by the Administrator:

(1) Identification of the TR NO<sub>x</sub> Annual source, and each TR NO<sub>x</sub> Annual unit at the source, for which the certificate of representation is submitted, including source name, source category and NAICS code (or, in the absence of a NAICS code, an equivalent code), State, plant code, county, latitude and longitude, unit identification number and type, identification number and nameplate capacity (in MWe, rounded to the nearest tenth) of each generator served by each such unit, actual or projected date of commencement of commercial operation, and a statement of whether such source is located in Indian Country. If a projected date of commencement of commercial operation is provided, the actual date of commencement of commercial operation shall be provided when such information becomes available.

(2) The name, address, e-mail address (if any), telephone number, and facsimile transmission number (if any) of the designated representative and any alternate designated representative.

(3) A list of the owners and operators of the TR NO<sub>x</sub> Annual source and of each TR NO<sub>x</sub> Annual unit at the source.

(4) The following certification statements by the designated representative and any alternate designated representative—

(i) “I certify that I was selected as the designated representative or alternate designated representative, as applicable, by an agreement binding on the owners and operators of the source and each TR NO<sub>x</sub> Annual unit at the source.”

(ii) “I certify that I have all the necessary authority to carry out my duties and responsibilities under the TR NO<sub>x</sub> Annual Trading Program on behalf of the owners and operators of the source and of each TR NO<sub>x</sub> Annual unit at the source and that each such owner and operator shall be fully bound by my

representations, actions, inactions, or submissions and by any decision or order issued to me by the Administrator regarding the source or unit.”

(iii) “Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, a TR NO<sub>x</sub> Annual unit, or where a utility or industrial customer purchases power from a TR NO<sub>x</sub> Annual unit under a life-of-the-unit, firm power contractual arrangement, I certify that: I have given a written notice of my selection as the ‘designated representative’ or ‘alternate designated representative’, as applicable, and of the agreement by which I was selected to each owner and operator of the source and of each TR NO<sub>x</sub> Annual unit at the source; and TR NO<sub>x</sub> Annual allowances and proceeds of transactions involving TR NO<sub>x</sub> Annual allowances will be deemed to be held or distributed in proportion to each holder’s legal, equitable, leasehold, or contractual reservation or entitlement, except that, if such multiple holders have expressly provided for a different distribution of TR NO<sub>x</sub> Annual allowances by contract, TR NO<sub>x</sub> Annual allowances and proceeds of transactions involving TR NO<sub>x</sub> Annual allowances will be deemed to be held or distributed in accordance with the contract.”

(5) The signature of the designated representative and any alternate designated representative and the dates signed.

(b) Unless otherwise required by the Administrator, documents of agreement referred to in the certificate of representation shall not be submitted to the Administrator. The Administrator shall not be under any obligation to review or evaluate the sufficiency of such documents, if submitted.

**§ 97.417 Objections concerning designated representative and alternate designated representative.**

(a) Once a complete certificate of representation under § 97.416 has been submitted and received, the Administrator will rely on the certificate of representation unless and until a superseding complete certificate of representation under § 97.416 is received by the Administrator.

(b) Except as provided in paragraph (a) of this section, no objection or other communication submitted to the Administrator concerning the authorization, or any representation, action, inaction, or submission, of a designated representative or alternate designated representative shall affect any representation, action, inaction, or submission of the designated representative or alternate designated representative or the finality of any

decision or order by the Administrator under the TR NO<sub>x</sub> Annual Trading Program.

(c) The Administrator will not adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of any designated representative or alternate designated representative, including private legal disputes concerning the proceeds of TR NO<sub>x</sub> Annual allowance transfers.

**§ 97.418 Delegation by designated representative and alternate designated representative.**

(a) A designated representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator provided for or required under this subpart.

(b) An alternate designated representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator provided for or required under this subpart.

(c) In order to delegate authority to a natural person to make an electronic submission to the Administrator in accordance with paragraph (a) or (b) of this section, the designated representative or alternate designated representative, as appropriate, must submit to the Administrator a notice of delegation, in a format prescribed by the Administrator, that includes the following elements:

(1) The name, address, e-mail address, telephone number, and facsimile transmission number (if any) of such designated representative or alternate designated representative;

(2) The name, address, e-mail address, telephone number, and facsimile transmission number (if any) of each such natural person (referred to in this section as an "agent");

(3) For each such natural person, a list of the type or types of electronic submissions under paragraph (a) or (b) of this section for which authority is delegated to him or her; and

(4) The following certification statements by such designated representative or alternate designated representative:

(i) "I agree that any electronic submission to the Administrator that is made by an agent identified in this notice of delegation and of a type listed for such agent in this notice of delegation and that is made when I am a designated representative or alternate designated representative, as appropriate, and before this notice of delegation is superseded by another

notice of delegation under 40 CFR 97.418(d) shall be deemed to be an electronic submission by me."

(ii) "Until this notice of delegation is superseded by another notice of delegation under 40 CFR 97.418(d), I agree to maintain an e-mail account and to notify the Administrator immediately of any change in my e-mail address unless all delegation of authority by me under 40 CFR 97.418 is terminated."

(d) A notice of delegation submitted under paragraph (c) of this section shall be effective, with regard to the designated representative or alternate designated representative identified in such notice, upon receipt of such notice by the Administrator and until receipt by the Administrator of a superseding notice of delegation submitted by such designated representative or alternate designated representative, as appropriate. The superseding notice of delegation may replace any previously identified agent, add a new agent, or eliminate entirely any delegation of authority.

(e) Any electronic submission covered by the certification in paragraph (c)(4)(i) of this section and made in accordance with a notice of delegation effective under paragraph (d) of this section shall be deemed to be an electronic submission by the designated representative or alternate designated representative submitting such notice of delegation.

**§ 97.419 [Reserved]**

**§ 97.420 Establishment of compliance accounts, assurance accounts, and general accounts.**

(a) *Compliance accounts.* Upon receipt of a complete certificate of representation under § 97.416, the Administrator will establish a compliance account for the TR NO<sub>x</sub> Annual source for which the certificate of representation was submitted, unless the source already has a compliance account. The designated representative and any alternate designated representative of the source shall be the authorized account representative and the alternate authorized account representative respectively of the compliance account.

(b) *Assurance accounts.* The Administrator will establish assurance accounts for certain owners and operators and States in accordance with § 97.425(b)(3).

(c) *General accounts.* (1) Application for general account. (i) Any person may apply to open a general account, for the purpose of holding and transferring TR NO<sub>x</sub> Annual allowances, by submitting to the Administrator a complete

application for a general account. Such application shall designate one and only one authorized account representative and may designate one and only one alternate authorized account representative who may act on behalf of the authorized account representative.

(A) The authorized account representative and alternate authorized account representative shall be selected by an agreement binding on the persons who have an ownership interest with respect to TR NO<sub>x</sub> Annual allowances held in the general account.

(B) The agreement by which the alternate authorized account representative is selected shall include a procedure for authorizing the alternate authorized account representative to act in lieu of the authorized account representative.

(ii) A complete application for a general account shall include the following elements in a format prescribed by the Administrator:

(A) Name, mailing address, e-mail address (if any), telephone number, and facsimile transmission number (if any) of the authorized account representative and any alternate authorized account representative;

(B) An identifying name for the general account;

(C) A list of all persons subject to a binding agreement for the authorized account representative and any alternate authorized account representative to represent their ownership interest with respect to the TR NO<sub>x</sub> Annual allowances held in the general account;

(D) The following certification statement by the authorized account representative and any alternate authorized account representative: "I certify that I was selected as the authorized account representative or the alternate authorized account representative, as applicable, by an agreement that is binding on all persons who have an ownership interest with respect to TR NO<sub>x</sub> Annual allowances held in the general account. I certify that I have all the necessary authority to carry out my duties and responsibilities under the TR NO<sub>x</sub> Annual Trading Program on behalf of such persons and that each such person shall be fully bound by my representations, actions, inactions, or submissions and by any decision or order issued to me by the Administrator regarding the general account."

(E) The signature of the authorized account representative and any alternate authorized account representative and the dates signed.

(iii) Unless otherwise required by the Administrator, documents of agreement referred to in the application for a

general account shall not be submitted to the Administrator. The Administrator shall not be under any obligation to review or evaluate the sufficiency of such documents, if submitted.

(2) Authorization of authorized account representative and alternate authorized account representative. (i) Upon receipt by the Administrator of a complete application for a general account under paragraph (b)(1) of this section, the Administrator will establish a general account for the person or persons for whom the application is submitted, and upon and after such receipt by the Administrator:

(A) The authorized account representative of the general account shall be authorized and shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each person who has an ownership interest with respect to TR NO<sub>x</sub> Annual allowances held in the general account in all matters pertaining to the TR NO<sub>x</sub> Annual Trading Program, notwithstanding any agreement between the authorized account representative and such person.

(B) Any alternate authorized account representative shall be authorized, and any representation, action, inaction, or submission by any alternate authorized account representative shall be deemed to be a representation, action, inaction, or submission by the authorized account representative.

(C) Each person who has an ownership interest with respect to TR NO<sub>x</sub> Annual allowances held in the general account shall be bound by any decision or order issued to the authorized account representative or alternate authorized account representative by the Administrator regarding the general account.

(ii) Except as provided in paragraph (c)(5) of this section concerning delegation of authority to make submissions, each submission concerning the general account shall be made, signed, and certified by the authorized account representative or any alternate authorized account representative for the persons having an ownership interest with respect to TR NO<sub>x</sub> Annual allowances held in the general account. Each such submission shall include the following certification statement by the authorized account representative or any alternate authorized account representative: "I am authorized to make this submission on behalf of the persons having an ownership interest with respect to the TR NO<sub>x</sub> Annual allowances held in the general account. I certify under penalty of law that I have personally examined, and am familiar with, the statements

and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

(iii) Except in this section, whenever the term "authorized account representative" is used in this subpart, the term shall be construed to include the authorized account representative or any alternate authorized account representative.

(3) Changing authorized account representative and alternate authorized account representative; changes in persons with ownership interest. (i) The authorized account representative of a general account may be changed at any time upon receipt by the Administrator of a superseding complete application for a general account under paragraph (c)(1) of this section. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous authorized account representative before the time and date when the Administrator receives the superseding application for a general account shall be binding on the new authorized account representative and the persons with an ownership interest with respect to the TR NO<sub>x</sub> Annual allowances in the general account.

(ii) The alternate authorized account representative of a general account may be changed at any time upon receipt by the Administrator of a superseding complete application for a general account under paragraph (c)(1) of this section. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous alternate authorized account representative before the time and date when the Administrator receives the superseding application for a general account shall be binding on the new alternate authorized account representative, the authorized account representative, and the persons with an ownership interest with respect to the TR NO<sub>x</sub> Annual allowances in the general account.

(iii)(A) In the event a person having an ownership interest with respect to TR NO<sub>x</sub> Annual allowances in the general account is not included in the list of such persons in the application for a general account, such person shall be deemed to be subject to and bound by the application for a general account,

the representation, actions, inactions, and submissions of the authorized account representative and any alternate authorized account representative of the account, and the decisions and orders of the Administrator, as if the person were included in such list.

(B) Within 30 days after any change in the persons having an ownership interest with respect to NO<sub>x</sub> Annual allowances in the general account, including the addition or removal of a person, the authorized account representative or any alternate authorized account representative shall submit a revision to the application for a general account amending the list of persons having an ownership interest with respect to the TR NO<sub>x</sub> Annual allowances in the general account to include the change.

(4) Objections concerning authorized account representative and alternate authorized account representative. (i) Once a complete application for a general account under paragraph (c)(1) of this section has been submitted and received, the Administrator will rely on the application unless and until a superseding complete application for a general account under paragraph (b)(1) of this section is received by the Administrator.

(ii) Except as provided in paragraph (c)(4)(i) of this section, no objection or other communication submitted to the Administrator concerning the authorization, or any representation, action, inaction, or submission of the authorized account representative or any alternate authorized account representative of a general account shall affect any representation, action, inaction, or submission of the authorized account representative or any alternate authorized account representative or the finality of any decision or order by the Administrator under the TR NO<sub>x</sub> Annual Trading Program.

(iii) The Administrator will not adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of the authorized account representative or any alternate authorized account representative of a general account, including private legal disputes concerning the proceeds of TR NO<sub>x</sub> Annual allowance transfers.

(5) Delegation by authorized account representative and alternate authorized account representative. (i) An authorized account representative of a general account may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator

provided for or required under this subpart.

(ii) An alternate authorized account representative of a general account may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator provided for or required under this subpart.

(iii) In order to delegate authority to a natural person to make an electronic submission to the Administrator in accordance with paragraph (c)(5)(i) or (ii) of this section, the authorized account representative or alternate authorized account representative, as appropriate, must submit to the Administrator a notice of delegation, in a format prescribed by the Administrator, that includes the following elements:

(A) The name, address, e-mail address, telephone number, and facsimile transmission number (if any) of such authorized account representative or alternate authorized account representative;

(B) The name, address, e-mail address, telephone number, and facsimile transmission number (if any) of each such natural person (referred to in this section as an "agent");

(C) For each such natural person, a list of the type or types of electronic submissions under paragraph (c)(5)(i) or (ii) of this section for which authority is delegated to him or her;

(D) The following certification statement by such authorized account representative or alternate authorized account representative: "I agree that any electronic submission to the Administrator that is made by an agent identified in this notice of delegation and of a type listed for such agent in this notice of delegation and that is made when I am an authorized account representative or alternate authorized representative, as appropriate, and before this notice of delegation is superseded by another notice of delegation under 40 CFR 97.420(c)(5)(iv) shall be deemed to be an electronic submission by me."; and

(E) The following certification statement by such authorized account representative or alternate authorized account representative: "Until this notice of delegation is superseded by another notice of delegation under 40 CFR 97.420(c)(5)(iv), I agree to maintain an e-mail account and to notify the Administrator immediately of any change in my e-mail address unless all delegation of authority by me under 40 CFR 97.420(c)(5) is terminated."

(iv) A notice of delegation submitted under paragraph (c)(5)(iii) of this section shall be effective, with regard to the

authorized account representative or alternate authorized account representative identified in such notice, upon receipt of such notice by the Administrator and until receipt by the Administrator of a superseding notice of delegation submitted by such authorized account representative or alternate authorized account representative, as appropriate. The superseding notice of delegation may replace any previously identified agent, add a new agent, or eliminate entirely any delegation of authority.

(v) Any electronic submission covered by the certification in paragraph (c)(5)(iii)(D) of this section and made in accordance with a notice of delegation effective under paragraph (c)(5)(iv) of this section shall be deemed to be an electronic submission by the designated representative or alternate designated representative submitting such notice of delegation.

(6) Closing a general account. (i) The authorized account representative or alternate authorized account representative of a general account may submit to the Administrator a request to close the account. Such request shall include a correctly submitted TR NO<sub>x</sub> Annual allowance transfer under § 97.422 for any TR NO<sub>x</sub> Annual allowances in the account to one or more other Allowance Management System accounts.

(ii) If a general account has no TR NO<sub>x</sub> Annual allowance transfers to or from the account for a 12-month period or longer and does not contain any TR NO<sub>x</sub> Annual allowances, the Administrator may notify the authorized account representative for the account that the account will be closed after 30 days after the notice is sent. The account will be closed after the 30-day period unless, before the end of the 30-day period, the Administrator receives a correctly submitted TR NO<sub>x</sub> Annual allowance transfer under § 97.422 to the account or a statement submitted by the authorized account representative or alternate authorized account representative demonstrating to the satisfaction of the Administrator good cause as to why the account should not be closed.

(d) *Account identification.* The Administrator will assign a unique identifying number to each account established under paragraph (a), (b), or (c) of this section.

(e) *Responsibilities of authorized account representative and alternate authorized account representative.* After the establishment of a compliance account or general account, the Administrator will accept or act on a submission pertaining to the account,

including, but not limited to, submissions concerning the deduction or transfer of TR NO<sub>x</sub> Annual allowances in the account, only if the submission has been made, signed, and certified in accordance with §§ 97.414(a) and 97.418 or paragraphs (c)(2)(ii) and (c)(5) of this section.

**§ 97.421 Recordation of TR NO<sub>x</sub> Annual allowance allocations and auction results.**

(a) By November 7, 2011, the Administrator will record in each TR NO<sub>x</sub> Annual source's compliance account the TR NO<sub>x</sub> Annual allowances allocated to the TR NO<sub>x</sub> Annual units at the source in accordance with § 97.411(a) for the control period in 2012.

(b) By November 7, 2011, the Administrator will record in each TR NO<sub>x</sub> Annual source's compliance account the TR NO<sub>x</sub> Annual allowances allocated to the TR NO<sub>x</sub> Annual units at the source in accordance with § 97.411(a) for the control period in 2013, unless the State in which the source is located notifies the Administrator in writing by October 17, 2011 of the State's intent to submit to the Administrator a complete SIP revision by April 1, 2012 meeting the requirements of § 52.38(a)(3)(i) through (iv) of this chapter.

(1) If, by April 1, 2012, the State does not submit to the Administrator such complete SIP revision, the Administrator will record by April 15, 2012 in each TR NO<sub>x</sub> Annual source's compliance account the TR NO<sub>x</sub> Annual allowances allocated to the TR NO<sub>x</sub> Annual units at the source in accordance with § 97.411(a) for the control period in 2013.

(2) If the State submits to the Administrator by April 1, 2012, and the Administrator approves by October 1, 2012, such complete SIP revision, the Administrator will record by October 1, 2012 in each TR NO<sub>x</sub> Annual source's compliance account the TR NO<sub>x</sub> Annual allowances allocated to the TR NO<sub>x</sub> Annual units at the source as provided in such approved, complete SIP revision for the control period in 2013.

(3) If the State submits to the Administrator by April 1, 2012, and the Administrator does not approve by October 1, 2012, such complete SIP revision, the Administrator will record by October 1, 2012 in each TR NO<sub>x</sub> Annual source's compliance account the TR NO<sub>x</sub> Annual allowances allocated to the TR NO<sub>x</sub> Annual units at the source in accordance with § 97.411(a) for the control period in 2013.

(c) By July 1, 2013, the Administrator will record in each TR NO<sub>x</sub> Annual source's compliance account the TR



NO<sub>x</sub> Annual allowances allocated to the TR NO<sub>x</sub> Annual units at the source, or in each appropriate Allowance Management System account the TR NO<sub>x</sub> Annual allowances auctioned to TR NO<sub>x</sub> Annual units, in accordance with § 97.411(a), or with a SIP revision approved under § 52.38(a)(4) or (5) of this chapter, for the control period in 2014 and 2015.

(d) By July 1, 2014, the Administrator will record in each TR NO<sub>x</sub> Annual source's compliance account the TR NO<sub>x</sub> Annual allowances allocated to the TR NO<sub>x</sub> Annual units at the source, or in each appropriate Allowance Management System account the TR NO<sub>x</sub> Annual allowances auctioned to TR NO<sub>x</sub> Annual units, in accordance with § 97.411(a), or with a SIP revision approved under § 52.38(a)(4) or (5) of this chapter, for the control period in 2016 and 2017.

(e) By July 1, 2015, the Administrator will record in each TR NO<sub>x</sub> Annual source's compliance account the TR NO<sub>x</sub> Annual allowances allocated to the TR NO<sub>x</sub> Annual units at the source, or in each appropriate Allowance Management System account the TR NO<sub>x</sub> Annual allowances auctioned to TR NO<sub>x</sub> Annual units, in accordance with § 97.411(a), or with a SIP revision approved under § 52.38(a)(4) or (5) of this chapter, for the control period in 2018 and 2019.

(f) By July 1, 2016 and July 1 of each year thereafter, the Administrator will record in each TR NO<sub>x</sub> Annual source's compliance account the TR NO<sub>x</sub> Annual allowances allocated to the TR NO<sub>x</sub> Annual units at the source, or in each appropriate Allowance Management System account the TR NO<sub>x</sub> Annual allowances auctioned to TR NO<sub>x</sub> Annual units, in accordance with § 97.411(a), or with a SIP revision approved under § 52.38(a)(4) or (5) of this chapter, for the control period in the fourth year after the year of the applicable recordation deadline under this paragraph.

(g) By August 1, 2012 and August 1 of each year thereafter, the Administrator will record in each TR NO<sub>x</sub> Annual source's compliance account the TR NO<sub>x</sub> Annual allowances allocated to the TR NO<sub>x</sub> Annual units at the source, or in each appropriate Allowance Management System account the TR NO<sub>x</sub> Annual allowances auctioned to TR NO<sub>x</sub> Annual units, in accordance with § 97.412(a)(2) through (8) and (12), or with a SIP revision approved under § 52.38(a)(4) or (5) of this chapter, for the control period in the year of the applicable recordation deadline under this paragraph.

(h) By August 1, 2012 and August 1 of each year thereafter, the Administrator will record in each TR NO<sub>x</sub> Annual source's compliance account the TR NO<sub>x</sub> Annual allowances allocated to the TR NO<sub>x</sub> Annual units at the source in accordance with § 97.412(b)(2) through (8) and (12) for the control period in the year of the applicable recordation deadline under this paragraph.

(i) By February 15, 2013 and February 15 of each year thereafter, the Administrator will record in each TR NO<sub>x</sub> Annual source's compliance account the TR NO<sub>x</sub> Annual allowances allocated to the TR NO<sub>x</sub> Annual units at the source in accordance with § 97.412(a)(9) through (12), for the control period in the year before the year of the applicable recordation deadline under this paragraph.

(j) By the date on which any allocation or auction results, other than an allocation or auction results described in paragraphs (a) through (i) of this section, of TR NO<sub>x</sub> Annual allowances to a recipient is made by or are submitted to the Administrator in accordance with § 97.411 or § 97.412 or with a SIP revision approved under § 52.38(a)(4) or (5) of this chapter, the Administrator will record such allocation or auction results in the appropriate Allowance Management System account.

(k) When recording the allocation or auction of TR NO<sub>x</sub> Annual allowances to a TR NO<sub>x</sub> Annual unit or other entity in an Allowance Management System account, the Administrator will assign each TR NO<sub>x</sub> Annual allowance a unique identification number that will include digits identifying the year of the control period for which the TR NO<sub>x</sub> Annual allowance is allocated or auctioned.

**§ 97.422 Submission of TR NO<sub>x</sub> Annual allowance transfers.**

(a) An authorized account representative seeking recordation of a TR NO<sub>x</sub> Annual allowance transfer shall submit the transfer to the Administrator.

(b) A TR NO<sub>x</sub> Annual allowance transfer shall be correctly submitted if:

(1) The transfer includes the following elements, in a format prescribed by the Administrator:

(i) The account numbers established by the Administrator for both the transferor and transferee accounts;

(ii) The serial number of each TR NO<sub>x</sub> Annual allowance that is in the transferor account and is to be transferred; and

(iii) The name and signature of the authorized account representative of the

transferor account and the date signed; and

(2) When the Administrator attempts to record the transfer, the transferor account includes each TR NO<sub>x</sub> Annual allowance identified by serial number in the transfer.

**§ 97.423 Recordation of TR NO<sub>x</sub> Annual allowance transfers.**

(a) Within 5 business days (except as provided in paragraph (b) of this section) of receiving a TR NO<sub>x</sub> Annual allowance transfer that is correctly submitted under § 97.422, the Administrator will record a TR NO<sub>x</sub> Annual allowance transfer by moving each TR NO<sub>x</sub> Annual allowance from the transferor account to the transferee account as specified in the transfer.

(b) A TR NO<sub>x</sub> Annual allowance transfer to or from a compliance account that is submitted for recordation after the allowance transfer deadline for a control period and that includes any TR NO<sub>x</sub> Annual allowances allocated for any control period before such allowance transfer deadline will not be recorded until after the Administrator completes the deductions from such compliance account under § 97.424 for the control period immediately before such allowance transfer deadline.

(c) Where a TR NO<sub>x</sub> Annual allowance transfer is not correctly submitted under § 97.422, the Administrator will not record such transfer.

(d) Within 5 business days of recordation of a TR NO<sub>x</sub> Annual allowance transfer under paragraphs (a) and (b) of the section, the Administrator will notify the authorized account representatives of both the transferor and transferee accounts.

(e) Within 10 business days of receipt of a TR NO<sub>x</sub> Annual allowance transfer that is not correctly submitted under § 97.422, the Administrator will notify the authorized account representatives of both accounts subject to the transfer of:

(1) A decision not to record the transfer, and

(2) The reasons for such non-recordation.

**§ 97.424 Compliance with TR NO<sub>x</sub> Annual emissions limitation.**

(a) *Availability for deduction for compliance.* TR NO<sub>x</sub> Annual allowances are available to be deducted for compliance with a source's TR NO<sub>x</sub> Annual emissions limitation for a control period in a given year only if the TR NO<sub>x</sub> Annual allowances:

(1) Were allocated for such control period or a control period in a prior year; and

(2) Are held in the source's compliance account as of the allowance transfer deadline for such control period.

(b) *Deductions for compliance.* After the recordation, in accordance with § 97.423, of TR NO<sub>x</sub> Annual allowance transfers submitted by the allowance transfer deadline for a control period in a given year, the Administrator will deduct from each source's compliance account TR NO<sub>x</sub> Annual allowances available under paragraph (a) of this section in order to determine whether the source meets the TR NO<sub>x</sub> Annual emissions limitation for such control period, as follows:

(1) Until the amount of TR NO<sub>x</sub> Annual allowances deducted equals the number of tons of total NO<sub>x</sub> emissions from all TR NO<sub>x</sub> Annual units at the source for such control period; or

(2) If there are insufficient TR NO<sub>x</sub> Annual allowances to complete the deductions in paragraph (b)(1) of this section, until no more TR NO<sub>x</sub> Annual allowances available under paragraph (a) of this section remain in the compliance account.

(c)(1) *Identification of TR NO<sub>x</sub> Annual allowances by serial number.* The authorized account representative for a source's compliance account may request that specific TR NO<sub>x</sub> Annual allowances, identified by serial number, in the compliance account be deducted for emissions or excess emissions for a control period in a given year in accordance with paragraph (b) or (d) of this section. In order to be complete, such request shall be submitted to the Administrator by the allowance transfer deadline for such control period and include, in a format prescribed by the Administrator, the identification of the TR NO<sub>x</sub> Annual source and the appropriate serial numbers.

(2) *First-in, first-out.* The Administrator will deduct TR NO<sub>x</sub> Annual allowances under paragraph (b) or (d) of this section from the source's compliance account in accordance with a complete request under paragraph (c)(1) of this section or, in the absence of such request or in the case of identification of an insufficient amount of TR NO<sub>x</sub> Annual allowances in such request, on a first-in, first-out accounting basis in the following order:

(i) Any TR NO<sub>x</sub> Annual allowances that were allocated to the units at the source and not transferred out of the compliance account, in the order of recordation; and then

(ii) Any TR NO<sub>x</sub> Annual allowances that were allocated to any unit and transferred to and recorded in the compliance account pursuant to this subpart, in the order of recordation.

(d) *Deductions for excess emissions.* After making the deductions for compliance under paragraph (b) of this section for a control period in a year in which the TR NO<sub>x</sub> Annual source has excess emissions, the Administrator will deduct from the source's compliance account an amount of TR NO<sub>x</sub> Annual allowances, allocated for a control period in a prior year or the control period in the year of the excess emissions or in the immediately following year, equal to two times the number of tons of the source's excess emissions.

(e) *Recordation of deductions.* The Administrator will record in the appropriate compliance account all deductions from such an account under paragraphs (b) and (d) of this section.

**§ 97.425 Compliance with TR NO<sub>x</sub> Annual assurance provisions.**

(a) *Availability for deduction.* TR NO<sub>x</sub> Annual allowances are available to be deducted for compliance with the TR NO<sub>x</sub> Annual assurance provisions for a control period in a given year by the owners and operators of a group of one or more TR NO<sub>x</sub> Annual sources and units in a State (and Indian country within the borders of such State) only if the TR NO<sub>x</sub> Annual allowances:

(1) Were allocated for a control period in a prior year or the control period in the given year or in the immediately following year; and

(2) Are held in the assurance account, established by the Administrator for such owners and operators of such group of TR NO<sub>x</sub> Annual sources and units in such State (and Indian country within the borders of such State) under paragraph (b)(3) of this section, as of the deadline established in paragraph (b)(4) of this section.

(b) *Deductions for compliance.* The Administrator will deduct TR NO<sub>x</sub> Annual allowances available under paragraph (a) of this section for compliance with the TR NO<sub>x</sub> Annual assurance provisions for a State for a control period in a given year in accordance with the following procedures:

(1) By June 1, 2013 and June 1 of each year thereafter, the Administrator will:

(i) Calculate, for each State (and Indian country within the borders of such State), the total NO<sub>x</sub> emissions from all TR NO<sub>x</sub> Annual units at TR NO<sub>x</sub> Annual sources in the State (and Indian country within the borders of such State) during the control period in the year before the year of this calculation deadline and the amount, if any, by which such total NO<sub>x</sub> emissions exceed the State assurance level as described in § 97.406(c)(2)(iii); and

(ii) Promulgate a notice of data availability of the results of the calculations required in paragraph (b)(1)(i) of this section, including separate calculations of the NO<sub>x</sub> emissions from each TR NO<sub>x</sub> Annual source.

(2) For each notice of data availability required in paragraph (b)(1)(ii) of this section and for any State (and Indian country within the borders of such State) identified in such notice as having TR NO<sub>x</sub> Annual units with total NO<sub>x</sub> emissions exceeding the State assurance level for a control period in a given year, as described in § 97.406(c)(2)(iii):

(i) By July 1 immediately after the promulgation of such notice, the designated representative of each TR NO<sub>x</sub> Annual source in each such State (and Indian country within the borders of such State) shall submit a statement, in a format prescribed by the Administrator, providing for each TR NO<sub>x</sub> Annual unit (if any) at the source that operates during, but is not allocated an amount of TR NO<sub>x</sub> Annual allowances for, such control period, the unit's allowable NO<sub>x</sub> emission rate for such control period and, if such rate is expressed in lb per mmBtu, the unit's heat rate.

(ii) By August 1 immediately after the promulgation of such notice, the Administrator will calculate, for each such State (and Indian country within the borders of such State) and such control period and each common designated representative for such control period for a group of one or more TR NO<sub>x</sub> Annual sources and units in the State (and Indian country within the borders of such State), the common designated representative's share of the total NO<sub>x</sub> emissions from all TR NO<sub>x</sub> Annual units at TR NO<sub>x</sub> Annual sources in the State (and Indian country within the borders of such State), the common designated representative's assurance level, and the amount (if any) of TR NO<sub>x</sub> Annual allowances that the owners and operators of such group of sources and units must hold in accordance with the calculation formula in § 97.406(c)(2)(i) and will promulgate a notice of data availability of the results of these calculations.

(iii) The Administrator will provide an opportunity for submission of objections to the calculations referenced by the notice of data availability required in paragraph (b)(2)(ii) of this section and the calculations referenced by the relevant notice of data availability required in paragraph (b)(1)(i) of this section.

(A) Objections shall be submitted by the deadline specified in such notice

and shall be limited to addressing whether the calculations referenced in the relevant notice required under paragraph (b)(1)(ii) of this section and referenced in the notice required under paragraph (b)(2)(ii) of this section are in accordance with § 97.406(c)(2)(iii), §§ 97.406(b) and 97.430 through 97.435, the definitions of “common designated representative”, “common designated representative’s assurance level”, and “common designated representative’s share” in § 97.402, and the calculation formula in § 97.406(c)(2)(i).

(B) The Administrator will adjust the calculations to the extent necessary to ensure that they are in accordance with the provisions referenced in paragraph (b)(2)(iii)(A) of this section. By October 1 immediately after the promulgation of such notice, the Administrator will promulgate a notice of data availability of any adjustments that the Administrator determines to be necessary and the reasons for accepting or rejecting any objections submitted in accordance with paragraph (b)(2)(iii)(A) of this section.

(3) For any State (and Indian country within the borders of such State) referenced in each notice of data availability required in paragraph (b)(2)(iii)(B) of this section as having TR NO<sub>x</sub> Annual units with total NO<sub>x</sub> emissions exceeding the State assurance level for a control period in a given year, the Administrator will establish one assurance account for each set of owners and operators referenced, in the notice of data availability required under paragraph (b)(2)(iii)(B) of this section, as all of the owners and operators of a group of TR NO<sub>x</sub> Annual sources and units in the State (and Indian country within the borders of such State) having a common designated representative for such control period and as being required to hold TR NO<sub>x</sub> Annual allowances.

(4)(i) As of midnight of November 1 immediately after the promulgation of each notice of data availability required in paragraph (b)(2)(iii)(B) of this section, the owners and operators described in paragraph (b)(3) of this section shall hold in the assurance account established for the them and for the appropriate TR NO<sub>x</sub> Annual sources, TR NO<sub>x</sub> Annual units, and State (and Indian country within the borders of such State) under paragraph (b)(3) of this section a total amount of TR NO<sub>x</sub> Annual allowances, available for deduction under paragraph (a) of this section, equal to the amount such owners and operators are required to hold with regard to such sources, units and State (and Indian country within the borders of such State) as calculated

by the Administrator and referenced in such notice.

(ii) Notwithstanding the allowance-holding deadline specified in paragraph (b)(4)(i) of this section, if November 1 is not a business day, then such allowance-holding deadline shall be midnight of the first business day thereafter.

(5) After November 1 (or the date described in paragraph (b)(4)(ii) of this section) immediately after the promulgation of each notice of data availability required in paragraph (b)(2)(iii)(B) of this section and after the recordation, in accordance with § 97.423, of TR NO<sub>x</sub> Annual allowance transfers submitted by midnight of such date, the Administrator will determine whether the owners and operators described in paragraph (b)(3) of this section hold, in the assurance account for the appropriate TR NO<sub>x</sub> Annual sources, TR NO<sub>x</sub> Annual units, and State (and Indian country within the borders of such State) established under paragraph (b)(3) of this section, the amount of TR NO<sub>x</sub> Annual allowances available under paragraph (a) of this section that the owners and operators are required to hold with regard to such sources, units, and State (and Indian country within the borders of such State) as calculated by the Administrator and referenced in the notice required in paragraph (b)(2)(iii)(B) of this section.

(6) Notwithstanding any other provision of this subpart and any revision, made by or submitted to the Administrator after the promulgation of the notice of data availability required in paragraph (b)(2)(iii)(B) of this section for a control period in a given year, of any data used in making the calculations referenced in such notice, the amounts of TR NO<sub>x</sub> Annual allowances that the owners and operators are required to hold in accordance with § 97.406(c)(2)(i) for such control period shall continue to be such amounts as calculated by the Administrator and referenced in such notice required in paragraph (b)(2)(iii)(B) of this section, except as follows:

(i) If any such data are revised by the Administrator as a result of a decision in or settlement of litigation concerning such data on appeal under part 78 of this chapter of such notice, or on appeal under section 307 of the Clean Air Act of a decision rendered under part 78 of this chapter on appeal of such notice, then the Administrator will use the data as so revised to recalculate the amounts of TR NO<sub>x</sub> Annual allowances that owners and operators are required to hold in accordance with the calculation

formula in § 97.406(c)(2)(i) for such control period with regard to the TR NO<sub>x</sub> Annual sources, TR NO<sub>x</sub> Annual units, and State (and Indian country within the borders of such State) involved, provided that such litigation under part 78 of this chapter, or the proceeding under part 78 of this chapter that resulted in the decision appealed in such litigation under section 307 of the Clean Air Act, was initiated no later than 30 days after promulgation of such notice required in paragraph (b)(2)(iii)(B) of this section.

(ii) If any such data are revised by the owners and operators of a TR NO<sub>x</sub> Annual source and TR NO<sub>x</sub> Annual unit whose designated representative submitted such data under paragraph (b)(2)(i) of this section, as a result of a decision in or settlement of litigation concerning such submission, then the Administrator will use the data as so revised to recalculate the amounts of TR NO<sub>x</sub> Annual allowances that owners and operators are required to hold in accordance with the calculation formula in § 97.406(c)(2)(i) for such control period with regard to the TR NO<sub>x</sub> Annual sources, TR NO<sub>x</sub> Annual units, and State (and Indian country within the borders of such State) involved, provided that such litigation was initiated no later than 30 days after promulgation of such notice required in paragraph (b)(2)(iii)(B) of this section.

(iii) If the revised data are used to recalculate, in accordance with paragraphs (b)(6)(i) and (ii) of this section, the amount of TR NO<sub>x</sub> Annual allowances that the owners and operators are required to hold for such control period with regard to the TR NO<sub>x</sub> Annual sources, TR NO<sub>x</sub> Annual units, and State (and Indian country within the borders of such State) involved—

(A) Where the amount of TR NO<sub>x</sub> Annual allowances that the owners and operators are required to hold increases as a result of the use of all such revised data, the Administrator will establish a new, reasonable deadline on which the owners and operators shall hold the additional amount of TR NO<sub>x</sub> Annual allowances in the assurance account established by the Administrator for the appropriate TR NO<sub>x</sub> Annual sources, TR NO<sub>x</sub> Annual units, and State (and Indian country within the borders of such State) under paragraph (b)(3) of this section. The owners’ and operators’ failure to hold such additional amount, as required, before the new deadline shall not be a violation of the Clean Air Act. The owners’ and operators’ failure to hold such additional amount, as required, as of the new deadline shall be a violation of the Clean Air Act. Each

TR NO<sub>x</sub> Annual allowance that the owners and operators fail to hold as required as of the new deadline, and each day in such control period, shall be a separate violation of the Clean Air Act.

(B) For the owners and operators for which the amount of TR NO<sub>x</sub> Annual allowances required to be held decreases as a result of the use of all such revised data, the Administrator will record, in all accounts from which TR NO<sub>x</sub> Annual allowances were transferred by such owners and operators for such control period to the assurance account established by the Administrator for the appropriate TR NO<sub>x</sub> Annual sources, TR NO<sub>x</sub> Annual units, and State (and Indian country within the borders of such State) under paragraph (b)(3) of this section, a total amount of the TR NO<sub>x</sub> Annual allowances held in such assurance account equal to the amount of the decrease. If TR NO<sub>x</sub> Annual allowances were transferred to such assurance account from more than one account, the amount of TR NO<sub>x</sub> Annual allowances recorded in each such transferor account will be in proportion to the percentage of the total amount of TR NO<sub>x</sub> Annual allowances transferred to such assurance account for such control period from such transferor account.

(C) Each TR NO<sub>x</sub> Annual allowance held under paragraph (b)(6)(iii)(A) of this section as a result of recalculation of requirements under the TR NO<sub>x</sub> Annual assurance provisions for such control period must be a TR NO<sub>x</sub> Annual allowance allocated for a control period in a year before or the year immediately following, or in the same year as, the year of such control period.

#### **§ 97.426 Banking.**

(a) A TR NO<sub>x</sub> Annual allowance may be banked for future use or transfer in a compliance account or a general account in accordance with paragraph (b) of this section.

(b) Any TR NO<sub>x</sub> Annual allowance that is held in a compliance account or a general account will remain in such account unless and until the TR NO<sub>x</sub> Annual allowance is deducted or transferred under § 97.411(c), § 97.423, § 97.424, § 97.425, 97.427, or 97.428.

#### **§ 97.427 Account error.**

The Administrator may, at his or her sole discretion and on his or her own motion, correct any error in any Allowance Management System account. Within 10 business days of making such correction, the Administrator will notify the authorized account representative for the account.

#### **§ 97.428 Administrator's action on submissions.**

(a) The Administrator may review and conduct independent audits concerning any submission under the TR NO<sub>x</sub> Annual Trading Program and make appropriate adjustments of the information in the submission.

(b) The Administrator may deduct TR NO<sub>x</sub> Annual allowances from or transfer TR NO<sub>x</sub> Annual allowances to a compliance account or an assurance account, based on the information in a submission, as adjusted under paragraph (a)(1) of this section, and record such deductions and transfers.

#### **§ 97.429 [Reserved]**

#### **§ 97.430 General monitoring, recordkeeping, and reporting requirements.**

The owners and operators, and to the extent applicable, the designated representative, of a TR NO<sub>x</sub> Annual unit, shall comply with the monitoring, recordkeeping, and reporting requirements as provided in this subpart and subpart H of part 75 of this chapter. For purposes of applying such requirements, the definitions in § 97.402 and in § 72.2 of this chapter shall apply, the terms "affected unit," "designated representative," and "continuous emission monitoring system" (or "CEMS") in part 75 of this chapter shall be deemed to refer to the terms "TR NO<sub>x</sub> Annual unit," "designated representative," and "continuous emission monitoring system" (or "CEMS") respectively as defined in § 97.402, and the term "newly affected unit" shall be deemed to mean "newly affected TR NO<sub>x</sub> Annual unit". The owner or operator of a unit that is not a TR NO<sub>x</sub> Annual unit but that is monitored under § 75.72(b)(2)(ii) of this chapter shall comply with the same monitoring, recordkeeping, and reporting requirements as a TR NO<sub>x</sub> Annual unit.

(a) *Requirements for installation, certification, and data accounting.* The owner or operator of each TR NO<sub>x</sub> Annual unit shall:

(1) Install all monitoring systems required under this subpart for monitoring NO<sub>x</sub> mass emissions and individual unit heat input (including all systems required to monitor NO<sub>x</sub> emission rate, NO<sub>x</sub> concentration, stack gas moisture content, stack gas flow rate, CO<sub>2</sub> or O<sub>2</sub> concentration, and fuel flow rate, as applicable, in accordance with §§ 75.71 and 75.72 of this chapter);

(2) Successfully complete all certification tests required under § 97.431 and meet all other requirements of this subpart and part 75 of this chapter applicable to the

monitoring systems under paragraph (a)(1) of this section; and

(3) Record, report, and quality-assure the data from the monitoring systems under paragraph (a)(1) of this section.

(b) *Compliance deadlines.* Except as provided in paragraph (e) of this section, the owner or operator shall meet the monitoring system certification and other requirements of paragraphs (a)(1) and (2) of this section on or before the following dates and shall record, report, and quality-assure the data from the monitoring systems under paragraph (a)(1) of this section on and after the following dates.

(1) For the owner or operator of a TR NO<sub>x</sub> Annual unit that commences commercial operation before July 1, 2011, January 1, 2012;

(2) For the owner or operator of a TR NO<sub>x</sub> Annual unit that commences commercial operation on or after July 1, 2011, the later of the following:

(i) January 1, 2012; or  
(ii) 180 calendar days after the date on which the unit commences commercial operation;

(3) The owner or operator of a TR NO<sub>x</sub> Annual unit for which construction of a new stack or flue or installation of add-on NO<sub>x</sub> emission controls is completed after the applicable deadline under paragraph (b)(1) or (2) of this section shall meet the requirements of §§ 75.4(e)(1) through (e)(4) of this chapter, except that:

(i) Such requirements shall apply to the monitoring systems required under § 97.430 through § 97.435, rather than the monitoring systems required under part 75 of this chapter;

(ii) NO<sub>x</sub> emission rate, NO<sub>x</sub> concentration, stack gas moisture content, stack gas volumetric flow rate, and O<sub>2</sub> or CO<sub>2</sub> concentration data shall be determined and reported, rather than the data listed in § 75.4(e)(2) of this chapter; and

(iii) Any petition for another procedure under § 75.4(e)(2) of this chapter shall be submitted under § 97.435, rather than § 75.66.

(c) *Reporting data.* The owner or operator of a TR NO<sub>x</sub> Annual unit that does not meet the applicable compliance date set forth in paragraph (b) of this section for any monitoring system under paragraph (a)(1) of this section shall, for each such monitoring system, determine, record, and report maximum potential (or, as appropriate, minimum potential) values for NO<sub>x</sub> concentration, NO<sub>x</sub> emission rate, stack gas flow rate, stack gas moisture content, fuel flow rate, and any other parameters required to determine NO<sub>x</sub> mass emissions and heat input in accordance with § 75.31(b)(2) or (c)(3) of

this chapter, section 2.4 of appendix D to part 75 of this chapter, or section 2.5 of appendix E to part 75 of this chapter, as applicable.

(d) *Prohibitions.* (1) No owner or operator of a TR NO<sub>x</sub> Annual unit shall use any alternative monitoring system, alternative reference method, or any other alternative to any requirement of this subpart without having obtained prior written approval in accordance with § 97.435.

(2) No owner or operator of a TR NO<sub>x</sub> Annual unit shall operate the unit so as to discharge, or allow to be discharged, NO<sub>x</sub> to the atmosphere without accounting for all such NO<sub>x</sub> in accordance with the applicable provisions of this subpart and part 75 of this chapter.

(3) No owner or operator of a TR NO<sub>x</sub> Annual unit shall disrupt the continuous emission monitoring system, any portion thereof, or any other approved emission monitoring method, and thereby avoid monitoring and recording NO<sub>x</sub> mass discharged into the atmosphere or heat input, except for periods of recertification or periods when calibration, quality assurance testing, or maintenance is performed in accordance with the applicable provisions of this subpart and part 75 of this chapter.

(4) No owner or operator of a TR NO<sub>x</sub> Annual unit shall retire or permanently discontinue use of the continuous emission monitoring system, any component thereof, or any other approved monitoring system under this subpart, except under any one of the following circumstances:

(i) During the period that the unit is covered by an exemption under § 97.405 that is in effect;

(ii) The owner or operator is monitoring emissions from the unit with another certified monitoring system approved, in accordance with the applicable provisions of this subpart and part 75 of this chapter, by the Administrator for use at that unit that provides emission data for the same pollutant or parameter as the retired or discontinued monitoring system; or

(iii) The designated representative submits notification of the date of certification testing of a replacement monitoring system for the retired or discontinued monitoring system in accordance with § 97.431(d)(3)(i).

(e) *Long-term cold storage.* The owner or operator of a TR NO<sub>x</sub> Annual unit is subject to the applicable provisions of § 75.4(d) of this chapter concerning units in long-term cold storage.

**§ 97.431 Initial monitoring system certification and recertification procedures.**

(a) The owner or operator of a TR NO<sub>x</sub> Annual unit shall be exempt from the initial certification requirements of this section for a monitoring system under § 97.430(a)(1) if the following conditions are met:

(1) The monitoring system has been previously certified in accordance with part 75 of this chapter; and

(2) The applicable quality-assurance and quality-control requirements of § 75.21 of this chapter and appendices B, D, and E to part 75 of this chapter are fully met for the certified monitoring system described in paragraph (a)(1) of this section.

(b) The recertification provisions of this section shall apply to a monitoring system under § 97.430(a)(1) that is exempt from initial certification requirements under paragraph (a) of this section.

(c) If the Administrator has previously approved a petition under § 75.17(a) or (b) of this chapter for apportioning the NO<sub>x</sub> emission rate measured in a common stack or a petition under § 75.66 of this chapter for an alternative to a requirement in § 75.12 or § 75.17 of this chapter, the designated representative shall resubmit the petition to the Administrator under § 97.435 to determine whether the approval applies under the TR NO<sub>x</sub> Annual Trading Program.

(d) Except as provided in paragraph (a) of this section, the owner or operator of a TR NO<sub>x</sub> Annual unit shall comply with the following initial certification and recertification procedures for a continuous monitoring system (*i.e.*, a continuous emission monitoring system and an excepted monitoring system under appendices D and E to part 75 of this chapter) under § 97.430(a)(1). The owner or operator of a unit that qualifies to use the low mass emissions excepted monitoring methodology under § 75.19 of this chapter or that qualifies to use an alternative monitoring system under subpart E of part 75 of this chapter shall comply with the procedures in paragraph (e) or (f) of this section respectively.

(1) Requirements for initial certification. The owner or operator shall ensure that each continuous monitoring system under § 97.430(a)(1) (including the automated data acquisition and handling system) successfully completes all of the initial certification testing required under § 75.20 of this chapter by the applicable deadline in § 97.430(b). In addition, whenever the owner or operator installs a monitoring system to meet the requirements of this subpart in a

location where no such monitoring system was previously installed, initial certification in accordance with § 75.20 of this chapter is required.

(2) Requirements for recertification. Whenever the owner or operator makes a replacement, modification, or change in any certified continuous emission monitoring system under § 97.430(a)(1) that may significantly affect the ability of the system to accurately measure or record NO<sub>x</sub> mass emissions or heat input rate or to meet the quality-assurance and quality-control requirements of § 75.21 of this chapter or appendix B to part 75 of this chapter, the owner or operator shall recertify the monitoring system in accordance with § 75.20(b) of this chapter. Furthermore, whenever the owner or operator makes a replacement, modification, or change to the flue gas handling system or the unit's operation that may significantly change the stack flow or concentration profile, the owner or operator shall recertify each continuous emission monitoring system whose accuracy is potentially affected by the change, in accordance with § 75.20(b) of this chapter. Examples of changes to a continuous emission monitoring system that require recertification include replacement of the analyzer, complete replacement of an existing continuous emission monitoring system, or change in location or orientation of the sampling probe or site. Any fuel flowmeter system, and any excepted NO<sub>x</sub> monitoring system under appendix E to part 75 of this chapter, under § 97.430(a)(1) are subject to the recertification requirements in § 75.20(g)(6) of this chapter.

(3) Approval process for initial certification and recertification. For initial certification of a continuous monitoring system under § 97.430(a)(1), paragraphs (d)(3)(i) through (v) of this section apply. For recertifications of such monitoring systems, paragraphs (d)(3)(i) through (iv) of this section and the procedures in §§ 75.20(b)(5) and (g)(7) of this chapter (in lieu of the procedures in paragraph (d)(3)(v) of this section) apply, provided that in applying paragraphs (d)(3)(i) through (iv) of this section, the words "certification" and "initial certification" are replaced by the word "recertification" and the word "certified" is replaced by the word "recertified".

(i) Notification of certification. The designated representative shall submit to the appropriate EPA Regional Office and the Administrator written notice of the dates of certification testing, in accordance with § 97.433.

(ii) Certification application. The designated representative shall submit to the Administrator a certification application for each monitoring system. A complete certification application shall include the information specified in § 75.63 of this chapter.

(iii) Provisional certification date. The provisional certification date for a monitoring system shall be determined in accordance with § 75.20(a)(3) of this chapter. A provisionally certified monitoring system may be used under the TR NO<sub>x</sub> Annual Trading Program for a period not to exceed 120 days after receipt by the Administrator of the complete certification application for the monitoring system under paragraph (d)(3)(ii) of this section. Data measured and recorded by the provisionally certified monitoring system, in accordance with the requirements of part 75 of this chapter, will be considered valid quality-assured data (retroactive to the date and time of provisional certification), provided that the Administrator does not invalidate the provisional certification by issuing a notice of disapproval within 120 days of the date of receipt of the complete certification application by the Administrator.

(iv) Certification application approval process. The Administrator will issue a written notice of approval or disapproval of the certification application to the owner or operator within 120 days of receipt of the complete certification application under paragraph (d)(3)(ii) of this section. In the event the Administrator does not issue such a notice within such 120-day period, each monitoring system that meets the applicable performance requirements of part 75 of this chapter and is included in the certification application will be deemed certified for use under the TR NO<sub>x</sub> Annual Trading Program.

(A) Approval notice. If the certification application is complete and shows that each monitoring system meets the applicable performance requirements of part 75 of this chapter, then the Administrator will issue a written notice of approval of the certification application within 120 days of receipt.

(B) Incomplete application notice. If the certification application is not complete, then the Administrator will issue a written notice of incompleteness that sets a reasonable date by which the designated representative must submit the additional information required to complete the certification application. If the designated representative does not comply with the notice of incompleteness by the specified date,

then the Administrator may issue a notice of disapproval under paragraph (d)(3)(iv)(C) of this section.

(C) Disapproval notice. If the certification application shows that any monitoring system does not meet the performance requirements of part 75 of this chapter or if the certification application is incomplete and the requirement for disapproval under paragraph (d)(3)(iv)(B) of this section is met, then the Administrator will issue a written notice of disapproval of the certification application. Upon issuance of such notice of disapproval, the provisional certification is invalidated by the Administrator and the data measured and recorded by each uncertified monitoring system shall not be considered valid quality-assured data beginning with the date and hour of provisional certification (as defined under § 75.20(a)(3) of this chapter).

(D) Audit decertification. The Administrator may issue a notice of disapproval of the certification status of a monitor in accordance with § 97.432(b).

(v) Procedures for loss of certification. If the Administrator issues a notice of disapproval of a certification application under paragraph (d)(3)(iv)(C) of this section or a notice of disapproval of certification status under paragraph (d)(3)(iv)(D) of this section, then:

(A) The owner or operator shall substitute the following values, for each disapproved monitoring system, for each hour of unit operation during the period of invalid data specified under § 75.20(a)(4)(iii), § 75.20(g)(7), or § 75.21(e) of this chapter and continuing until the applicable date and hour specified under § 75.20(a)(5)(i) or (g)(7) of this chapter:

(1) For a disapproved NO<sub>x</sub> emission rate (*i.e.*, NO<sub>x</sub>-diluent) system, the maximum potential NO<sub>x</sub> emission rate, as defined in § 72.2 of this chapter.

(2) For a disapproved NO<sub>x</sub> pollutant concentration monitor and disapproved flow monitor, respectively, the maximum potential concentration of NO<sub>x</sub> and the maximum potential flow rate, as defined in sections 2.1.2.1 and 2.1.4.1 of appendix A to part 75 of this chapter.

(3) For a disapproved moisture monitoring system and disapproved diluent gas monitoring system, respectively, the minimum potential moisture percentage and either the maximum potential CO<sub>2</sub> concentration or the minimum potential O<sub>2</sub> concentration (as applicable), as defined in sections 2.1.5, 2.1.3.1, and 2.1.3.2 of appendix A to part 75 of this chapter.

(4) For a disapproved fuel flowmeter system, the maximum potential fuel flow rate, as defined in section 2.4.2.1 of appendix D to part 75 of this chapter.

(5) For a disapproved excepted NO<sub>x</sub> monitoring system under appendix E to part 75 of this chapter, the fuel-specific maximum potential NO<sub>x</sub> emission rate, as defined in § 72.2 of this chapter.

(B) The designated representative shall submit a notification of certification retest dates and a new certification application in accordance with paragraphs (d)(3)(i) and (ii) of this section.

(C) The owner or operator shall repeat all certification tests or other requirements that were failed by the monitoring system, as indicated in the Administrator's notice of disapproval, no later than 30 unit operating days after the date of issuance of the notice of disapproval.

(e) The owner or operator of a unit qualified to use the low mass emissions (LME) excepted methodology under § 75.19 of this chapter shall meet the applicable certification and recertification requirements in §§ 75.19(a)(2) and 75.20(h) of this chapter. If the owner or operator of such a unit elects to certify a fuel flowmeter system for heat input determination, the owner or operator shall also meet the certification and recertification requirements in § 75.20(g) of this chapter.

(f) The designated representative of each unit for which the owner or operator intends to use an alternative monitoring system approved by the Administrator under subpart E of part 75 of this chapter shall comply with the applicable notification and application procedures of § 75.20(f) of this chapter.

#### **§ 97.432 Monitoring system out-of-control periods.**

(a) *General provisions.* Whenever any monitoring system fails to meet the quality-assurance and quality-control requirements or data validation requirements of part 75 of this chapter, data shall be substituted using the applicable missing data procedures in subpart D or subpart H of, or appendix D or appendix E to, part 75 of this chapter.

(b) *Audit decertification.* Whenever both an audit of a monitoring system and a review of the initial certification or recertification application reveal that any monitoring system should not have been certified or recertified because it did not meet a particular performance specification or other requirement under § 97.431 or the applicable provisions of part 75 of this chapter, both at the time of the initial certification or

recertification application submission and at the time of the audit, the Administrator will issue a notice of disapproval of the certification status of such monitoring system. For the purposes of this paragraph, an audit shall be either a field audit or an audit of any information submitted to the Administrator or any State or permitting authority. By issuing the notice of disapproval, the Administrator revokes prospectively the certification status of the monitoring system. The data measured and recorded by the monitoring system shall not be considered valid quality-assured data from the date of issuance of the notification of the revoked certification status until the date and time that the owner or operator completes subsequently approved initial certification or recertification tests for the monitoring system. The owner or operator shall follow the applicable initial certification or recertification procedures in § 97.431 for each disapproved monitoring system.

**§ 97.433 Notifications concerning monitoring.**

The designated representative of a TR NO<sub>x</sub> Annual unit shall submit written notice to the Administrator in accordance with § 75.61 of this chapter.

**§ 97.434 Recordkeeping and reporting.**

(a) *General provisions.* The designated representative shall comply with all recordkeeping and reporting requirements in paragraphs (b) through (e) of this section, the applicable recordkeeping and reporting requirements under § 75.73 of this chapter, and the requirements of § 97.414(a).

(b) *Monitoring plans.* The owner or operator of a TR NO<sub>x</sub> Annual unit shall comply with requirements of § 75.73(c) and (e) of this chapter.

(c) *Certification applications.* The designated representative shall submit an application to the Administrator within 45 days after completing all initial certification or recertification tests required under § 97.431, including the information required under § 75.63 of this chapter.

(d) *Quarterly reports.* The designated representative shall submit quarterly reports, as follows:

(1) The designated representative shall report the NO<sub>x</sub> mass emissions data and heat input data for the TR NO<sub>x</sub> Annual unit, in an electronic quarterly report in a format prescribed by the Administrator, for each calendar quarter beginning with:

(i) For a unit that commences commercial operation before July 1,

2011, the calendar quarter covering January 1, 2012 through March 31, 2012; or

(ii) For a unit that commences commercial operation on or after July 1, 2011, the calendar quarter corresponding to the earlier of the date of provisional certification or the applicable deadline for initial certification under § 97.430(b), unless that quarter is the third or fourth quarter of 2011, in which case reporting shall commence in the quarter covering January 1, 2012 through March 31, 2012.

(2) The designated representative shall submit each quarterly report to the Administrator within 30 days after the end of the calendar quarter covered by the report. Quarterly reports shall be submitted in the manner specified in § 75.73(f) of this chapter.

(3) For TR NO<sub>x</sub> Annual units that are also subject to the Acid Rain Program, TR NO<sub>x</sub> Ozone Season Trading Program, TR SO<sub>2</sub> Group 1 Trading Program, or TR SO<sub>2</sub> Group 2 Trading Program, quarterly reports shall include the applicable data and information required by subparts F through H of part 75 of this chapter as applicable, in addition to the NO<sub>x</sub> mass emission data, heat input data, and other information required by this subpart.

(4) The Administrator may review and conduct independent audits of any quarterly report in order to determine whether the quarterly report meets the requirements of this subpart and part 75 of this chapter, including the requirement to use substitute data.

(i) The Administrator will notify the designated representative of any determination that the quarterly report fails to meet any such requirements and specify in such notification any corrections that the Administrator believes are necessary to make through resubmission of the quarterly report and a reasonable time period within which the designated representative must respond. Upon request by the designated representative, the Administrator may specify reasonable extensions of such time period. Within the time period (including any such extensions) specified by the Administrator, the designated representative shall resubmit the quarterly report with the corrections specified by the Administrator, except to the extent the designated representative provides information demonstrating that a specified correction is not necessary because the quarterly report already meets the requirements of this subpart and part 75 of this chapter that are relevant to the specified correction.

(ii) Any resubmission of a quarterly report shall meet the requirements applicable to the submission of a quarterly report under this subpart and part 75 of this chapter, except for the deadline set forth in paragraph (d)(2) of this section.

(e) *Compliance certification.* The designated representative shall submit to the Administrator a compliance certification (in a format prescribed by the Administrator) in support of each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The certification shall state that:

(1) The monitoring data submitted were recorded in accordance with the applicable requirements of this subpart and part 75 of this chapter, including the quality assurance procedures and specifications; and

(2) For a unit with add-on NO<sub>x</sub> emission controls and for all hours where NO<sub>x</sub> data are substituted in accordance with § 75.34(a)(1) of this chapter, the add-on emission controls were operating within the range of parameters listed in the quality assurance/quality control program under appendix B to part 75 of this chapter and the substitute data values do not systematically underestimate NO<sub>x</sub> emissions.

**§ 97.435 Petitions for alternatives to monitoring, recordkeeping, or reporting requirements.**

(a) The designated representative of a TR NO<sub>x</sub> Annual unit may submit a petition under § 75.66 of this chapter to the Administrator, requesting approval to apply an alternative to any requirement of §§ 97.430 through 97.434.

(b) A petition submitted under paragraph (a) of this section shall include sufficient information for the evaluation of the petition, including, at a minimum, the following information:

(i) Identification of each unit and source covered by the petition;

(ii) A detailed explanation of why the proposed alternative is being suggested in lieu of the requirement;

(iii) A description and diagram of any equipment and procedures used in the proposed alternative;

(iv) A demonstration that the proposed alternative is consistent with the purposes of the requirement for which the alternative is proposed and with the purposes of this subpart and part 75 of this chapter and that any adverse effect of approving the alternative will be *de minimis*; and

(v) Any other relevant information that the Administrator may require.

(c) Use of an alternative to any requirement referenced in paragraph (a) of this section is in accordance with this subpart only to the extent that the petition is approved in writing by the Administrator and that such use is in accordance with such approval.

■ 75. Part 97 is amended by adding subpart BBBBBB to read as follows:

**Subpart BBBBBB—TR NO<sub>x</sub> Ozone Season Trading Program**

- 97.501 Purpose.
- 97.502 Definitions.
- 97.503 Measurements, abbreviations, and acronyms.
- 97.504 Applicability.
- 97.505 Retired unit exemption.
- 97.506 Standard requirements.
- 97.507 Computation of time.
- 97.508 Administrative appeal procedures.
- 97.509 [Reserved]
- 97.510 State NO<sub>x</sub> Ozone Season trading budgets, new unit set-asides, Indian country new unit set-asides and variability limits.
- 97.511 Timing requirements for TR NO<sub>x</sub> Ozone Season allowance allocations.
- 97.512 TR NO<sub>x</sub> Ozone Season allowance allocations to new units.
- 97.513 Authorization of designated representative and alternate designated representative.
- 97.514 Responsibilities of designated representative and alternate designated representative.
- 97.515 Changing designated representative and alternate designated representative; changes in owners and operators.
- 97.516 Certificate of representation.
- 97.517 Objections concerning designated representative and alternate designated representative.
- 97.518 Delegation by designated representative and alternate designated representative.
- 97.519 [Reserved]
- 97.520 Establishment of compliance accounts and general accounts.
- 97.521 Recordation of TR NO<sub>x</sub> Ozone Season allowance allocations.
- 97.522 Submission of TR NO<sub>x</sub> Ozone Season allowance transfers.
- 97.523 Recordation of TR NO<sub>x</sub> Ozone Season allowance transfers.
- 97.524 Compliance with TR NO<sub>x</sub> Ozone Season emissions limitation.
- 97.525 Compliance with TR NO<sub>x</sub> Ozone Season assurance provisions.
- 97.526 Banking.
- 97.527 Account error.
- 97.528 Administrator's action on submissions.
- 97.529 [RESERVED]
- 97.530 General monitoring, recordkeeping, and reporting requirements.
- 97.531 Initial monitoring system certification and recertification procedures.
- 97.532 Monitoring system out-of-control periods.
- 97.533 Notifications concerning monitoring.

97.534 Recordkeeping and reporting.

97.535 Petitions for alternatives to monitoring, recordkeeping, or reporting requirements.

**Subpart BBBBBB—TR NO<sub>x</sub> Ozone Season Trading Program**

**§ 97.501 Purpose.**

This subpart sets forth the general, designated representative, allowance, and monitoring provisions for the Transport Rule (TR) NO<sub>x</sub> Ozone Season Trading Program, under section 110 of the Clean Air Act and § 52.38 of this chapter, as a means of mitigating interstate transport of ozone and nitrogen oxides.

**§ 97.502 Definitions.**

The terms used in this subpart shall have the meanings set forth in this section as follows:

*Acid Rain Program* means a multi-state SO<sub>2</sub> and NO<sub>x</sub> air pollution control and emission reduction program established by the Administrator under title IV of the Clean Air Act and parts 72 through 78 of this chapter.

*Administrator* means the Administrator of the United States Environmental Protection Agency or the Director of the Clean Air Markets Division (or its successor determined by the Administrator) of the United States Environmental Protection Agency, the Administrator's duly authorized representative under this subpart.

*Allocate* or *allocation* means, with regard to TR NO<sub>x</sub> Ozone Season allowances, the determination by the Administrator, State, or permitting authority, in accordance with this subpart and any SIP revision submitted by the State and approved by the Administrator under § 52.38(b)(3), (4), or (5) of this chapter, of the amount of such TR NO<sub>x</sub> Ozone Season allowances to be initially credited, at no cost to the recipient, to:

- (1) A TR NO<sub>x</sub> Ozone Season unit;
- (2) A new unit set-aside;
- (3) An Indian country new unit set-aside; or
- (4) An entity not listed in paragraphs (1) through (3) of this definition;
- (5) Provided that, if the Administrator, State, or permitting authority initially credits, to a TR NO<sub>x</sub> Ozone Season unit qualifying for an initial credit, a credit in the amount of zero TR NO<sub>x</sub> Ozone Season allowances, the TR NO<sub>x</sub> Ozone Season unit will be treated as being allocated an amount (*i.e.*, zero) of TR NO<sub>x</sub> Ozone Season allowances.

*Allowable NO<sub>x</sub> emission rate* means, for a unit, the most stringent State or federal NO<sub>x</sub> emission rate limit (in lb/MWhr or, if in lb/mmBtu, converted

to lb/MWhr by multiplying it by the unit's heat rate in mmBtu/MWhr) that is applicable to the unit and covers the longest averaging period not exceeding one year.

*Allowance Management System* means the system by which the Administrator records allocations, deductions, and transfers of TR NO<sub>x</sub> Ozone Season allowances under the TR NO<sub>x</sub> Ozone Season Trading Program. Such allowances are allocated, recorded, held, deducted, or transferred only as whole allowances.

*Allowance Management System account* means an account in the Allowance Management System established by the Administrator for purposes of recording the allocation, holding, transfer, or deduction of TR NO<sub>x</sub> Ozone Season allowances.

*Allowance transfer deadline* means, for a control period in a given year, midnight of December 1 (if it is a business day), or midnight of the first business day thereafter (if December 1 is not a business day), immediately after such control period and is the deadline by which a TR NO<sub>x</sub> Ozone Season allowance transfer must be submitted for recordation in a TR NO<sub>x</sub> Ozone Season source's compliance account in order to be available for use in complying with the source's TR NO<sub>x</sub> Ozone Season emissions limitation for such control period in accordance with §§ 97.506 and 97.524.

*Alternate designated representative* means, for a TR NO<sub>x</sub> Ozone Season source and each TR NO<sub>x</sub> Ozone Season unit at the source, the natural person who is authorized by the owners and operators of the source and all such units at the source, in accordance with this subpart, to act on behalf of the designated representative in matters pertaining to the TR NO<sub>x</sub> Ozone Season Trading Program. If the TR NO<sub>x</sub> Ozone Season source is also subject to the Acid Rain Program, TR NO<sub>x</sub> Annual Trading Program, TR SO<sub>2</sub> Group 1 Trading Program, or TR SO<sub>2</sub> Group 2 Trading Program, then this natural person shall be the same natural person as the alternate designated representative, as defined in the respective program.

*Assurance account* means an Allowance Management System account, established by the Administrator under § 97.525(b)(3) for certain owners and operators of a group of one or more TR NO<sub>x</sub> Ozone Season sources and units in a given State (and Indian country within the borders of such State), in which are held TR NO<sub>x</sub> Ozone Season allowances available for use for a control period in a given year in complying with the TR NO<sub>x</sub> Ozone



Season assurance provisions in accordance with §§ 97.506 and 97.525.

*Authorized account representative* means, for a general account, the natural person who is authorized, in accordance with this subpart, to transfer and otherwise dispose of TR NO<sub>x</sub> Ozone Season allowances held in the general account and, for a TR NO<sub>x</sub> Ozone Season source's compliance account, the designated representative of the source.

*Automated data acquisition and handling system* or *DAHS* means the component of the continuous emission monitoring system, or other emissions monitoring system approved for use under this subpart, designed to interpret and convert individual output signals from pollutant concentration monitors, flow monitors, diluent gas monitors, and other component parts of the monitoring system to produce a continuous record of the measured parameters in the measurement units required by this subpart.

*Biomass* means—

(1) Any organic material grown for the purpose of being converted to energy;

(2) Any organic byproduct of agriculture that can be converted into energy; or

(3) Any material that can be converted into energy and is nonmerchantable for other purposes, that is segregated from other material that is nonmerchantable for other purposes, and that is;

(i) A forest-related organic resource, including mill residues, precommercial thinnings, slash, brush, or byproduct from conversion of trees to merchantable material; or

(ii) A wood material, including pallets, crates, dunnage, manufacturing and construction materials (other than pressure-treated, chemically-treated, or painted wood products), and landscape or right-of-way tree trimmings.

*Boiler* means an enclosed fossil- or other-fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or other medium.

*Bottoming-cycle unit* means a unit in which the energy input to the unit is first used to produce useful thermal energy, where at least some of the reject heat from the useful thermal energy application or process is then used for electricity production.

*Business day* means a day that does not fall on a weekend or a federal holiday.

*Certifying official* means a natural person who is:

(1) For a corporation, a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function or any other person

who performs similar policy- or decision-making functions for the corporation;

(2) For a partnership or sole proprietorship, a general partner or the proprietor respectively; or

(3) For a local government entity or State, federal, or other public agency, a principal executive officer or ranking elected official.

*Clean Air Act* means the Clean Air Act, 42 U.S.C. 7401, *et seq.*

*Coal* means “coal” as defined in § 72.2 of this chapter.

*Coal-derived fuel* means any fuel (whether in a solid, liquid, or gaseous state) produced by the mechanical, thermal, or chemical processing of coal.

*Cogeneration system* means an integrated group, at a source, of equipment (including a boiler, or combustion turbine, and a steam turbine generator) designed to produce useful thermal energy for industrial, commercial, heating, or cooling purposes and electricity through the sequential use of energy.

*Cogeneration unit* means a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine that is a topping-cycle unit or a bottoming-cycle unit:

(1) Operating as part of a cogeneration system; and

(2) Producing on an annual average basis—

(i) For a topping-cycle unit,

(A) Useful thermal energy not less than 5 percent of total energy output; and

(B) Useful power that, when added to one-half of useful thermal energy produced, is not less than 42.5 percent of total energy input, if useful thermal energy produced is 15 percent or more of total energy output, or not less than 45 percent of total energy input, if useful thermal energy produced is less than 15 percent of total energy output.

(ii) For a bottoming-cycle unit, useful power not less than 45 percent of total energy input;

(3) Provided that the requirements in paragraph (2) of this definition shall not apply to a calendar year referenced in paragraph (2) of this definition during which the unit did not operate at all;

(4) Provided that the total energy input under paragraphs (2)(i)(B) and (2)(ii) of this definition shall equal the unit's total energy input from all fuel, except biomass if the unit is a boiler; and

(5) Provided that, if, throughout its operation during the 12-month period or a calendar year referenced in paragraph (2) of this definition, a unit is operated as part of a cogeneration system and the cogeneration system meets on a system-

wide basis the requirement in paragraph (2)(i)(B) or (2)(ii) of this definition, the unit shall be deemed to meet such requirement during that 12-month period or calendar year.

*Combustion turbine* means an enclosed device comprising:

(1) If the device is simple cycle, a compressor, a combustor, and a turbine and in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine; and

(2) If the device is combined cycle, the equipment described in paragraph (1) of this definition and any associated duct burner, heat recovery steam generator, and steam turbine.

*Commence commercial operation* means, with regard to a unit:

(1) To have begun to produce steam, gas, or other heated medium used to generate electricity for sale or use, including test generation, except as provided in § 97.505.

(i) For a unit that is a TR NO<sub>x</sub> Ozone Season unit under § 97.504 on the later of January 1, 2005 or the date the unit commences commercial operation as defined in the introductory text of paragraph (1) of this definition and that subsequently undergoes a physical change or is moved to a new location or source, such date shall remain the date of commencement of commercial operation of the unit, which shall continue to be treated as the same unit.

(ii) For a unit that is a TR NO<sub>x</sub> Ozone Season unit under § 97.504 on the later of January 1, 2005 or the date the unit commences commercial operation as defined in the introductory text of paragraph (1) of this definition and that is subsequently replaced by a unit at the same or a different source, such date shall remain the replaced unit's date of commencement of commercial operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of commercial operation as defined in paragraph (1) or (2) of this definition as appropriate.

(2) Notwithstanding paragraph (1) of this definition and except as provided in § 97.505, for a unit that is not a TR NO<sub>x</sub> Ozone Season unit under § 97.504 on the later of January 1, 2005 or the date the unit commences commercial operation as defined in introductory text of paragraph (1) of this definition, the unit's date for commencement of commercial operation shall be the date on which the unit becomes a TR NO<sub>x</sub> Ozone Season unit under § 97.504.

(i) For a unit with a date for commencement of commercial operation as defined in the introductory text of paragraph (2) of this definition

and that subsequently undergoes a physical change or is moved to a different location or source, such date shall remain the date of commencement of commercial operation of the unit, which shall continue to be treated as the same unit.

(ii) For a unit with a date for commencement of commercial operation as defined in the introductory text of paragraph (2) of this definition and that is subsequently replaced by a unit at the same or a different source, such date shall remain the replaced unit's date of commencement of commercial operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of commercial operation as defined in paragraph (1) or (2) of this definition as appropriate.

*Common designated representative* means, with regard to a control period in a given year, a designated representative where, as of April 1 immediately after the allowance transfer deadline for such control period, the same natural person is authorized under §§ 97.513(a) and 97.515(a) as the designated representative for a group of one or more TR NO<sub>x</sub> Ozone Season sources and units located in a State (and Indian country within the borders of such State).

*Common designated representative's assurance level* means, with regard to a specific common designated representative and a State (and Indian country within the borders of such State) and control period in a given year for which the State assurance level is exceeded as described in § 97.506(c)(2)(iii), the common designated representative's share of the State NO<sub>x</sub> Ozone Season trading budget with the variability limit for the State for such control period.

*Common designated representative's share* means, with regard to a specific common designated representative for a control period in a given year:

(1) With regard to a total amount of NO<sub>x</sub> emissions from all TR NO<sub>x</sub> Ozone Season units in a State (and Indian country within the borders of such State) during such control period, the total tonnage of NO<sub>x</sub> emissions during such control period from a group of one or more TR NO<sub>x</sub> Ozone Season units located in such State (and such Indian country) and having the common designated representative for such control period;

(2) With regard to a State NO<sub>x</sub> Ozone Season trading budget with the variability limit for such control period, the amount (rounded to the nearest allowance) equal to the sum of the total amount of TR NO<sub>x</sub> Ozone Season

allowances allocated for such control period to a group of one or more TR NO<sub>x</sub> Ozone Season units located in the State (and Indian country within the borders of such State) and having the common designated representative for such control period and of the total amount of TR NO<sub>x</sub> Ozone Season allowances purchased by an owner or operator of such TR NO<sub>x</sub> Ozone Season units in an auction for such control period and submitted by the State or the permitting authority to the Administrator for recordation in the compliance accounts for such TR NO<sub>x</sub> Ozone Season units in accordance with the TR NO<sub>x</sub> Ozone Season allowance auction provisions in a SIP revision approved by the Administrator under § 52.38(b)(4) or (5) of this chapter, multiplied by the sum of the State NO<sub>x</sub> Ozone Season trading budget under § 97.510(a) and the State's variability limit under § 97.510(b) for such control period and divided by such State NO<sub>x</sub> Ozone Season trading budget;

(3) Provided that, in the case of a unit that operates during, but has no amount of TR NO<sub>x</sub> Ozone Season allowances allocated under §§ 97.511 and 97.512 for, such control period, the unit shall be treated, solely for purposes of this definition, as being allocated an amount (rounded to the nearest allowance) of TR NO<sub>x</sub> Ozone Season allowances for such control period equal to the unit's allowable NO<sub>x</sub> emission rate applicable to such control period, multiplied by a capacity factor of 0.92 (if the unit is a boiler combusting any amount of coal or coal-derived fuel during such control period), 0.32 (if the unit is a simple combustion turbine during such control period), 0.71 (if the unit is a combined cycle turbine during such control period), 0.73 (if the unit is an integrated coal gasification combined cycle unit during such control period), or 0.44 (for any other unit), multiplied by the unit's maximum hourly load as reported in accordance with this subpart and by 3,672 hours/control period, and divided by 2,000 lb/ton.

*Common stack* means a single flue through which emissions from 2 or more units are exhausted.

*Compliance account* means an Allowance Management System account, established by the Administrator for a TR NO<sub>x</sub> Ozone Season source under this subpart, in which any TR NO<sub>x</sub> Ozone Season allowance allocations to the TR NO<sub>x</sub> Ozone Season units at the source are recorded and in which are held any TR NO<sub>x</sub> Ozone Season allowances available for use for a control period in a given year in complying with the source's TR NO<sub>x</sub> Ozone Season emissions limitation

in accordance with §§ 97.506 and 97.524.

*Continuous emission monitoring system* or *CEMS* means the equipment required under this subpart to sample, analyze, measure, and provide, by means of readings recorded at least once every 15 minutes and using an automated data acquisition and handling system (DAHS), a permanent record of NO<sub>x</sub> emissions, stack gas volumetric flow rate, stack gas moisture content, and O<sub>2</sub> or CO<sub>2</sub> concentration (as applicable), in a manner consistent with part 75 of this chapter and §§ 97.530 through 97.535. The following systems are the principal types of continuous emission monitoring systems:

(1) A flow monitoring system, consisting of a stack flow rate monitor and an automated data acquisition and handling system and providing a permanent, continuous record of stack gas volumetric flow rate, in standard cubic feet per hour (scfh);

(2) A NO<sub>x</sub> concentration monitoring system, consisting of a NO<sub>x</sub> pollutant concentration monitor and an automated data acquisition and handling system and providing a permanent, continuous record of NO<sub>x</sub> emissions, in parts per million (ppm);

(3) A NO<sub>x</sub> emission rate (or NO<sub>x</sub>-diluent) monitoring system, consisting of a NO<sub>x</sub> pollutant concentration monitor, a diluent gas (CO<sub>2</sub> or O<sub>2</sub>) monitor, and an automated data acquisition and handling system and providing a permanent, continuous record of NO<sub>x</sub> concentration, in parts per million (ppm), diluent gas concentration, in percent CO<sub>2</sub> or O<sub>2</sub>, and NO<sub>x</sub> emission rate, in pounds per million British thermal units (lb/mmBtu);

(4) A moisture monitoring system, as defined in § 75.11(b)(2) of this chapter and providing a permanent, continuous record of the stack gas moisture content, in percent H<sub>2</sub>O;

(5) A CO<sub>2</sub> monitoring system, consisting of a CO<sub>2</sub> pollutant concentration monitor (or an O<sub>2</sub> monitor plus suitable mathematical equations from which the CO<sub>2</sub> concentration is derived) and an automated data acquisition and handling system and providing a permanent, continuous record of CO<sub>2</sub> emissions, in percent CO<sub>2</sub>; and

(6) An O<sub>2</sub> monitoring system, consisting of an O<sub>2</sub> concentration monitor and an automated data acquisition and handling system and providing a permanent, continuous record of O<sub>2</sub>, in percent O<sub>2</sub>.

*Control period* means the period starting May 1 of a calendar year, except as provided in § 97.506(c)(3), and

ending on September 30 of the same year, inclusive.

*Designated representative* means, for a TR NO<sub>x</sub> Ozone Season source and each TR NO<sub>x</sub> Ozone Season unit at the source, the natural person who is authorized by the owners and operators of the source and all such units at the source, in accordance with this subpart, to represent and legally bind each owner and operator in matters pertaining to the TR NO<sub>x</sub> Ozone Season Trading Program. If the TR NO<sub>x</sub> Ozone Season source is also subject to the Acid Rain Program, TR NO<sub>x</sub> Annual Trading Program, TR SO<sub>2</sub> Group 1 Trading Program, or TR SO<sub>2</sub> Group 2 Trading Program, then this natural person shall be the same natural person as the designated representative, as defined in the respective program.

*Emissions* means air pollutants exhausted from a unit or source into the atmosphere, as measured, recorded, and reported to the Administrator by the designated representative, and as modified by the Administrator:

(1) In accordance with this subpart; and

(2) With regard to a period before the unit or source is required to measure, record, and report such air pollutants in accordance with this subpart, in accordance with part 75 of this chapter.

*Excess emissions* means any ton of emissions from the TR NO<sub>x</sub> Ozone Season units at a TR NO<sub>x</sub> Ozone Season source during a control period in a given year that exceeds the TR NO<sub>x</sub> Ozone Season emissions limitation for the source for such control period.

*Fossil fuel* means—

(1) Natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material; or

(2) For purposes of applying the limitation on “average annual fuel consumption of fossil fuel” in §§ 97.504(b)(2)(i)(B) and (ii), natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material for the purpose of creating useful heat.

*Fossil-fuel-fired* means, with regard to a unit, combusting any amount of fossil fuel in 2005 or any calendar year thereafter.

*General account* means an Allowance Management System account, established under this subpart, that is not a compliance account or an assurance account.

*Generator* means a device that produces electricity.

*Gross electrical output* means, for a unit, electricity made available for use, including any such electricity used in the power production process (which process includes, but is not limited to,

any on-site processing or treatment of fuel combusted at the unit and any on-site emission controls).

*Heat input* means, for a unit for a specified period of time, the product (in mmBtu/time) of the gross calorific value of the fuel (in mmBtu/lb) fed into the unit multiplied by the fuel feed rate (in lb of fuel/time), as measured, recorded, and reported to the Administrator by the designated representative and as modified by the Administrator in accordance with this subpart and excluding the heat derived from preheated combustion air, recirculated flue gases, or exhaust.

*Heat input rate* means, for a unit, the amount of heat input (in mmBtu) divided by unit operating time (in hr) or, for a unit and a specific fuel, the amount of heat input attributed to the fuel (in mmBtu) divided by the unit operating time (in hr) during which the unit combusts the fuel.

*Heat rate* means, for a unit, the unit's maximum design heat input (in Btu/hr), divided by the product of 1,000,000 Btu/mmBtu and the unit's maximum hourly load.

*Indian country* means “Indian country” as defined in 18 U.S.C. 1151.

*Life-of-the-unit, firm power contractual arrangement* means a unit participation power sales agreement under which a utility or industrial customer reserves, or is entitled to receive, a specified amount or percentage of nameplate capacity and associated energy generated by any specified unit and pays its proportional amount of such unit's total costs, pursuant to a contract:

(1) For the life of the unit;

(2) For a cumulative term of no less than 30 years, including contracts that permit an election for early termination; or

(3) For a period no less than 25 years or 70 percent of the economic useful life of the unit determined as of the time the unit is built, with option rights to purchase or release some portion of the nameplate capacity and associated energy generated by the unit at the end of the period.

*Maximum design heat input* means, for a unit, the maximum amount of fuel per hour (in Btu/hr) that the unit is capable of combusting on a steady state basis as of the initial installation of the unit as specified by the manufacturer of the unit.

*Monitoring system* means any monitoring system that meets the requirements of this subpart, including a continuous emission monitoring system, an alternative monitoring system, or an excepted monitoring system under part 75 of this chapter.

*Nameplate capacity* means, starting from the initial installation of a generator, the maximum electrical generating output (in MWe, rounded to the nearest tenth) that the generator is capable of producing on a steady state basis and during continuous operation (when not restricted by seasonal or other deratings) as of such installation as specified by the manufacturer of the generator or, starting from the completion of any subsequent physical change in the generator resulting in an increase in the maximum electrical generating output that the generator is capable of producing on a steady state basis and during continuous operation (when not restricted by seasonal or other deratings), such increased maximum amount (in MWe, rounded to the nearest tenth) as of such completion as specified by the person conducting the physical change.

*Natural gas* means “natural gas” as defined in § 72.2 of this chapter.

*Newly affected TR NO<sub>x</sub> Ozone Season unit* means a unit that was not a TR NO<sub>x</sub> Ozone Season unit when it began operating but that thereafter becomes a TR NO<sub>x</sub> Ozone Season unit.

*Operate or operation* means, with regard to a unit, to combust fuel.

*Operator* means, for a TR NO<sub>x</sub> Ozone Season source or a TR NO<sub>x</sub> Ozone Season unit at a source respectively, any person who operates, controls, or supervises a TR NO<sub>x</sub> Ozone Season unit at the source or the TR NO<sub>x</sub> Ozone Season unit and shall include, but not be limited to, any holding company, utility system, or plant manager of such source or unit.

*Owner* means, for a TR NO<sub>x</sub> Ozone Season source or a TR NO<sub>x</sub> Ozone Season unit at a source respectively, any of the following persons:

(1) Any holder of any portion of the legal or equitable title in a TR NO<sub>x</sub> Ozone Season unit at the source or the TR NO<sub>x</sub> Ozone Season unit;

(2) Any holder of a leasehold interest in a TR NO<sub>x</sub> Ozone Season unit at the source or the TR NO<sub>x</sub> Ozone Season unit, provided that, unless expressly provided for in a leasehold agreement, “owner” shall not include a passive lessor, or a person who has an equitable interest through such lessor, whose rental payments are not based (either directly or indirectly) on the revenues or income from such TR NO<sub>x</sub> Ozone Season unit; and

(3) Any purchaser of power from a TR NO<sub>x</sub> Ozone Season unit at the source or the TR NO<sub>x</sub> Ozone Season unit under a life-of-the-unit, firm power contractual arrangement.

*Permanently retired* means, with regard to a unit, a unit that is

unavailable for service and that the unit's owners and operators do not expect to return to service in the future.

*Permitting authority* means "permitting authority" as defined in §§ 70.2 and 71.2 of this chapter.

*Potential electrical output capacity* means, for a unit, 33 percent of the unit's maximum design heat input, divided by 3,413 Btu/kWh, divided by 1,000 kWh/MWh, and multiplied by 8,760 hr/yr.

*Receive* or *receipt of* means, when referring to the Administrator, to come into possession of a document, information, or correspondence (whether sent in hard copy or by authorized electronic transmission), as indicated in an official log, or by a notation made on the document, information, or correspondence, by the Administrator in the regular course of business.

*Recordation, record, or recorded* means, with regard to TR NO<sub>x</sub> Ozone Season allowances, the moving of TR NO<sub>x</sub> Ozone Season allowances by the Administrator into, out of, or between Allowance Management System accounts, for purposes of allocation, auction, transfer, or deduction.

*Reference method* means any direct test method of sampling and analyzing for an air pollutant as specified in § 75.22 of this chapter.

*Replacement, replace, or replaced* means, with regard to a unit, the demolishing of a unit, or the permanent retirement and permanent disabling of a unit, and the construction of another unit (the replacement unit) to be used instead of the demolished or retired unit (the replaced unit).

*Sequential use of energy* means:

(1) The use of reject heat from electricity production in a useful thermal energy application or process; or

(2) The use of reject heat from useful thermal energy application or process in electricity production.

*Serial number* means, for a TR NO<sub>x</sub> Ozone Season allowance, the unique identification number assigned to each TR NO<sub>x</sub> Ozone Season allowance by the Administrator.

*Solid waste incineration unit* means a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine that is a "solid waste incineration unit" as defined in section 129(g)(1) of the Clean Air Act.

*Source* means all buildings, structures, or installations located in one or more contiguous or adjacent properties under common control of the same person or persons. This definition does not change or otherwise affect the definition of "major source", "stationary

source", or "source" as set forth and implemented in a title V operating permit program or any other program under the Clean Air Act.

*State* means one of the States that is subject to the TR NO<sub>x</sub> Ozone Season Trading Program pursuant to § 52.38(b) of this chapter.

*Submit* or *serve* means to send or transmit a document, information, or correspondence to the person specified in accordance with the applicable regulation:

(1) In person;

(2) By United States Postal Service; or

(3) By other means of dispatch or transmission and delivery;

(4) Provided that compliance with any "submission" or "service" deadline shall be determined by the date of dispatch, transmission, or mailing and not the date of receipt.

*Topping-cycle unit* means a unit in which the energy input to the unit is first used to produce useful power, including electricity, where at least some of the reject heat from the electricity production is then used to provide useful thermal energy.

*Total energy input* means, for a unit, total energy of all forms supplied to the unit, excluding energy produced by the unit. Each form of energy supplied shall be measured by the lower heating value of that form of energy calculated as follows:

$$LHV = HHV - 10.55 (W + 9H)$$

Where:

LHV = lower heating value of the form of energy in Btu/lb,

HHV = higher heating value of the form of energy in Btu/lb,

W = weight % of moisture in the form of energy, and

H = weight % of hydrogen in the form of energy.

*Total energy output* means, for a unit, the sum of useful power and useful thermal energy produced by the unit.

*TR NO<sub>x</sub> Annual Trading Program* means a multi-state NO<sub>x</sub> air pollution control and emission reduction program established in accordance with subpart AAAAA of this part and § 52.38(a) of this chapter (including such a program that is revised in a SIP revision approved by the Administrator under § 52.38(a)(3) or (4) of this chapter or that is established in a SIP revision approved by the Administrator under § 52.38(a)(5) of this chapter), as a means of mitigating interstate transport of fine particulates and NO<sub>x</sub>.

*TR NO<sub>x</sub> Ozone Season allowance* means a limited authorization issued and allocated or auctioned by the Administrator under this subpart, or by a State or permitting authority under a

SIP revision approved by the Administrator under § 52.38(b)(3), (4), or (5) of this chapter, to emit one ton of NO<sub>x</sub> during a control period of the specified calendar year for which the authorization is allocated or auctioned or of any calendar year thereafter under the TR NO<sub>x</sub> Ozone Season Trading Program.

*TR NO<sub>x</sub> Ozone Season allowance deduction or deduct TR NO<sub>x</sub> Ozone Season allowances* means the permanent withdrawal of TR NO<sub>x</sub> Ozone Season allowances by the Administrator from a compliance account (e.g., in order to account for compliance with the TR NO<sub>x</sub> Ozone Season emissions limitation) or from an assurance account (e.g., in order to account for compliance with the assurance provisions under §§ 97.506 and 97.525).

*TR NO<sub>x</sub> Ozone Season allowances held or hold TR NO<sub>x</sub> Ozone Season allowances* means the TR NO<sub>x</sub> Ozone Season allowances treated as included in an Allowance Management System account as of a specified point in time because at that time they:

(1) Have been recorded by the Administrator in the account or transferred into the account by a correctly submitted, but not yet recorded, TR NO<sub>x</sub> Ozone Season allowance transfer in accordance with this subpart; and

(2) Have not been transferred out of the account by a correctly submitted, but not yet recorded, TR NO<sub>x</sub> Ozone Season allowance transfer in accordance with this subpart.

*TR NO<sub>x</sub> Ozone Season emissions limitation* means, for a TR NO<sub>x</sub> Ozone Season source, the tonnage of NO<sub>x</sub> emissions authorized in a control period in a given year by the TR NO<sub>x</sub> Ozone Season allowances available for deduction for the source under § 97.524(a) for such control period.

*TR NO<sub>x</sub> Ozone Season source* means a source that includes one or more TR NO<sub>x</sub> Ozone Season units.

*TR NO<sub>x</sub> Ozone Season Trading Program* means a multi-state NO<sub>x</sub> air pollution control and emission reduction program established in accordance with this subpart and § 52.38(b) of this chapter (including such a program that is revised in a SIP revision approved by the Administrator under § 52.38(b)(3) or (4) of this chapter or that is established in a SIP revision approved by the Administrator under § 52.38(b)(5) of this chapter), as a means of mitigating interstate transport of ozone and NO<sub>x</sub>.

*TR NO<sub>x</sub> Ozone Season unit* means a unit that is subject to the TR NO<sub>x</sub> Ozone Season Trading Program.

*TR SO<sub>2</sub> Group 1 Trading Program* means a multi-state SO<sub>2</sub> air pollution control and emission reduction program established in accordance with subpart CCCCC of this part and 52.39(a), (b), (d) through (f), (j), and (k) of this chapter (including such a program that is revised in a SIP revision approved by the Administrator under § 52.39(d) or (e) of this chapter or that is established in a SIP revision approved by the Administrator under § 52.39(f) of this chapter), as a means of mitigating interstate transport of fine particulates and SO<sub>2</sub>.

*TR SO<sub>2</sub> Group 2 Trading Program* means a multi-state SO<sub>2</sub> air pollution control and emission reduction program established in accordance with subpart DDDDD of this part and 52.39(a), (c), and (g) through (k) of this chapter (including such a program that is revised in a SIP revision approved by the Administrator under § 52.39(g) or (h) of this chapter or that is established in a SIP revision approved by the Administrator under § 52.39(i) of this chapter), as a means of mitigating interstate transport of fine particulates and SO<sub>2</sub>.

*Unit* means a stationary, fossil-fuel-fired boiler, stationary, fossil-fuel-fired combustion turbine, or other stationary, fossil-fuel-fired combustion device. A unit that undergoes a physical change or is moved to a different location or source shall continue to be treated as the same unit. A unit (the replaced unit) that is replaced by another unit (the replacement unit) at the same or a different source shall continue to be treated as the same unit, and the replacement unit shall be treated as a separate unit.

*Unit operating day* means, with regard to a unit, a calendar day in which the unit combusts any fuel.

*Unit operating hour* or *hour of unit operation* means, with regard to a unit, an hour in which the unit combusts any fuel.

*Useful power* means, with regard to a unit, electricity or mechanical energy that the unit makes available for use, excluding any such energy used in the power production process (which process includes, but is not limited to, any on-site processing or treatment of fuel combusted at the unit and any on-site emission controls).

*Useful thermal energy* means thermal energy that is:

(1) Made available to an industrial or commercial process (not a power production process), excluding any heat contained in condensate return or makeup water;

(2) Used in a heating application (*e.g.*, space heating or domestic hot water heating); or

(3) Used in a space cooling application (*i.e.*, in an absorption chiller).

*Utility power distribution system* means the portion of an electricity grid owned or operated by a utility and dedicated to delivering electricity to customers.

#### **§ 97.503 Measurements, abbreviations, and acronyms.**

Measurements, abbreviations, and acronyms used in this subpart are defined as follows:

Btu—British thermal unit  
CO<sub>2</sub>—carbon dioxide  
H<sub>2</sub>O—water  
hr—hour  
kW—kilowatt electrical  
kWh—kilowatt hour  
lb—pound  
mmBtu—million Btu  
MWe—megawatt electrical  
MWh—megawatt hour  
NO<sub>x</sub>—nitrogen oxides  
O<sub>2</sub>—oxygen  
ppm—parts per million  
scfh—standard cubic feet per hour  
SO<sub>2</sub>—sulfur dioxide  
yr—year

#### **§ 97.504 Applicability.**

(a) Except as provided in paragraph (b) of this section:

(1) The following units in a State (and Indian country within the borders of such State) shall be TR NO<sub>x</sub> Ozone Season units, and any source that includes one or more such units shall be a TR NO<sub>x</sub> Ozone Season source, subject to the requirements of this subpart: any stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time, on or after January 1, 2005, a generator with nameplate capacity of more than 25 MWe producing electricity for sale.

(2) If a stationary boiler or stationary combustion turbine that, under paragraph (a)(1) of this section, is not a TR NO<sub>x</sub> Ozone Season unit begins to combust fossil fuel or to serve a generator with nameplate capacity of more than 25 MWe producing electricity for sale, the unit shall become a TR NO<sub>x</sub> Ozone Season unit as provided in paragraph (a)(1) of this section on the first date on which it both combusts fossil fuel and serves such generator.

(b) Any unit in a State (and Indian country within the borders of such State) that otherwise is a TR NO<sub>x</sub> Ozone Season unit under paragraph (a) of this section and that meets the requirements set forth in paragraph (b)(1)(i) or (2)(i) of this section shall not be a TR NO<sub>x</sub> Ozone Season unit:

(1)(i) Any unit:

(A) Qualifying as a cogeneration unit throughout the later of 2005 or the 12-month period starting on the date the unit first produces electricity and continuing to qualify as a cogeneration unit throughout each calendar year ending after the later of 2005 or such 12-month period; and

(B) Not supplying in 2005 or any calendar year thereafter more than one-third of the unit's potential electric output capacity or 219,000 MWh, whichever is greater, to any utility power distribution system for sale.

(ii) If, after qualifying under paragraph (b)(1)(i) of this section as not being a TR NO<sub>x</sub> Ozone Season unit, a unit subsequently no longer meets all the requirements of paragraph (b)(1)(i) of this section, the unit shall become a TR NO<sub>x</sub> Ozone Season unit starting on the earlier of January 1 after the first calendar year during which the unit first no longer qualifies as a cogeneration unit or January 1 after the first calendar year during which the unit no longer meets the requirements of paragraph (b)(1)(i)(B) of this section. The unit shall thereafter continue to be a TR NO<sub>x</sub> Ozone Season unit.

(2)(i) Any unit:

(A) Qualifying as a solid waste incineration unit throughout the later of 2005 or the 12-month period starting on the date the unit first produces electricity and continuing to qualify as a solid waste incineration unit throughout each calendar year ending after the later of 2005 or such 12-month period; and

(B) With an average annual fuel consumption of fossil fuel for the first 3 consecutive calendar years of operation starting no earlier than 2005 of less than 20 percent (on a Btu basis) and an average annual fuel consumption of fossil fuel for any 3 consecutive calendar years thereafter of less than 20 percent (on a Btu basis).

(ii) If, after qualifying under paragraph (b)(2)(i) of this section as not being a TR NO<sub>x</sub> Ozone Season unit, a unit subsequently no longer meets all the requirements of paragraph (b)(1)(i) of this section, the unit shall become a TR NO<sub>x</sub> Ozone Season unit starting on the earlier of January 1 after the first calendar year during which the unit first no longer qualifies as a solid waste incineration unit or January 1 after the first 3 consecutive calendar years after 2005 for which the unit has an average annual fuel consumption of fossil fuel of 20 percent or more. The unit shall thereafter continue to be a TR NO<sub>x</sub> Ozone Season unit.

(c) A certifying official of an owner or operator of any unit or other equipment

may submit a petition (including any supporting documents) to the Administrator at any time for a determination concerning the applicability, under paragraphs (a) and (b) of this section or a SIP revision approved under § 52.38(b)(4) or (5) of this chapter, of the TR NO<sub>x</sub> Ozone Season Trading Program to the unit or other equipment.

(1) *Petition content.* The petition shall be in writing and include the identification of the unit or other equipment and the relevant facts about the unit or other equipment. The petition and any other documents provided to the Administrator in connection with the petition shall include the following certification statement, signed by the certifying official: "I am authorized to make this submission on behalf of the owners and operators of the unit or other equipment for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

(2) *Response.* The Administrator will issue a written response to the petition and may request supplemental information determined by the Administrator to be relevant to such petition. The Administrator's determination concerning the applicability, under paragraphs (a) and (b) of this section, of the TR NO<sub>x</sub> Ozone Season Trading Program to the unit or other equipment shall be binding on any State or permitting authority unless the Administrator determines that the petition or other documents or information provided in connection with the petition contained significant, relevant errors or omissions.

#### § 97.505 Retired unit exemption.

(a)(1) Any TR NO<sub>x</sub> Ozone Season unit that is permanently retired shall be exempt from § 97.506(b) and (c)(1), § 97.524, and §§ 97.530 through 97.535.

(2) The exemption under paragraph (a)(1) of this section shall become effective the day on which the TR NO<sub>x</sub> Ozone Season unit is permanently retired. Within 30 days of the unit's permanent retirement, the designated

representative shall submit a statement to the Administrator. The statement shall state, in a format prescribed by the Administrator, that the unit was permanently retired on a specified date and will comply with the requirements of paragraph (b) of this section.

(b) *Special provisions.* (1) A unit exempt under paragraph (a) of this section shall not emit any NO<sub>x</sub>, starting on the date that the exemption takes effect.

(2) For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under paragraph (a) of this section shall retain, at the source that includes the unit, records demonstrating that the unit is permanently retired. The 5-year period for keeping records may be extended for cause, at any time before the end of the period, in writing by the Administrator. The owners and operators bear the burden of proof that the unit is permanently retired.

(3) The owners and operators and, to the extent applicable, the designated representative of a unit exempt under paragraph (a) of this section shall comply with the requirements of the TR NO<sub>x</sub> Ozone Season Trading Program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.

(4) A unit exempt under paragraph (a) of this section shall lose its exemption on the first date on which the unit resumes operation. Such unit shall be treated, for purposes of applying allocation, monitoring, reporting, and recordkeeping requirements under this subpart, as a unit that commences commercial operation on the first date on which the unit resumes operation.

#### § 97.506 Standard requirements.

(a) *Designated representative requirements.* The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with §§ 97.513 through 97.518.

(b) *Emissions monitoring, reporting, and recordkeeping requirements.* (1) The owners and operators, and the designated representative, of each TR NO<sub>x</sub> Ozone Season source and each TR NO<sub>x</sub> Ozone Season unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of §§ 97.530 through 97.535.

(2) The emissions data determined in accordance with §§ 97.530 through 97.535 shall be used to calculate allocations of TR NO<sub>x</sub> Ozone Season allowances under §§ 97.511(a)(2) and (b)

and 97.512 and to determine compliance with the TR NO<sub>x</sub> Ozone Season emissions limitation and assurance provisions under paragraph (c) of this section, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with §§ 97.530 through 97.535 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) *NO<sub>x</sub> emissions requirements.* (1) *TR NO<sub>x</sub> Ozone Season emissions limitation.* (i) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NO<sub>x</sub> Ozone Season source and each TR NO<sub>x</sub> Ozone Season unit at the source shall hold, in the source's compliance account, TR NO<sub>x</sub> Ozone Season allowances available for deduction for such control period under § 97.524(a) in an amount not less than the tons of total NO<sub>x</sub> emissions for such control period from all TR NO<sub>x</sub> Ozone Season units at the source.

(ii) If total NO<sub>x</sub> emissions during a control period in a given year from the TR NO<sub>x</sub> Ozone Season units at a TR NO<sub>x</sub> Ozone Season source are in excess of the TR NO<sub>x</sub> Ozone Season emissions limitation set forth in paragraph (c)(1)(i) of this section, then:

(A) The owners and operators of the source and each TR NO<sub>x</sub> Ozone Season unit at the source shall hold the TR NO<sub>x</sub> Ozone Season allowances required for deduction under § 97.524(d); and

(B) The owners and operators of the source and each TR NO<sub>x</sub> Ozone Season unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart and the Clean Air Act.

(2) *TR NO<sub>x</sub> Ozone Season assurance provisions.* (i) If total NO<sub>x</sub> emissions during a control period in a given year from all TR NO<sub>x</sub> Ozone Season units at TR NO<sub>x</sub> Ozone Season sources in a State (and Indian country within the borders of such State) exceed the State assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO<sub>x</sub> emissions during such control period exceeds the common designated

representative's assurance level for the State and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR NO<sub>x</sub> Ozone Season allowances available for deduction for such control period under § 97.525(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with § 97.525(b), of multiplying—

(A) The quotient of the amount by which the common designated representative's share of such NO<sub>x</sub> emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the State (and Indian country within the borders of such State) for such control period, by which each common designated representative's share of such NO<sub>x</sub> emissions exceeds the respective common designated representative's assurance level; and

(B) The amount by which total NO<sub>x</sub> emissions from all TR NO<sub>x</sub> Ozone Season units at TR NO<sub>x</sub> Ozone Season sources in the State (and Indian country within the borders of such State) for such control period exceed the State assurance level.

(ii) The owners and operators shall hold the TR NO<sub>x</sub> Ozone Season allowances required under paragraph (c)(2)(i) of this section, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.

(iii) Total NO<sub>x</sub> emissions from all TR NO<sub>x</sub> Ozone Season units at TR NO<sub>x</sub> Ozone Season sources in a State (and Indian country within the borders of such State) during a control period in a given year exceed the State assurance level if such total NO<sub>x</sub> emissions exceed the sum, for such control period, of the State NO<sub>x</sub> Ozone Season trading budget under § 97.510(a) and the State's variability limit under § 97.510(b).

(iv) It shall not be a violation of this subpart or of the Clean Air Act if total NO<sub>x</sub> emissions from all TR NO<sub>x</sub> Ozone Season units at TR NO<sub>x</sub> Ozone Season sources in a State (and Indian country within the borders of such State) during a control period exceed the State assurance level or if a common designated representative's share of total NO<sub>x</sub> emissions from the TR NO<sub>x</sub> Ozone Season units at TR NO<sub>x</sub> Ozone Season sources in a State (and Indian country within the borders of such State) during a control period exceeds the common

designated representative's assurance level.

(v) To the extent the owners and operators fail to hold TR NO<sub>x</sub> Ozone Season allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) of this section,

(A) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and

(B) Each TR NO<sub>x</sub> Ozone Season allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) of this section and each day of such control period shall constitute a separate violation of this subpart and the Clean Air Act.

(3) Compliance periods. A TR NO<sub>x</sub> Ozone Season unit shall be subject to the requirements under paragraphs (c)(1) and (c)(2) of this section for the control period starting on the later of May 1, 2012 or the deadline for meeting the unit's monitor certification requirements under § 97.530(b) and for each control period thereafter.

(4) Vintage of allowances held for compliance. (i) A TR NO<sub>x</sub> Ozone Season allowance held for compliance with the requirements under paragraph (c)(1)(i) of this section for a control period in a given year must be a TR NO<sub>x</sub> Ozone Season allowance that was allocated for such control period or a control period in a prior year.

(ii) A TR NO<sub>x</sub> Ozone Season allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) of this section for a control period in a given year must be a TR NO<sub>x</sub> Ozone Season allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

(5) Allowance Management System requirements. Each TR NO<sub>x</sub> Ozone Season allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with this subpart.

(6) Limited authorization. A TR NO<sub>x</sub> Ozone Season allowance is a limited authorization to emit one ton of NO<sub>x</sub> during the control period in one year. Such authorization is limited in its use and duration as follows:

(i) Such authorization shall only be used in accordance with the TR NO<sub>x</sub> Ozone Season Trading Program; and

(ii) Notwithstanding any other provision of this subpart, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the

Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

(7) Property right. A TR NO<sub>x</sub> Ozone Season allowance does not constitute a property right.

(d) *Title V permit requirements.* (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR NO<sub>x</sub> Ozone Season allowances in accordance with this subpart.

(2) A description of whether a unit is required to monitor and report NO<sub>x</sub> emissions using a continuous emission monitoring system (under subpart H of part 75 of this chapter), an excepted monitoring system (under appendices D and E to part 75 of this chapter), a low mass emissions excepted monitoring methodology (under § 75.19 of this chapter), or an alternative monitoring system (under subpart E of part 75 of this chapter) in accordance with §§ 97.530 through 97.535 may be added to, or changed in, a title V permit using minor permit modification procedures in accordance with §§ 70.7(e)(2) and 71.7(e)(1) of this chapter, provided that the requirements applicable to the described monitoring and reporting (as added or changed, respectively) are already incorporated in such permit. This paragraph explicitly provides that the addition of, or change to, a unit's description as described in the prior sentence is eligible for minor permit modification procedures in accordance with §§ 70.7(e)(2)(i)(B) and 71.7(e)(1)(i)(B) of this chapter.

(e) *Additional recordkeeping and reporting requirements.* (1) Unless otherwise provided, the owners and operators of each TR NO<sub>x</sub> Ozone Season source and each TR NO<sub>x</sub> Ozone Season unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.

(i) The certificate of representation under § 97.516 for the designated representative for the source and each TR NO<sub>x</sub> Ozone Season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under § 97.516 changing the designated representative.

(ii) All emissions monitoring information, in accordance with this subpart.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR NO<sub>x</sub> Ozone Season Trading Program.

(2) The designated representative of a TR NO<sub>x</sub> Ozone Season source and each TR NO<sub>x</sub> Ozone Season unit at the source shall make all submissions required under the TR NO<sub>x</sub> Ozone Season Trading Program, except as provided in § 97.518. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in parts 70 and 71 of this chapter.

(f) *Liability.* (1) Any provision of the TR NO<sub>x</sub> Ozone Season Trading Program that applies to a TR NO<sub>x</sub> Ozone Season source or the designated representative of a TR NO<sub>x</sub> Ozone Season source shall also apply to the owners and operators of such source and of the TR NO<sub>x</sub> Ozone Season units at the source.

(2) Any provision of the TR NO<sub>x</sub> Ozone Season Trading Program that applies to a TR NO<sub>x</sub> Ozone Season unit or the designated representative of a TR NO<sub>x</sub> Ozone Season unit shall also apply to the owners and operators of such unit.

(g) *Effect on other authorities.* No provision of the TR NO<sub>x</sub> Ozone Season Trading Program or exemption under § 97.505 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR NO<sub>x</sub> Ozone Season source or TR NO<sub>x</sub> Ozone Season unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

**§ 97.507 Computation of time.**

(a) Unless otherwise stated, any time period scheduled, under the TR NO<sub>x</sub> Ozone Season Trading Program, to begin on the occurrence of an act or event shall begin on the day the act or event occurs.

(b) Unless otherwise stated, any time period scheduled, under the TR NO<sub>x</sub> Ozone Season Trading Program, to begin

before the occurrence of an act or event shall be computed so that the period ends the day before the act or event occurs.

(c) Unless otherwise stated, if the final day of any time period, under the TR NO<sub>x</sub> Ozone Season Trading Program, is not a business day, the time period shall be extended to the next business day.

**§ 97.508 Administrative appeal procedures.**

The administrative appeal procedures for decisions of the Administrator under the TR NO<sub>x</sub> Ozone Season Trading Program are set forth in part 78 of this chapter.

**§ 97.509 [Reserved]**

**§ 97.510 State NO<sub>x</sub> Ozone Season trading budgets, new unit set-asides, Indian country new unit set-aside, and variability limits.**

(a) The State NO<sub>x</sub> Ozone Season trading budgets, new unit set-asides, and Indian country new unit set-asides for allocations of TR NO<sub>x</sub> Ozone Season allowances for the control periods in 2012 and thereafter are as follows:

State	NO <sub>x</sub> Ozone Season trading budget (tons) * for 2012 and 2013	New unit set-aside (tons) for 2012 and 2013	Indian country new unit set-aside (tons) for 2012 and 2013
Alabama	31,746	635	
Arkansas	15,037	301	
Florida	27,825	529	28
Georgia	27,944	559	
Illinois	21,208	1,697	
Indiana	46,876	1,406	
Kentucky	36,167	1,447	
Louisiana	13,432	390	13
Maryland	7,179	144	
Mississippi	10,160	193	10
New Jersey	3,382	68	
New York	8,331	242	8
North Carolina	22,168	1,308	22
Ohio	40,063	801	
Pennsylvania	52,201	1,044	
South Carolina	13,909	264	14
Tennessee	14,908	298	
Texas	63,043	1,828	63
Virginia	14,452	723	
West Virginia	25,283	1,264	

State	NO <sub>x</sub> Ozone Season trading budget (tons) * for 2014 and thereafter	New unit set-aside (tons) for 2014 and thereafter	Indian country new unit set-aside (tons) for 2014 and thereafter
Alabama	31,499	630	
Arkansas	15,037	301	
Florida	27,825	529	28
Georgia	18,279	366	
Illinois	21,208	1,697	
Indiana	46,175	1,385	
Kentucky	32,674	1,307	
Louisiana	13,432	390	13
Maryland	7,179	144	
Mississippi	10,160	193	10
New Jersey	3,382	68	



State	NO <sub>x</sub> Ozone Season trading budget (tons)* for 2014 and thereafter	New unit set-aside (tons) for 2014 and thereafter	Indian country new unit set-aside (tons) for 2014 and thereafter
New York .....	8,331	242	8
North Carolina .....	18,455	1,089	18
Ohio .....	37,792	756	.....
Pennsylvania .....	51,912	1,038	.....
South Carolina .....	13,909	264	14
Tennessee .....	8,016	160	.....
Texas .....	63,043	1,828	63
Virginia .....	14,452	723	.....
West Virginia .....	23,291	1,165	.....

\* Each trading budget includes the new unit set-aside and, where applicable, the Indian country new unit set-aside and does not include the variability limit.

(b) The States' variability limits for the State NO<sub>x</sub> Ozone Season trading budgets for the control periods in 2012 and thereafter are as follows:

State	Variability limits for 2012 and 2013	Variability limits for 2014 and thereafter
Alabama .....	6,667	6,615
Arkansas .....	3,158	3,158
Florida .....	5,843	5,843
Georgia .....	5,868	3,839
Illinois .....	4,454	4,454
Indiana .....	9,844	9,697
Kentucky .....	7,595	6,862
Louisiana .....	2,821	2,821
Maryland .....	1,508	1,508
Mississippi .....	2,134	2,134
New Jersey .....	710	710
New York .....	1,750	1,750
North Carolina .....	4,655	3,876
Ohio .....	8,413	7,936
Pennsylvania .....	10,962	10,902
South Carolina .....	2,921	2,921
Tennessee .....	3,131	1,683
Texas .....	13,239	13,239
Virginia .....	3,035	3,035
West Virginia .....	5,309	4,891

**§ 97.511 Timing requirements for TR NO<sub>x</sub> Ozone Season allowance allocations.**

(a) *Existing units.* (1) TR NO<sub>x</sub> Ozone Season allowances are allocated, for the control periods in 2012 and each year thereafter, as provided in a notice of data availability issued by the Administrator. Providing an allocation to a unit in such notice does not constitute a determination that the unit is a TR NO<sub>x</sub> Ozone Season unit, and not providing an allocation to a unit in such notice does not constitute a determination that the unit is not a TR NO<sub>x</sub> Ozone Season unit.

(2) Notwithstanding paragraph (a)(1) of this section, if a unit provided an allocation in the notice of data availability issued under paragraph (a)(1) of this section does not operate, starting after 2011, during the control period in two consecutive years, such unit will not be allocated the TR NO<sub>x</sub> Ozone Season allowances provided in such notice for the unit for the control periods in the fifth year after the first

such year and in each year after that fifth year. All TR NO<sub>x</sub> Ozone Season allowances that would otherwise have been allocated to such unit will be allocated to the new unit set-aside for the State where such unit is located and for the respective years involved. If such unit resumes operation, the Administrator will allocate TR NO<sub>x</sub> Ozone Season allowances to the unit in accordance with paragraph (b) of this section.

(b) *New units.*—(1) New unit set-asides. (i) By June 1, 2012 and June 1 of each year thereafter, the Administrator will calculate the TR NO<sub>x</sub> Ozone Season allowance allocation to each TR NO<sub>x</sub> Ozone Season unit in a State, in accordance with § 97.512(a)(2) through (7) and (12), for the control period in the year of the applicable calculation deadline under this paragraph and will promulgate a notice of data availability of the results of the calculations.

(ii) For each notice of data availability required in paragraph (b)(1)(i) of this section, the Administrator will provide an opportunity for submission of objections to the calculations referenced in such notice.

(A) Objections shall be submitted by the deadline specified in each notice of data availability required in paragraph (b)(1)(i) of this section and shall be limited to addressing whether the calculations (including the identification of the TR NO<sub>x</sub> Ozone Season units) are in accordance with § 97.512(a)(2) through (7) and (12) and §§ 97.506(b)(2) and 97.530 through 97.535.

(B) The Administrator will adjust the calculations to the extent necessary to ensure that they are in accordance with the provisions referenced in paragraph (b)(1)(ii)(A) of this section. By August 1 immediately after the promulgation of each notice of data availability required in paragraph (b)(1)(i) of this section, the Administrator will promulgate a notice

of data availability of any adjustments that the Administrator determines to be necessary with regard to allocations under § 97.512(a)(2) through (7) and (12) and the reasons for accepting or rejecting any objections submitted in accordance with paragraph (b)(1)(ii)(A) of this section.

(iii) If the new unit set-aside for such control period contains any TR NO<sub>x</sub> Ozone Season allowances that have not been allocated in the applicable notice of data availability required in paragraph (b)(1)(ii) of this section, the Administrator will promulgate, by September 15 immediately after such notice, a notice of data availability that identifies any TR NO<sub>x</sub> Ozone Season units that commenced commercial operation during the period starting May 1 of the year before the year of such control period and ending August 31 of year of such control period.

(iv) For each notice of data availability required in paragraph (b)(1)(iii) of this section, the Administrator will provide an opportunity for submission of objections to the identification of TR NO<sub>x</sub> Ozone Season units in such notice.

(A) Objections shall be submitted by the deadline specified in each notice of data availability required in paragraph (b)(1)(iii) of this section and shall be limited to addressing whether the identification of TR NO<sub>x</sub> Ozone Season units in such notice is in accordance with paragraph (b)(1)(iii) of this section.

(B) The Administrator will adjust the identification of TR NO<sub>x</sub> Ozone Season units in the each notice of data availability required in paragraph (b)(1)(iii) of this section to the extent necessary to ensure that it is in accordance with paragraph (b)(1)(iii) of this section and will calculate the TR NO<sub>x</sub> Ozone Season allowance allocation to each TR NO<sub>x</sub> Ozone Season unit in accordance with § 97.512(a)(9), (10), and (12) and §§ 97.506(b)(2) and 97.530 through 97.535. By November 15 immediately after the promulgation of each notice of data availability required in paragraph (b)(1)(iii) of this section, the Administrator will promulgate a notice of data availability of any adjustments of the identification of TR NO<sub>x</sub> Ozone Season units that the Administrator determines to be necessary, the reasons for accepting or rejecting any objections submitted in accordance with paragraph (b)(1)(iv)(A) of this section, and the results of such calculations.

(v) To the extent any TR NO<sub>x</sub> Ozone Season allowances are added to the new unit set-aside after promulgation of each notice of data availability required in paragraph (b)(1)(iv) of this section, the

Administrator will promulgate additional notices of data availability, as deemed appropriate, of the allocation of such TR NO<sub>x</sub> Ozone Season allowances in accordance with § 97.512(a)(10).

(2) Indian country new unit set-asides. (i) By June 1, 2012 and June 1 of each year thereafter, the Administrator will calculate the TR NO<sub>x</sub> Ozone Season allowance allocation to each TR NO<sub>x</sub> Ozone Season unit in Indian country within the borders of a State, in accordance with § 97.512(b)(2) through (7) and (12), for the control period in the year of the applicable calculation deadline under this paragraph and will promulgate a notice of data availability of the results of the calculations.

(ii) For each notice of data availability required in paragraph (b)(2)(i) of this section, the Administrator will provide an opportunity for submission of objections to the calculations referenced in such notice.

(A) Objections shall be submitted by the deadline specified in each notice of data availability required in paragraph (b)(2)(i) of this section and shall be limited to addressing whether the calculations (including the identification of the TR NO<sub>x</sub> Ozone Season units) are in accordance with § 97.512(b)(2) through (7) and (12) and §§ 97.506(b)(2) and 97.530 through 97.535.

(B) The Administrator will adjust the calculations to the extent necessary to ensure that they are in accordance with the provisions referenced in paragraph (b)(2)(ii)(A) of this section. By August 1 immediately after the promulgation of each notice of data availability required in paragraph (b)(2)(i) of this section, the Administrator will promulgate a notice of data availability of any adjustments that the Administrator determines to be necessary with regard to allocations under § 97.512(b)(2) through (7) and (12) and the reasons for accepting or rejecting any objections submitted in accordance with paragraph (b)(2)(ii)(A) of this section.

(iii) If the Indian country new unit set-aside for such control period contains any TR NO<sub>x</sub> Ozone Season allowances that have not been allocated in the applicable notice of data availability required in paragraph (b)(2)(ii) of this section, the Administrator will promulgate, by September 15 immediately after such notice, a notice of data availability that identifies any TR NO<sub>x</sub> Ozone Season units that commenced commercial operation during the period starting May 1 of the year before the year of such control period and ending August 31 of year of such control period.

(iv) For each notice of data availability required in paragraph (b)(2)(iii) of this section, the Administrator will provide an opportunity for submission of objections to the identification of TR NO<sub>x</sub> Ozone Season units in such notice.

(A) Objections shall be submitted by the deadline specified in each notice of data availability required in paragraph (b)(2)(iii) of this section and shall be limited to addressing whether the identification of TR NO<sub>x</sub> Ozone Season units in such notice is in accordance with paragraph (b)(2)(iii) of this section.

(B) The Administrator will adjust the identification of TR NO<sub>x</sub> Ozone Season units in the each notice of data availability required in paragraph (b)(2)(iii) of this section to the extent necessary to ensure that it is in accordance with paragraph (b)(2)(iii) of this section and will calculate the TR NO<sub>x</sub> Ozone Season allowance allocation to each TR NO<sub>x</sub> Ozone Season unit in accordance with § 97.512(b)(9), (10), and (12) and §§ 97.506(b)(2) and 97.530 through 97.535. By November 15 immediately after the promulgation of each notice of data availability required in paragraph (b)(2)(iii) of this section, the Administrator will promulgate a notice of data availability of any adjustments of the identification of TR NO<sub>x</sub> Ozone Season units that the Administrator determines to be necessary, the reasons for accepting or rejecting any objections submitted in accordance with paragraph (b)(2)(iv)(A) of this section, and the results of such calculations. (v) To the extent any TR NO<sub>x</sub> Ozone Season allowances are added to the Indian country new unit set-aside after promulgation of each notice of data availability required in paragraph (b)(2)(iv) of this section, the Administrator will promulgate additional notices of data availability, as deemed appropriate, of the allocation of such TR NO<sub>x</sub> Ozone Season allowances in accordance with § 97.512(b)(10).

(c) *Units incorrectly allocated TR NO<sub>x</sub> Ozone Season allowances.* (1) For each control period in 2012 and thereafter, if the Administrator determines that TR NO<sub>x</sub> Ozone Season allowances were allocated under paragraph (a) of this section, or under a provision of a SIP revision approved under § 52.38(b)(3), (4), or (5) of this chapter, where such control period and the recipient are covered by the provisions of paragraph (c)(1)(i) of this section or were allocated under § 97.512(a)(2) through (7), (9), and (12) and (b)(2) through (7), (9), and (12), or under a provision of a SIP revision approved under § 52.38(b)(4) or (5) of this chapter, where such control period and the recipient are covered by the

provisions of paragraph (c)(1)(ii) of this section, then the Administrator will notify the designated representative of the recipient and will act in accordance with the procedures set forth in paragraphs (c)(2) through (5) of this section:

(i)(A) The recipient is not actually a TR NO<sub>x</sub> Ozone Season unit under § 97.504 as of May 1, 2012 and is allocated TR NO<sub>x</sub> Ozone Season allowances for such control period or, in the case of an allocation under a provision of a SIP revision approved under § 52.38(b)(3), (4), or (5) of this chapter, the recipient is not actually a TR NO<sub>x</sub> Ozone Season unit as of May 1, 2012 and is allocated TR NO<sub>x</sub> Ozone Season allowances for such control period that the SIP revision provides should be allocated only to recipients that are TR NO<sub>x</sub> Ozone Season units as of May 1, 2012; or

(B) The recipient is not located as of May 1 of the control period in the State from whose NO<sub>x</sub> Ozone Season trading budget the TR NO<sub>x</sub> Ozone Season allowances allocated under paragraph (a) of this section, or under a provision of a SIP revision approved under § 52.38(b)(3), (4), or (5) of this chapter, were allocated for such control period.

(ii) The recipient is not actually a TR NO<sub>x</sub> Ozone Season unit under § 97.504 as of May 1 of such control period and is allocated TR NO<sub>x</sub> Ozone Season allowances for such control period or, in the case of an allocation under a provision of a SIP revision approved under § 52.38(b)(3), (4), or (5) of this chapter, the recipient is not actually a TR NO<sub>x</sub> Ozone Season unit as of January 1 of such control period and is allocated TR NO<sub>x</sub> Ozone Season allowances for such control period that the SIP revision provides should be allocated only to recipients that are TR NO<sub>x</sub> Ozone Season units as of May 1 of such control period.

(2) Except as provided in paragraph (c)(3) or (4) of this section, the Administrator will not record such TR NO<sub>x</sub> Ozone Season allowances under § 97.521.

(3) If the Administrator already recorded such TR NO<sub>x</sub> Ozone Season allowances under § 97.521 and if the Administrator makes the determination under paragraph (c)(1) of this section before making deductions for the source that includes such recipient under § 97.524(b) for such control period, then the Administrator will deduct from the account in which such TR NO<sub>x</sub> Ozone Season allowances were recorded an amount of TR NO<sub>x</sub> Ozone Season allowances allocated for the same or a prior control period equal to the amount of such already recorded TR NO<sub>x</sub> Ozone

Season allowances. The authorized account representative shall ensure that there are sufficient TR NO<sub>x</sub> Ozone Season allowances in such account for completion of the deduction.

(4) If the Administrator already recorded such TR NO<sub>x</sub> Ozone Season allowances under § 97.521 and if the Administrator makes the determination under paragraph (c)(1) of this section after making deductions for the source that includes such recipient under § 97.524(b) for such control period, then the Administrator will not make any deduction to take account of such already recorded TR NO<sub>x</sub> Ozone Season allowances.

(5)(i) With regard to the TR NO<sub>x</sub> Ozone Season allowances that are not recorded, or that are deducted as an incorrect allocation, in accordance with paragraphs (c)(2) and (3) of this section for a recipient under paragraph (c)(1)(i) of this section, the Administrator will:

(A) Transfer such TR NO<sub>x</sub> Ozone Season allowances to the new unit set-aside for such control period for the State from whose NO<sub>x</sub> Ozone Season trading budget the TR NO<sub>x</sub> Ozone Season allowances were allocated; or

(B) If the State has a SIP revision approved under § 52.38(b)(4) or (5) covering such control period, include such TR NO<sub>x</sub> Annual allowances in the portion of the State NO<sub>x</sub> Ozone Season trading budget that may be allocated for such control period in accordance with such SIP revision.

(ii) With regard to the TR NO<sub>x</sub> Ozone Season allowances that were not allocated from the Indian country new unit set-aside for such control period and that are not recorded, or that are deducted as an incorrect allocation, in accordance with paragraphs (c)(2) and (3) of this section for a recipient under paragraph (c)(1)(ii) of this paragraph, the Administrator will:

(A) Transfer such TR NO<sub>x</sub> Ozone Season allowances to the new unit set-aside for such control period; or

(B) If the State has a SIP revision approved under § 52.38(b)(4) or (5) covering such control period, include such TR NO<sub>x</sub> Ozone Season allowances in the portion of the State NO<sub>x</sub> Ozone Season trading budget that may be allocated for such control period in accordance with such SIP revision.

(iii) With regard to the TR NO<sub>x</sub> Ozone Season allowances that were allocated from the Indian country new unit set-aside for such control period and that are not recorded, or that are deducted as an incorrect allocation, in accordance with paragraphs (c)(2) and (3) of this section for a recipient under paragraph (c)(1)(ii) of this paragraph, the Administrator will transfer such TR

NO<sub>x</sub> Ozone Season allowances to the Indian country new unit set-aside for such control period.

**§ 97.512 TR NO<sub>x</sub> Ozone Season allowance allocations to new units.**

(a) For each control period in 2012 and thereafter and for the TR NO<sub>x</sub> Ozone Season units in each State, the Administrator will allocate TR NO<sub>x</sub> Ozone Season allowances to the TR NO<sub>x</sub> Ozone Season units as follows:

(1) The TR NO<sub>x</sub> Ozone Season allowances will be allocated to the following TR NO<sub>x</sub> Ozone Season units, except as provided in paragraph (a)(10) of this section:

(i) TR NO<sub>x</sub> Ozone Season units that are not allocated an amount of TR NO<sub>x</sub> Ozone Season allowances in the notice of data availability issued under § 97.511(a)(1);

(ii) TR NO<sub>x</sub> Ozone Season units whose allocation of an amount of TR NO<sub>x</sub> Ozone Season allowances for such control period in the notice of data availability issued under § 97.511(a)(1) is covered by § 97.511(c)(2) or (3);

(iii) TR NO<sub>x</sub> Ozone Season units that are allocated an amount of TR NO<sub>x</sub> Ozone Season allowances for such control period in the notice of data availability issued under § 97.511(a)(1), which allocation is terminated for such control period pursuant to § 97.511(a)(2), and that operate during the control period immediately preceding such control period; or

(iv) For purposes of paragraph (a)(9) of this section, TR NO<sub>x</sub> Ozone Season units under § 97.511(c)(1)(ii) whose allocation of an amount of TR NO<sub>x</sub> Ozone Season allowances for such control period in the notice of data availability issued under § 97.511(b)(1)(ii)(B) is covered by § 97.511(c)(2) or (3).

(2) The Administrator will establish a separate new unit set-aside for the State for each such control period. Each such new unit set-aside will be allocated TR NO<sub>x</sub> Ozone Season allowances in an amount equal to the applicable amount of tons of NO<sub>x</sub> emissions as set forth in § 97.510(a) and will be allocated additional TR NO<sub>x</sub> Ozone Season allowances (if any) in accordance with §§ 97.511(a)(2) and (c)(5) and paragraph (b)(10) of this section.

(3) The Administrator will determine, for each TR NO<sub>x</sub> Ozone Season unit described in paragraph (a)(1) of this section, an allocation of TR NO<sub>x</sub> Ozone Season allowances for the later of the following control periods and for each subsequent control period:

(i) The control period in 2012;

(ii) The first control period after the control period in which the TR NO<sub>x</sub>

Ozone Season unit commences commercial operation;

(iii) For a unit described in paragraph (a)(1)(ii) of this section, the first control period in which the TR NO<sub>x</sub> Ozone Season unit operates in the State after operating in another jurisdiction and for which the unit is not already allocated one or more TR NO<sub>x</sub> Ozone Season allowances; and

(iv) For a unit described in paragraph (a)(1)(iii) of this section, the first control period after the control period in which the unit resumes operation.

(4)(i) The allocation to each TR NO<sub>x</sub> Ozone Season unit described in paragraph (a)(1)(i) through (iii) of this section and for each control period described in paragraph (a)(3) of this section will be an amount equal to the unit's total tons of NO<sub>x</sub> emissions during the immediately preceding control period.

(ii) The Administrator will adjust the allocation amount in paragraph (a)(4)(i) in accordance with paragraphs (a)(5) through (7) and (12) of this section.

(5) The Administrator will calculate the sum of the TR NO<sub>x</sub> Ozone Season allowances determined for all such TR NO<sub>x</sub> Ozone Season units under paragraph (a)(4)(i) of this section in the State for such control period.

(6) If the amount of TR NO<sub>x</sub> Ozone Season allowances in the new unit set-aside for the State for such control period is greater than or equal to the sum under paragraph (a)(5) of this section, then the Administrator will allocate the amount of TR NO<sub>x</sub> Ozone Season allowances determined for each such TR NO<sub>x</sub> Ozone Season unit under paragraph (a)(4)(i) of this section.

(7) If the amount of TR NO<sub>x</sub> Ozone Season allowances in the new unit set-aside for the State for such control period is less than the sum under paragraph (a)(5) of this section, then the Administrator will allocate to each such TR NO<sub>x</sub> Ozone Season unit the amount of the TR NO<sub>x</sub> Ozone Season allowances determined under paragraph (a)(4)(i) of this section for the unit, multiplied by the amount of TR NO<sub>x</sub> Ozone Season allowances in the new unit set-aside for such control period, divided by the sum under paragraph (a)(5) of this section, and rounded to the nearest allowance.

(8) The Administrator will notify the public, through the promulgation of the notices of data availability described in § 97.511(b)(1)(i) and (ii), of the amount of TR NO<sub>x</sub> Ozone Season allowances allocated under paragraphs (a)(2) through (7) and (12) of this section for such control period to each TR NO<sub>x</sub> Ozone Season unit eligible for such allocation.

(9) If, after completion of the procedures under paragraphs (a)(5) through (8) of this section for such control period, any unallocated TR NO<sub>x</sub> Ozone Season allowances remain in the new unit set-aside for the State for such control period, the Administrator will allocate such TR NO<sub>x</sub> Ozone Season allowances as follows—

(i) The Administrator will determine, for each unit described in paragraph (a)(1) of this section that commenced commercial operation during the period starting May 1 of the year before the year of such control period and ending August 31 of year of such control period, the positive difference (if any) between the unit's emissions during such control period and the amount of TR NO<sub>x</sub> Ozone Season allowances referenced in the notice of data availability required under § 97.511(b)(1)(ii) for the unit for such control period;

(ii) The Administrator will determine the sum of the positive differences determined under paragraph (a)(9)(i) of this section;

(iii) If the amount of unallocated TR NO<sub>x</sub> Ozone Season allowances remaining in the new unit set-aside for the State for such control period is greater than or equal to the sum determined under paragraph (a)(9)(ii) of this section, then the Administrator will allocate the amount of TR NO<sub>x</sub> Ozone Season allowances determined for each such TR NO<sub>x</sub> Ozone Season unit under paragraph (a)(9)(i) of this section; and

(iv) If the amount of unallocated TR NO<sub>x</sub> Ozone Season allowances remaining in the new unit set-aside for the State for such control period is less than the sum under paragraph (a)(9)(ii) of this section, then the Administrator will allocate to each such TR NO<sub>x</sub> Ozone Season unit the amount of the TR NO<sub>x</sub> Ozone Season allowances determined under paragraph (a)(9)(i) of this section for the unit, multiplied by the amount of unallocated TR NO<sub>x</sub> Ozone Season allowances remaining in the new unit set-aside for such control period, divided by the sum under paragraph (a)(9)(ii) of this section, and rounded to the nearest allowance.

(10) If, after completion of the procedures under paragraphs (a)(9) and (12) of this section for such control period, any unallocated TR NO<sub>x</sub> Ozone Season allowances remain in the new unit set-aside for the State for such control period, the Administrator will allocate to each TR NO<sub>x</sub> Ozone Season unit that is in the State, is allocated an amount of TR NO<sub>x</sub> Ozone Season allowances in the notice of data availability issued under § 97.511(a)(1), and continues to be allocated TR NO<sub>x</sub>

Ozone Season allowances for such control period in accordance with § 97.511(a)(2), an amount of TR NO<sub>x</sub> Ozone Season allowances equal to the following: the total amount of such remaining unallocated TR NO<sub>x</sub> Ozone Season allowances in such new unit set-aside, multiplied by the unit's allocation under § 97.511(a) for such control period, divided by the remainder of the amount of tons in the applicable State NO<sub>x</sub> Ozone Season trading budget minus the sum of the amounts of tons in such new unit set-aside and the Indian country new unit set-aside for the State for such control period, and rounded to the nearest allowance.

(11) The Administrator will notify the public, through the promulgation of the notices of data availability described in § 97.511(b)(1)(iii), (iv), and (v), of the amount of TR NO<sub>x</sub> Ozone Season allowances allocated under paragraphs (a)(9), (10), and (12) of this section for such control period to each TR NO<sub>x</sub> Ozone Season unit eligible for such allocation.

(12)(i) Notwithstanding the requirements of paragraphs (a)(2) through (11) of this section, if the calculations of allocations of a new unit set-aside for a control period in a given year under paragraph (a)(7) of this section, paragraphs (a)(6) and (9)(iv) of this section, or paragraphs (a)(6), (9)(iii), and (10) of this section would otherwise result in total allocations of such new unit set-aside exceeding the total amount of such new unit set-aside, then the Administrator will adjust the results of the calculations under paragraph (a)(7), (9)(iv), or (10) of this section, as applicable, as follows. The Administrator will list the TR NO<sub>x</sub> Ozone Season units in descending order based on the amount of such units' allocations under paragraph (a)(7), (9)(iv), or (10) of this section, as applicable, and, in cases of equal allocation amounts, in alphabetical order of the relevant source's name and numerical order of the relevant unit's identification number, and will reduce each unit's allocation under paragraph (a)(7), (9)(iv), or (10) of this section, as applicable, by one TR NO<sub>x</sub> Ozone Season allowance (but not below zero) in the order in which the units are listed and will repeat this reduction process as necessary, until the total allocations of such new unit set-aside equal the total amount of such new unit set-aside.

(ii) Notwithstanding the requirements of paragraphs (a)(10) and (11) of this section, if the calculations of allocations of a new unit set-aside for a control period in a given year under paragraphs (a)(6), (9)(iii), and (10) of this section would otherwise result in a total

allocations of such new unit set-aside less than the total amount of such new unit set-aside, then the Administrator will adjust the results of the calculations under paragraph (a)(10) of this section, as follows. The Administrator will list the TR NO<sub>x</sub> Ozone Season units in descending order based on the amount of such units' allocations under paragraph (a)(10) of this section and, in cases of equal allocation amounts, in alphabetical order of the relevant source's name and numerical order of the relevant unit's identification number, and will increase each unit's allocation under paragraph (a)(10) of this section by one TR NO<sub>x</sub> Ozone Season allowance in the order in which the units are listed and will repeat this increase process as necessary, until the total allocations of such new unit set-aside equal the total amount of such new unit set-aside.

(b) For each control period in 2012 and thereafter and for the TR NO<sub>x</sub> Ozone Season units located in Indian country within the borders of each State, the Administrator will allocate TR NO<sub>x</sub> Ozone Season allowances to the TR NO<sub>x</sub> Ozone Season units as follows:

(1) The TR NO<sub>x</sub> Ozone Season allowances will be allocated to the following TR NO<sub>x</sub> Ozone Season units, except as provided in paragraph (b)(10) of this section:

(i) TR NO<sub>x</sub> Ozone Season units that are not allocated an amount of TR NO<sub>x</sub> Ozone Season allowances in the notice of data availability issued under § 97.511(a)(1); or

(ii) For purposes of paragraph (b)(9) of this section, TR NO<sub>x</sub> Ozone Season units under § 97.511(c)(1)(ii) whose allocation of an amount of TR NO<sub>x</sub> Ozone Season allowances for such control period in the notice of data availability issued under § 97.511(b)(2)(ii)(B) is covered by § 97.511(c)(2) or (3).

(2) The Administrator will establish a separate Indian country new unit set-aside for the State for each such control period. Each such Indian country new unit set-aside will be allocated TR NO<sub>x</sub> Ozone Season allowances in an amount equal to the applicable amount of tons of NO<sub>x</sub> emissions as set forth in § 97.510(a) and will be allocated additional TR NO<sub>x</sub> Ozone Season allowances (if any) in accordance with § 97.511(c)(5).

(3) The Administrator will determine, for each TR NO<sub>x</sub> Ozone Season unit described in paragraph (b)(1) of this section, an allocation of TR NO<sub>x</sub> Ozone Season allowances for the later of the following control periods and for each subsequent control period:

(i) The control period in 2012; and

(ii) The first control period after the control period in which the TR NO<sub>x</sub> Ozone Season unit commences commercial operation.

(4)(i) The allocation to each TR NO<sub>x</sub> Ozone Season unit described in paragraph (b)(1)(i) of this section and for each control period described in paragraph (b)(3) of this section will be an amount equal to the unit's total tons of NO<sub>x</sub> emissions during the immediately preceding control period.

(ii) The Administrator will adjust the allocation amount in paragraph (b)(4)(i) in accordance with paragraphs (b)(5) through (7) and (12) of this section.

(5) The Administrator will calculate the sum of the TR NO<sub>x</sub> Ozone Season allowances determined for all such TR NO<sub>x</sub> Ozone Season units under paragraph (b)(4)(i) of this section in Indian country within the borders of the State for such control period.

(6) If the amount of TR NO<sub>x</sub> Ozone Season allowances in the Indian country new unit set-aside for the State for such control period is greater than or equal to the sum under paragraph (b)(5) of this section, then the Administrator will allocate the amount of TR NO<sub>x</sub> Ozone Season allowances determined for each such TR NO<sub>x</sub> Ozone Season unit under paragraph (b)(4)(i) of this section.

(7) If the amount of TR NO<sub>x</sub> Ozone Season allowances in the Indian country new unit set-aside for the State for such control period is less than the sum under paragraph (b)(5) of this section, then the Administrator will allocate to each such TR NO<sub>x</sub> Ozone Season unit the amount of the TR NO<sub>x</sub> Ozone Season allowances determined under paragraph (b)(4)(i) of this section for the unit, multiplied by the amount of TR NO<sub>x</sub> Ozone Season allowances in the Indian country new unit set-aside for such control period, divided by the sum under paragraph (b)(5) of this section, and rounded to the nearest allowance.

(8) The Administrator will notify the public, through the promulgation of the notices of data availability described in § 97.511(b)(2)(i) and (ii), of the amount of TR NO<sub>x</sub> Ozone Season allowances allocated under paragraphs (b)(2) through (7) and (12) of this section for such control period to each TR NO<sub>x</sub> Ozone Season unit eligible for such allocation.

(9) If, after completion of the procedures under paragraphs (b)(5) through (8) of this section for such control period, any unallocated TR NO<sub>x</sub> Ozone Season allowances remain in the Indian country new unit set-aside for the State for such control period, the Administrator will allocate such TR NO<sub>x</sub> Ozone Season allowances as follows—

(i) The Administrator will determine, for each unit described in paragraph (b)(1) of this section that commenced commercial operation during the period starting May 1 of the year before the year of such control period and ending August 31 of year of such control period, the positive difference (if any) between the unit's emissions during such control period and the amount of TR NO<sub>x</sub> Ozone Season allowances referenced in the notice of data availability required under § 97.511(b)(2)(ii) for the unit for such control period;

(ii) The Administrator will determine the sum of the positive differences determined under paragraph (b)(9)(i) of this section;

(iii) If the amount of unallocated TR NO<sub>x</sub> Ozone Season allowances remaining in the Indian country new unit set-aside for the State for such control period is greater than or equal to the sum determined under paragraph (b)(9)(ii) of this section, then the Administrator will allocate the amount of TR NO<sub>x</sub> Ozone Season allowances determined for each such TR NO<sub>x</sub> Ozone Season unit under paragraph (b)(9)(i) of this section; and

(iv) If the amount of unallocated TR NO<sub>x</sub> Ozone Season allowances remaining in the Indian country new unit set-aside for the State for such control period is less than the sum under paragraph (b)(9)(ii) of this section, then the Administrator will allocate to each such TR NO<sub>x</sub> Ozone Season unit the amount of the TR NO<sub>x</sub> Ozone Season allowances determined under paragraph (b)(9)(i) of this section for the unit, multiplied by the amount of unallocated TR NO<sub>x</sub> Ozone Season allowances remaining in the Indian country new unit set-aside for such control period, divided by the sum under paragraph (b)(9)(ii) of this section, and rounded to the nearest allowance.

(10) If, after completion of the procedures under paragraphs (b)(9) and (12) of this section for such control period, any unallocated TR NO<sub>x</sub> Ozone Season allowances remain in the Indian country new unit set-aside for the State for such control period, the Administrator will:

(i) Transfer such unallocated TR NO<sub>x</sub> Ozone Season allowances to the new unit set-aside for the State for such control period; or

(ii) If the State has a SIP revision approved under § 52.38(b)(4) or (5) covering such control period, include such unallocated TR NO<sub>x</sub> Ozone Season allowances in the portion of the State NO<sub>x</sub> Ozone Season trading budget that may be allocated for such control period in accordance with such SIP revision.

(11) The Administrator will notify the public, through the promulgation of the notices of data availability described in § 97.511(b)(2)(iii), (iv), and (v), of the amount of TR NO<sub>x</sub> Ozone Season allowances allocated under paragraphs (b)(9), (10), and (12) of this section for such control period to each TR NO<sub>x</sub> Ozone Season unit eligible for such allocation.

(12)(i) Notwithstanding the requirements of paragraphs (b)(2) through (11) of this section, if the calculations of allocations of an Indian country new unit set-aside for a control period in a given year under paragraph (b)(7) of this section, paragraphs (b)(6) and (9)(iv) of this section, or paragraphs (b)(6), (9)(iii), and (10) of this section would otherwise result in total allocations of such Indian country new unit set-aside exceeding the total amount of such Indian country new unit set-aside, then the Administrator will adjust the results of the calculations under paragraph (b)(7), (9)(iv), or (10) of this section, as applicable, as follows. The Administrator will list the TR NO<sub>x</sub> Ozone Season units in descending order based on the amount of such units' allocations under paragraph (b)(7), (9)(iv), or (10) of this section, as applicable, and, in cases of equal allocation amounts, in alphabetical order of the relevant source's name and numerical order of the relevant unit's identification number, and will reduce each unit's allocation under paragraph (b)(7), (9)(iv), or (10) of this section, as applicable, by one TR NO<sub>x</sub> Ozone Season allowance (but not below zero) in the order in which the units are listed and will repeat this reduction process as necessary, until the total allocations of such Indian country new unit set-aside equal the total amount of such Indian country new unit set-aside.

(ii) Notwithstanding the requirements of paragraphs (b)(10) and (11) of this section, if the calculations of allocations of an Indian country new unit set-aside for a control period in a given year under paragraphs (b)(6), (9)(iii), and (10) of this section would otherwise result in a total allocations of such Indian country new unit set-aside less than the total amount of such Indian country new unit set-aside, then the Administrator will adjust the results of the calculations under paragraph (b)(10) of this section, as follows. The Administrator will list the TR NO<sub>x</sub> Ozone Season units in descending order based on the amount of such units' allocations under paragraph (b)(10) of this section and, in cases of equal allocation amounts, in alphabetical order of the relevant source's name and numerical order of the relevant unit's

identification number, and will increase each unit's allocation under paragraph (b)(10) of this section by one TR NO<sub>x</sub> Ozone Season allowance in the order in which the units are listed and will repeat this increase process as necessary, until the total allocations of such Indian country new unit set-aside equal the total amount of such Indian country new unit set-aside.

**§ 97.513 Authorization of designated representative and alternate designated representative.**

(a) Except as provided under § 97.515, each TR NO<sub>x</sub> Ozone Season source, including all TR NO<sub>x</sub> Ozone Season units at the source, shall have one and only one designated representative, with regard to all matters under the TR NO<sub>x</sub> Ozone Season Trading Program.

(1) The designated representative shall be selected by an agreement binding on the owners and operators of the source and all TR NO<sub>x</sub> Ozone Season units at the source and shall act in accordance with the certification statement in § 97.516(a)(4)(iii).

(2) Upon and after receipt by the Administrator of a complete certificate of representation under § 97.516:

(i) The designated representative shall be authorized and shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each owner and operator of the source and each TR NO<sub>x</sub> Ozone Season unit at the source in all matters pertaining to the TR NO<sub>x</sub> Ozone Season Trading Program, notwithstanding any agreement between the designated representative and such owners and operators; and

(ii) The owners and operators of the source and each TR NO<sub>x</sub> Ozone Season unit at the source shall be bound by any decision or order issued to the designated representative by the Administrator regarding the source or any such unit.

(b) Except as provided under § 97.515, each TR NO<sub>x</sub> Ozone Season source may have one and only one alternate designated representative, who may act on behalf of the designated representative. The agreement by which the alternate designated representative is selected shall include a procedure for authorizing the alternate designated representative to act in lieu of the designated representative.

(1) The alternate designated representative shall be selected by an agreement binding on the owners and operators of the source and all TR NO<sub>x</sub> Ozone Season units at the source and shall act in accordance with the certification statement in § 97.516(a)(4)(iii).

(2) Upon and after receipt by the Administrator of a complete certificate of representation under § 97.516,

(i) The alternate designated representative shall be authorized;

(ii) Any representation, action, inaction, or submission by the alternate designated representative shall be deemed to be a representation, action, inaction, or submission by the designated representative; and

(iii) The owners and operators of the source and each TR NO<sub>x</sub> Ozone Season unit at the source shall be bound by any decision or order issued to the alternate designated representative by the Administrator regarding the source or any such unit.

(c) Except in this section, § 97.502, and §§ 97.514 through 97.518, whenever the term "designated representative" (as distinguished from the term "common designated representative") is used in this subpart, the term shall be construed to include the designated representative or any alternate designated representative.

**§ 97.514 Responsibilities of designated representative and alternate designated representative.**

(a) Except as provided under § 97.518 concerning delegation of authority to make submissions, each submission under the TR NO<sub>x</sub> Ozone Season Trading Program shall be made, signed, and certified by the designated representative or alternate designated representative for each TR NO<sub>x</sub> Ozone Season source and TR NO<sub>x</sub> Ozone Season unit for which the submission is made. Each such submission shall include the following certification statement by the designated representative or alternate designated representative: "I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

(b) The Administrator will accept or act on a submission made for a TR NO<sub>x</sub> Ozone Season source or a TR NO<sub>x</sub> Ozone Season unit only if the

submission has been made, signed, and certified in accordance with paragraph (a) of this section and § 97.518.

**§ 97.515 Changing designated representative and alternate designated representative; changes in owners and operators; changes in units at the source.**

(a) *Changing designated representative.* The designated representative may be changed at any time upon receipt by the Administrator of a superseding complete certificate of representation under § 97.516.

Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous designated representative before the time and date when the Administrator receives the superseding certificate of representation shall be binding on the new designated representative and the owners and operators of the TR NO<sub>x</sub> Ozone Season source and the TR NO<sub>x</sub> Ozone Season units at the source.

(b) *Changing alternate designated representative.* The alternate designated representative may be changed at any time upon receipt by the Administrator of a superseding complete certificate of representation under § 97.516.

Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous alternate designated representative before the time and date when the Administrator receives the superseding certificate of representation shall be binding on the new alternate designated representative, the designated representative, and the owners and operators of the TR NO<sub>x</sub> Ozone Season source and the TR NO<sub>x</sub> Ozone Season units at the source.

(c) *Changes in owners and operators.*

(1) In the event an owner or operator of a TR NO<sub>x</sub> Ozone Season source or a TR NO<sub>x</sub> Ozone Season unit at the source is not included in the list of owners and operators in the certificate of representation under § 97.516, such owner or operator shall be deemed to be subject to and bound by the certificate of representation, the representations, actions, inactions, and submissions of the designated representative and any alternate designated representative of the source or unit, and the decisions and orders of the Administrator, as if the owner or operator were included in such list.

(2) Within 30 days after any change in the owners and operators of a TR NO<sub>x</sub> Ozone Season source or a TR NO<sub>x</sub> Ozone Season unit at the source, including the addition or removal of an owner or operator, the designated representative or any alternate designated representative shall submit a revision to the certificate of

representation under § 97.516 amending the list of owners and operators to reflect the change.

(d) *Changes in units at the source.* Within 30 days of any change in which units are located at a TR NO<sub>x</sub> Ozone Season source (including the addition or removal of a unit), the designated representative or any alternate designated representative shall submit a certificate of representation under § 97.516 amending the list of units to reflect the change.

(1) If the change is the addition of a unit that operated (other than for purposes of testing by the manufacturer before initial installation) before being located at the source, then the certificate of representation shall identify, in a format prescribed by the Administrator, the entity from whom the unit was purchased or otherwise obtained (including name, address, telephone number, and facsimile number (if any)), the date on which the unit was purchased or otherwise obtained, and the date on which the unit became located at the source.

(2) If the change is the removal of a unit, then the certificate of representation shall identify, in a format prescribed by the Administrator, the entity to which the unit was sold or that otherwise obtained the unit (including name, address, telephone number, and facsimile number (if any)), the date on which the unit was sold or otherwise obtained, and the date on which the unit became no longer located at the source.

**§ 97.516 Certificate of representation.**

(a) A complete certificate of representation for a designated representative or an alternate designated representative shall include the following elements in a format prescribed by the Administrator:

(1) Identification of the TR NO<sub>x</sub> Ozone Season source, and each TR NO<sub>x</sub> Ozone Season unit at the source, for which the certificate of representation is submitted, including source name, source category and NAICS code (or, in the absence of a NAICS code, an equivalent code), State, plant code, county, latitude and longitude, unit identification number and type, identification number and nameplate capacity (in MWe, rounded to the nearest tenth) of each generator served by each such unit, actual or projected date of commencement of commercial operation, and a statement of whether such source is located in Indian Country. If a projected date of commencement of commercial operation is provided, the actual date of commencement of commercial

operation shall be provided when such information becomes available.

(2) The name, address, e-mail address (if any), telephone number, and facsimile transmission number (if any) of the designated representative and any alternate designated representative.

(3) A list of the owners and operators of the TR NO<sub>x</sub> Ozone Season source and of each TR NO<sub>x</sub> Ozone Season unit at the source.

(4) The following certification statements by the designated representative and any alternate designated representative—

(i) “I certify that I was selected as the designated representative or alternate designated representative, as applicable, by an agreement binding on the owners and operators of the source and each TR NO<sub>x</sub> Ozone Season unit at the source.”

(ii) “I certify that I have all the necessary authority to carry out my duties and responsibilities under the TR NO<sub>x</sub> Ozone Season Trading Program on behalf of the owners and operators of the source and of each TR NO<sub>x</sub> Ozone Season unit at the source and that each such owner and operator shall be fully bound by my representations, actions, inactions, or submissions and by any decision or order issued to me by the Administrator regarding the source or unit.”

(iii) “Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, a TR NO<sub>x</sub> Ozone Season unit, or where a utility or industrial customer purchases power from a TR NO<sub>x</sub> Ozone Season unit under a life-of-the-unit, firm power contractual arrangement, I certify that: I have given a written notice of my selection as the ‘designated representative’ or ‘alternate designated representative’, as applicable, and of the agreement by which I was selected to each owner and operator of the source and of each TR NO<sub>x</sub> Ozone Season unit at the source; and TR NO<sub>x</sub> Ozone Season allowances and proceeds of transactions involving TR NO<sub>x</sub> Ozone Season allowances will be deemed to be held or distributed in proportion to each holder’s legal, equitable, leasehold, or contractual reservation or entitlement, except that, if such multiple holders have expressly provided for a different distribution of TR NO<sub>x</sub> Ozone Season allowances by contract, TR NO<sub>x</sub> Ozone Season allowances and proceeds of transactions involving TR NO<sub>x</sub> Ozone Season allowances will be deemed to be held or distributed in accordance with the contract.”

(5) The signature of the designated representative and any alternate designated representative and the dates signed.

(b) Unless otherwise required by the Administrator, documents of agreement referred to in the certificate of representation shall not be submitted to the Administrator. The Administrator shall not be under any obligation to review or evaluate the sufficiency of such documents, if submitted.

**§ 97.517 Objections concerning designated representative and alternate designated representative.**

(a) Once a complete certificate of representation under § 97.516 has been submitted and received, the Administrator will rely on the certificate of representation unless and until a superseding complete certificate of representation under § 97.516 is received by the Administrator.

(b) Except as provided in paragraph (a) of this section, no objection or other communication submitted to the Administrator concerning the authorization, or any representation, action, inaction, or submission, of a designated representative or alternate designated representative shall affect any representation, action, inaction, or submission of the designated representative or alternate designated representative or the finality of any decision or order by the Administrator under the TR NO<sub>x</sub> Ozone Season Trading Program.

(c) The Administrator will not adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of any designated representative or alternate designated representative, including private legal disputes concerning the proceeds of TR NO<sub>x</sub> Ozone Season allowance transfers.

**§ 97.518 Delegation by designated representative and alternate designated representative.**

(a) A designated representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator provided for or required under this subpart.

(b) An alternate designated representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator provided for or required under this subpart.

(c) In order to delegate authority to a natural person to make an electronic submission to the Administrator in accordance with paragraph (a) or (b) of this section, the designated representative or alternate designated representative, as appropriate, must submit to the Administrator a notice of

delegation, in a format prescribed by the Administrator, that includes the following elements:

(1) The name, address, e-mail address, telephone number, and facsimile transmission number (if any) of such designated representative or alternate designated representative;

(2) The name, address, e-mail address, telephone number, and facsimile transmission number (if any) of each such natural person (referred to in this section as an "agent");

(3) For each such natural person, a list of the type or types of electronic submissions under paragraph (a) or (b) of this section for which authority is delegated to him or her; and

(4) The following certification statements by such designated representative or alternate designated representative:

(i) "I agree that any electronic submission to the Administrator that is made by an agent identified in this notice of delegation and of a type listed for such agent in this notice of delegation and that is made when I am a designated representative or alternate designated representative, as appropriate, and before this notice of delegation is superseded by another notice of delegation under 40 CFR 97.518(d) shall be deemed to be an electronic submission by me."

(ii) "Until this notice of delegation is superseded by another notice of delegation under 40 CFR 97.518(d), I agree to maintain an e-mail account and to notify the Administrator immediately of any change in my e-mail address unless all delegation of authority by me under 40 CFR 97.518 is terminated."

(d) A notice of delegation submitted under paragraph (c) of this section shall be effective, with regard to the designated representative or alternate designated representative identified in such notice, upon receipt of such notice by the Administrator and until receipt by the Administrator of a superseding notice of delegation submitted by such designated representative or alternate designated representative, as appropriate. The superseding notice of delegation may replace any previously identified agent, add a new agent, or eliminate entirely any delegation of authority.

(e) Any electronic submission covered by the certification in paragraph (c)(4)(i) of this section and made in accordance with a notice of delegation effective under paragraph (d) of this section shall be deemed to be an electronic submission by the designated representative or alternate designated representative submitting such notice of delegation.

**§ 97.519 [Reserved]**

**§ 97.520 Establishment of compliance accounts, assurance accounts, and general accounts.**

(a) *Compliance accounts.* Upon receipt of a complete certificate of representation under § 97.516, the Administrator will establish a compliance account for the TR NO<sub>x</sub> Ozone Season source for which the certificate of representation was submitted, unless the source already has a compliance account. The designated representative and any alternate designated representative of the source shall be the authorized account representative and the alternate authorized account representative respectively of the compliance account.

(b) *Assurance accounts.* The Administrator will establish assurance accounts for certain owners and operators and States in accordance with § 97.525(b)(3).

(c) *General accounts.* (1) Application for general account. (i) Any person may apply to open a general account, for the purpose of holding and transferring TR NO<sub>x</sub> Ozone Season allowances, by submitting to the Administrator a complete application for a general account. Such application shall designate one and only one authorized account representative and may designate one and only one alternate authorized account representative who may act on behalf of the authorized account representative.

(A) The authorized account representative and alternate authorized account representative shall be selected by an agreement binding on the persons who have an ownership interest with respect to TR NO<sub>x</sub> Ozone Season allowances held in the general account.

(B) The agreement by which the alternate authorized account representative is selected shall include a procedure for authorizing the alternate authorized account representative to act in lieu of the authorized account representative.

(ii) A complete application for a general account shall include the following elements in a format prescribed by the Administrator:

(A) Name, mailing address, e-mail address (if any), telephone number, and facsimile transmission number (if any) of the authorized account representative and any alternate authorized account representative;

(B) An identifying name for the general account;

(C) A list of all persons subject to a binding agreement for the authorized account representative and any alternate authorized account representative to



represent their ownership interest with respect to the TR NO<sub>x</sub> Ozone Season allowances held in the general account;

(D) The following certification statement by the authorized account representative and any alternate authorized account representative: "I certify that I was selected as the authorized account representative or the alternate authorized account representative, as applicable, by an agreement that is binding on all persons who have an ownership interest with respect to TR NO<sub>x</sub> Ozone Season allowances held in the general account. I certify that I have all the necessary authority to carry out my duties and responsibilities under the TR NO<sub>x</sub> Ozone Season Trading Program on behalf of such persons and that each such person shall be fully bound by my representations, actions, inactions, or submissions and by any decision or order issued to me by the Administrator regarding the general account."

(E) The signature of the authorized account representative and any alternate authorized account representative and the dates signed.

(iii) Unless otherwise required by the Administrator, documents of agreement referred to in the application for a general account shall not be submitted to the Administrator. The Administrator shall not be under any obligation to review or evaluate the sufficiency of such documents, if submitted.

(2) Authorization of authorized account representative and alternate authorized account representative. (i) Upon receipt by the Administrator of a complete application for a general account under paragraph (b)(1) of this section, the Administrator will establish a general account for the person or persons for whom the application is submitted, and upon and after such receipt by the Administrator:

(A) The authorized account representative of the general account shall be authorized and shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each person who has an ownership interest with respect to TR NO<sub>x</sub> Ozone Season allowances held in the general account in all matters pertaining to the TR NO<sub>x</sub> Ozone Season Trading Program, notwithstanding any agreement between the authorized account representative and such person.

(B) Any alternate authorized account representative shall be authorized, and any representation, action, inaction, or submission by any alternate authorized account representative shall be deemed to be a representation, action, inaction, or submission by the authorized account representative.

(C) Each person who has an ownership interest with respect to TR NO<sub>x</sub> Ozone Season allowances held in the general account shall be bound by any decision or order issued to the authorized account representative or alternate authorized account representative by the Administrator regarding the general account.

(ii) Except as provided in paragraph (c)(5) of this section concerning delegation of authority to make submissions, each submission concerning the general account shall be made, signed, and certified by the authorized account representative or any alternate authorized account representative for the persons having an ownership interest with respect to TR NO<sub>x</sub> Ozone Season allowances held in the general account. Each such submission shall include the following certification statement by the authorized account representative or any alternate authorized account representative: "I am authorized to make this submission on behalf of the persons having an ownership interest with respect to the TR NO<sub>x</sub> Ozone Season allowances held in the general account. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information, including the possibility of fine or imprisonment."

(iii) Except in this section, whenever the term "authorized account representative" is used in this subpart, the term shall be construed to include the authorized account representative or any alternate authorized account representative.

(3) Changing authorized account representative and alternate authorized account representative; changes in persons with ownership interest. (i) The authorized account representative of a general account may be changed at any time upon receipt by the Administrator of a superseding complete application for a general account under paragraph (c)(1) of this section. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous authorized account representative before the time and date when the Administrator receives the superseding application for a general

account shall be binding on the new authorized account representative and the persons with an ownership interest with respect to the TR NO<sub>x</sub> Ozone Season allowances in the general account.

(ii) The alternate authorized account representative of a general account may be changed at any time upon receipt by the Administrator of a superseding complete application for a general account under paragraph (c)(1) of this section. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous alternate authorized account representative before the time and date when the Administrator receives the superseding application for a general account shall be binding on the new alternate authorized account representative, the authorized account representative, and the persons with an ownership interest with respect to the TR NO<sub>x</sub> Ozone Season allowances in the general account.

(iii)(A) In the event a person having an ownership interest with respect to TR NO<sub>x</sub> Ozone Season allowances in the general account is not included in the list of such persons in the application for a general account, such person shall be deemed to be subject to and bound by the application for a general account, the representation, actions, inactions, and submissions of the authorized account representative and any alternate authorized account representative of the account, and the decisions and orders of the Administrator, as if the person were included in such list.

(B) Within 30 days after any change in the persons having an ownership interest with respect to NO<sub>x</sub> Ozone Season allowances in the general account, including the addition or removal of a person, the authorized account representative or any alternate authorized account representative shall submit a revision to the application for a general account amending the list of persons having an ownership interest with respect to the TR NO<sub>x</sub> Ozone Season allowances in the general account to include the change.

(4) Objections concerning authorized account representative and alternate authorized account representative. (i) Once a complete application for a general account under paragraph (c)(1) of this section has been submitted and received, the Administrator will rely on the application unless and until a superseding complete application for a general account under paragraph (b)(1) of this section is received by the Administrator.

(ii) Except as provided in paragraph (c)(4)(i) of this section, no objection or other communication submitted to the Administrator concerning the authorization, or any representation, action, inaction, or submission of the authorized account representative or any alternate authorized account representative of a general account shall affect any representation, action, inaction, or submission of the authorized account representative or any alternate authorized account representative or the finality of any decision or order by the Administrator under the TR NO<sub>x</sub> Ozone Season Trading Program.

(iii) The Administrator will not adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of the authorized account representative or any alternate authorized account representative of a general account, including private legal disputes concerning the proceeds of TR NO<sub>x</sub> Ozone Season allowance transfers.

(5) Delegation by authorized account representative and alternate authorized account representative. (i) An authorized account representative of a general account may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator provided for or required under this subpart.

(ii) An alternate authorized account representative of a general account may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator provided for or required under this subpart.

(iii) In order to delegate authority to a natural person to make an electronic submission to the Administrator in accordance with paragraph (c)(5)(i) or (ii) of this section, the authorized account representative or alternate authorized account representative, as appropriate, must submit to the Administrator a notice of delegation, in a format prescribed by the Administrator, that includes the following elements:

(A) The name, address, e-mail address, telephone number, and facsimile transmission number (if any) of such authorized account representative or alternate authorized account representative;

(B) The name, address, e-mail address, telephone number, and facsimile transmission number (if any) of each such natural person (referred to in this section as an "agent");

(C) For each such natural person, a list of the type or types of electronic

submissions under paragraph (c)(5)(i) or (ii) of this section for which authority is delegated to him or her;

(D) The following certification statement by such authorized account representative or alternate authorized account representative: "I agree that any electronic submission to the Administrator that is made by an agent identified in this notice of delegation and of a type listed for such agent in this notice of delegation and that is made when I am an authorized account representative or alternate authorized representative, as appropriate, and before this notice of delegation is superseded by another notice of delegation under 40 CFR 97.520(c)(5)(iv) shall be deemed to be an electronic submission by me."; and

(E) The following certification statement by such authorized account representative or alternate authorized account representative: "Until this notice of delegation is superseded by another notice of delegation under 40 CFR 97.520(c)(5)(iv), I agree to maintain an e-mail account and to notify the Administrator immediately of any change in my e-mail address unless all delegation of authority by me under 40 CFR 97.520(c)(5) is terminated.".

(iv) A notice of delegation submitted under paragraph (c)(5)(iii) of this section shall be effective, with regard to the authorized account representative or alternate authorized account representative identified in such notice, upon receipt of such notice by the Administrator and until receipt by the Administrator of a superseding notice of delegation submitted by such authorized account representative or alternate authorized account representative, as appropriate. The superseding notice of delegation may replace any previously identified agent, add a new agent, or eliminate entirely any delegation of authority.

(v) Any electronic submission covered by the certification in paragraph (c)(5)(iii)(D) of this section and made in accordance with a notice of delegation effective under paragraph (c)(5)(iv) of this section shall be deemed to be an electronic submission by the designated representative or alternate designated representative submitting such notice of delegation.

(6) Closing a general account. (i) The authorized account representative or alternate authorized account representative of a general account may submit to the Administrator a request to close the account. Such request shall include a correctly submitted TR NO<sub>x</sub> Ozone Season allowance transfer under § 97.522 for any TR NO<sub>x</sub> Ozone Season allowances in the account to one or

more other Allowance Management System accounts.

(ii) If a general account has no TR NO<sub>x</sub> Ozone Season allowance transfers to or from the account for a 12-month period or longer and does not contain any TR NO<sub>x</sub> Ozone Season allowances, the Administrator may notify the authorized account representative for the account that the account will be closed after 30 days after the notice is sent. The account will be closed after the 30-day period unless, before the end of the 30-day period, the Administrator receives a correctly submitted TR NO<sub>x</sub> Ozone Season allowance transfer under § 97.522 to the account or a statement submitted by the authorized account representative or alternate authorized account representative demonstrating to the satisfaction of the Administrator good cause as to why the account should not be closed.

(d) *Account identification.* The Administrator will assign a unique identifying number to each account established under paragraph (a), (b), or (c) of this section.

(e) *Responsibilities of authorized account representative and alternate authorized account representative.* After the establishment of a compliance account or general account, the Administrator will accept or act on a submission pertaining to the account, including, but not limited to, submissions concerning the deduction or transfer of TR NO<sub>x</sub> Ozone Season allowances in the account, only if the submission has been made, signed, and certified in accordance with §§ 97.514(a) and 97.518 or paragraphs (c)(2)(ii) and (c)(5) of this section.

**§ 97.521 Recordation of TR NO<sub>x</sub> Ozone Season allowance allocations and auction results.**

(a) By November 7, 2011, the Administrator will record in each TR NO<sub>x</sub> Ozone Season source's compliance account the TR NO<sub>x</sub> Ozone Season allowances allocated to the TR NO<sub>x</sub> Ozone Season units at the source in accordance with § 97.511(a) for the control period in 2012.

(b) By November 7, 2011, the Administrator will record in each TR NO<sub>x</sub> Ozone Season source's compliance account the TR NO<sub>x</sub> Ozone Season allowances allocated to the TR NO<sub>x</sub> Ozone Season units at the source in accordance with § 97.511(a) for the control period in 2013, unless the State in which the source is located notifies the Administrator in writing by October 17, 2011 of the State's intent to submit to the Administrator a complete SIP revision by April 1, 2012 meeting the

requirements of § 52.38(b)(3)(i) through (iv) of this chapter.

(1) If, by April 1, 2012, the State does not submit to the Administrator such complete SIP revision, the Administrator will record by April 15, 2012 in each TR NO<sub>x</sub> Ozone Season source's compliance account the TR NO<sub>x</sub> Ozone Season allowances allocated to the TR NO<sub>x</sub> Ozone Season units at the source in accordance with § 97.511(a) for the control period in 2013.

(2) If the State submits to the Administrator by April 1, 2012, and the Administrator approves by October 1, 2012, such complete SIP revision, the Administrator will record by October 1, 2012 in each TR NO<sub>x</sub> Ozone Season source's compliance account the TR NO<sub>x</sub> Ozone Season allowances allocated to the TR NO<sub>x</sub> Ozone Season units at the source as provided in such approved, complete SIP revision for the control period in 2013.

(3) If the State submits to the Administrator by April 1, 2012, and the Administrator does not approve by October 1, 2012, such complete SIP revision, the Administrator will record by October 1, 2012 in each TR NO<sub>x</sub> Ozone Season source's compliance account the TR NO<sub>x</sub> Ozone Season allowances allocated to the TR NO<sub>x</sub> Ozone Season units at the source in accordance with § 97.511(a) for the control period in 2013.

(c) By July 1, 2013, the Administrator will record in each TR NO<sub>x</sub> Ozone Season source's compliance account the TR NO<sub>x</sub> Ozone Season allowances allocated to the TR NO<sub>x</sub> Ozone Season units at the source, or in each appropriate Allowance Management System account the TR NO<sub>x</sub> Ozone Season allowances auctioned to TR NO<sub>x</sub> Ozone Season units, in accordance with § 97.511(a), or with a SIP revision approved under § 52.38(b)(4) or (5) of this chapter, for the control period in 2014 and 2015.

(d) By July 1, 2014, the Administrator will record in each TR NO<sub>x</sub> Ozone Season source's compliance account the TR NO<sub>x</sub> Ozone Season allowances allocated to the TR NO<sub>x</sub> Ozone Season units at the source, or in each appropriate Allowance Management System account the TR NO<sub>x</sub> Ozone Season allowances auctioned to TR NO<sub>x</sub> Ozone Season units, in accordance with § 97.511(a), or with a SIP revision approved under § 52.38(b)(4) or (5) of this chapter, for the control period in 2016 and 2017.

(e) By July 1, 2015, the Administrator will record in each TR NO<sub>x</sub> Ozone Season source's compliance account the TR NO<sub>x</sub> Ozone Season allowances

allocated to the TR NO<sub>x</sub> Ozone Season units at the source, or in each appropriate Allowance Management System account the TR NO<sub>x</sub> Ozone Season allowances auctioned to TR NO<sub>x</sub> Ozone Season units, in accordance with § 97.511(a), or with a SIP revision approved under § 52.38(b)(4) or (5) of this chapter, for the control period in 2018 and 2019.

(f) By July 1, 2016 and July 1 of each year thereafter, the Administrator will record in each TR NO<sub>x</sub> Ozone Season source's compliance account the TR NO<sub>x</sub> Ozone Season allowances allocated to the TR NO<sub>x</sub> Ozone Season units at the source, or in each appropriate Allowance Management System account the TR NO<sub>x</sub> Ozone Season allowances auctioned to TR NO<sub>x</sub> Ozone Season units, in accordance with § 97.511(a), or with a SIP revision approved under § 52.38(b)(4) or (5) of this chapter, for the control period in the fourth year after the year of the applicable recordation deadline under this paragraph.

(g) By August 1, 2012 and August 1 of each year thereafter, the Administrator will record in each TR NO<sub>x</sub> Ozone Season source's compliance account the TR NO<sub>x</sub> Ozone Season allowances allocated to the TR NO<sub>x</sub> Ozone Season units at the source, or in each appropriate Allowance Management System account the TR NO<sub>x</sub> Ozone Season allowances auctioned to TR NO<sub>x</sub> Ozone Season units, in accordance with § 97.512(a)(2) through (8) and (12), or with a SIP revision approved under § 52.38(b)(4) or (5) of this chapter, for the control period in the year of the applicable recordation deadline under this paragraph.

(h) By August 1, 2012 and August 1 of each year thereafter, the Administrator will record in each TR NO<sub>x</sub> Ozone Season source's compliance account the TR NO<sub>x</sub> Ozone Season allowances allocated to the TR NO<sub>x</sub> Ozone Season units at the source in accordance with § 97.512(b)(2) through (8) and (12) for the control period in the year of the applicable recordation deadline under this paragraph.

(i) By November 15, 2012 and November 15 of each year thereafter, the Administrator will record in each TR NO<sub>x</sub> Ozone Season source's compliance account the TR NO<sub>x</sub> Ozone Season allowances allocated to the TR NO<sub>x</sub> Ozone Season units at the source in accordance with § 97.512(a)(9) through (12), for the control period in the year of the applicable recordation deadline under this paragraph.

(j) By the date on which any allocation or auction results, other than an allocation or auction results

described in paragraphs (a) through (i) of this section, of TR NO<sub>x</sub> Ozone Season allowances to a recipient is made by or are submitted to the Administrator in accordance with § 97.511 or § 97.512 or with a SIP revision approved under § 52.38(b)(4) or (5) of this chapter, the Administrator will record such allocation or auction results in the appropriate Allowance Management System account.

(k) When recording the allocation or auction of TR NO<sub>x</sub> Ozone Season allowances to a TR NO<sub>x</sub> Ozone Season unit or other entity in an Allowance Management System account, the Administrator will assign each TR NO<sub>x</sub> Ozone Season allowance a unique identification number that will include digits identifying the year of the control period for which the TR NO<sub>x</sub> Ozone Season allowance is allocated or auctioned.

#### **§ 97.522 Submission of TR NO<sub>x</sub> Ozone Season allowance transfers.**

(a) An authorized account representative seeking recordation of a TR NO<sub>x</sub> Ozone Season allowance transfer shall submit the transfer to the Administrator.

(b) A TR NO<sub>x</sub> Ozone Season allowance transfer shall be correctly submitted if:

(1) The transfer includes the following elements, in a format prescribed by the Administrator:

(i) The account numbers established by the Administrator for both the transferor and transferee accounts;

(ii) The serial number of each TR NO<sub>x</sub> Ozone Season allowance that is in the transferor account and is to be transferred; and

(iii) The name and signature of the authorized account representative of the transferor account and the date signed; and

(2) When the Administrator attempts to record the transfer, the transferor account includes each TR NO<sub>x</sub> Ozone Season allowance identified by serial number in the transfer.

#### **§ 97.523 Recordation of TR NO<sub>x</sub> Ozone Season allowance transfers.**

(a) Within 5 business days (except as provided in paragraph (b) of this section) of receiving a TR NO<sub>x</sub> Ozone Season allowance transfer that is correctly submitted under § 97.522, the Administrator will record a TR NO<sub>x</sub> Ozone Season allowance transfer by moving each TR NO<sub>x</sub> Ozone Season allowance from the transferor account to the transferee account as specified in the transfer.

(b) A TR NO<sub>x</sub> Ozone Season allowance transfer to or from a

compliance account that is submitted for recordation after the allowance transfer deadline for a control period and that includes any TR NO<sub>x</sub> Ozone Season allowances allocated for any control period before such allowance transfer deadline will not be recorded until after the Administrator completes the deductions from such compliance account under § 97.524 for the control period immediately before such allowance transfer deadline.

(c) Where a TR NO<sub>x</sub> Ozone Season allowance transfer is not correctly submitted under § 97.522, the Administrator will not record such transfer.

(d) Within 5 business days of recordation of a TR NO<sub>x</sub> Ozone Season allowance transfer under paragraphs (a) and (b) of the section, the Administrator will notify the authorized account representatives of both the transferor and transferee accounts.

(e) Within 10 business days of receipt of a TR NO<sub>x</sub> Ozone Season allowance transfer that is not correctly submitted under § 97.522, the Administrator will notify the authorized account representatives of both accounts subject to the transfer of:

(1) A decision not to record the transfer, and

(2) The reasons for such non-recordation.

**§ 97.524 Compliance with TR NO<sub>x</sub> Ozone Season emissions limitation.**

(a) *Availability for deduction for compliance.* TR NO<sub>x</sub> Ozone Season allowances are available to be deducted for compliance with a source's TR NO<sub>x</sub> Ozone Season emissions limitation for a control period in a given year only if the TR NO<sub>x</sub> Ozone Season allowances:

(1) Were allocated for such control period or a control period in a prior year; and

(2) Are held in the source's compliance account as of the allowance transfer deadline for such control period.

(b) *Deductions for compliance.* After the recordation, in accordance with § 97.523, of TR NO<sub>x</sub> Ozone Season allowance transfers submitted by the allowance transfer deadline for a control period in a given year, the Administrator will deduct from each source's compliance account TR NO<sub>x</sub> Ozone Season allowances available under paragraph (a) of this section in order to determine whether the source meets the TR NO<sub>x</sub> Ozone Season emissions limitation for such control period, as follows:

(1) Until the amount of TR NO<sub>x</sub> Ozone Season allowances deducted equals the number of tons of total NO<sub>x</sub>

emissions from all TR NO<sub>x</sub> Ozone Season units at the source for such control period; or

(2) If there are insufficient TR NO<sub>x</sub> Ozone Season allowances to complete the deductions in paragraph (b)(1) of this section, until no more TR NO<sub>x</sub> Ozone Season allowances available under paragraph (a) of this section remain in the compliance account.

(c)(1) *Identification of TR NO<sub>x</sub> Ozone Season allowances by serial number.* The authorized account representative for a source's compliance account may request that specific TR NO<sub>x</sub> Ozone Season allowances, identified by serial number, in the compliance account be deducted for emissions or excess emissions for a control period in a given year in accordance with paragraph (b) or (d) of this section. In order to be complete, such request shall be submitted to the Administrator by the allowance transfer deadline for such control period and include, in a format prescribed by the Administrator, the identification of the TR NO<sub>x</sub> Ozone Season source and the appropriate serial numbers.

(2) *First-in, first-out.* The Administrator will deduct TR NO<sub>x</sub> Ozone Season allowances under paragraph (b) or (d) of this section from the source's compliance account in accordance with a complete request under paragraph (c)(1) of this section or, in the absence of such request or in the case of identification of an insufficient amount of TR NO<sub>x</sub> Ozone Season allowances in such request, on a first-in, first-out accounting basis in the following order:

(i) Any TR NO<sub>x</sub> Ozone Season allowances that were allocated to the units at the source and not transferred out of the compliance account, in the order of recordation; and then

(ii) Any TR NO<sub>x</sub> Ozone Season allowances that were allocated to any unit and transferred to and recorded in the compliance account pursuant to this subpart, in the order of recordation.

(d) *Deductions for excess emissions.* After making the deductions for compliance under paragraph (b) of this section for a control period in a year in which the TR NO<sub>x</sub> Ozone Season source has excess emissions, the Administrator will deduct from the source's compliance account an amount of TR NO<sub>x</sub> Ozone Season allowances, allocated for a control period in a prior year or the control period in the year of the excess emissions or in the immediately following year, equal to two times the number of tons of the source's excess emissions.

(e) *Recordation of deductions.* The Administrator will record in the

appropriate compliance account all deductions from such an account under paragraphs (b) and (d) of this section.

**§ 97.525 Compliance with TR NO<sub>x</sub> Ozone Season assurance provisions.**

(a) *Availability for deduction.* TR NO<sub>x</sub> Ozone Season allowances are available to be deducted for compliance with the TR NO<sub>x</sub> Ozone Season assurance provisions for a control period in a given year by the owners and operators of a group of one or more TR NO<sub>x</sub> Ozone Season sources and units in a State (and Indian country within the borders of such State) only if the TR NO<sub>x</sub> Ozone Season allowances:

(1) Were allocated for a control period in a prior year or the control period in the given year or in the immediately following year; and

(2) Are held in the assurance account, established by the Administrator for such owners and operators of such group of TR NO<sub>x</sub> Ozone Season sources and units in such State (and Indian country within the borders of such State) under paragraph (b)(3) of this section, as of the deadline established in paragraph (b)(4) of this section.

(b) *Deductions for compliance.* The Administrator will deduct TR NO<sub>x</sub> Ozone Season allowances available under paragraph (a) of this section for compliance with the TR NO<sub>x</sub> Ozone Season assurance provisions for a State for a control period in a given year in accordance with the following procedures:

(1) By June 1, 2013 and June 1 of each year thereafter, the Administrator will:

(i) Calculate, for each State (and Indian country within the borders of such State), the total NO<sub>x</sub> emissions from all TR NO<sub>x</sub> Ozone Season units at TR NO<sub>x</sub> Ozone Season sources in the State (and Indian country within the borders of such State) during the control period in the year before the year of this calculation deadline and the amount, if any, by which such total NO<sub>x</sub> emissions exceed the State assurance level as described in § 97.506(c)(2)(iii); and

(ii) Promulgate a notice of data availability of the results of the calculations required in paragraph (b)(1)(i) of this section, including separate calculations of the NO<sub>x</sub> emissions from each TR NO<sub>x</sub> Ozone Season source.

(2) For each notice of data availability required in paragraph (b)(1)(ii) of this section and for any State (and Indian country within the borders of such State) identified in such notice as having TR NO<sub>x</sub> Ozone Season units with total NO<sub>x</sub> emissions exceeding the State assurance level for a control

period in a given year, as described in § 97.506(c)(2)(iii):

(i) By July 1 immediately after the promulgation of such notice, the designated representative of each TR NO<sub>x</sub> Ozone Season source in each such State (and Indian country within the borders of such State) shall submit a statement, in a format prescribed by the Administrator, providing for each TR NO<sub>x</sub> Ozone Season unit (if any) at the source that operates during, but is not allocated an amount of TR NO<sub>x</sub> Ozone Season allowances for, such control period, the unit's allowable NO<sub>x</sub> emission rate for such control period and, if such rate is expressed in lb per mmBtu, the unit's heat rate.

(ii) By August 1 immediately after the promulgation of such notice, the Administrator will calculate, for each such State (and Indian country within the borders of such State) and such control period and each common designated representative for such control period for a group of one or more TR NO<sub>x</sub> Ozone Season sources and units in the State (and Indian country within the borders of such State), the common designated representative's share of the total NO<sub>x</sub> emissions from all TR NO<sub>x</sub> Ozone Season units at TR NO<sub>x</sub> Ozone Season sources in the State (and Indian country within the borders of such State), the common designated representative's assurance level, and the amount (if any) of TR NO<sub>x</sub> Ozone Season allowances that the owners and operators of such group of sources and units must hold in accordance with the calculation formula in § 97.506(c)(2)(i) and will promulgate a notice of data availability of the results of these calculations.

(iii) The Administrator will provide an opportunity for submission of objections to the calculations referenced by the notice of data availability required in paragraph (b)(2)(ii) of this section and the calculations referenced by the relevant notice of data availability required in paragraph (b)(1)(i) of this section.

(A) Objections shall be submitted by the deadline specified in such notice and shall be limited to addressing whether the calculations referenced in the relevant notice required under paragraph (b)(1)(ii) of this section and referenced in the notice required under paragraph (b)(2)(ii) of this section are in accordance with § 97.506(c)(2)(iii), §§ 97.506(b) and 97.530 through 97.535, the definitions of "common designated representative", "common designated representative's assurance level", and "common designated representative's share" in § 97.502, and the calculation formula in § 97.506(c)(2)(i).

(B) The Administrator will adjust the calculations to the extent necessary to ensure that they are in accordance with the provisions referenced in paragraph (b)(2)(iii)(A) of this section. By October 1 immediately after the promulgation of such notice, the Administrator will promulgate a notice of data availability of any adjustments that the Administrator determines to be necessary and the reasons for accepting or rejecting any objections submitted in accordance with paragraph (b)(2)(iii)(A) of this section.

(3) For any State (and Indian country within the borders of such State) referenced in each notice of data availability required in paragraph (b)(2)(iii)(B) of this section as having TR NO<sub>x</sub> Ozone Season units with total NO<sub>x</sub> emissions exceeding the State assurance level for a control period in a given year, the Administrator will establish one assurance account for each set of owners and operators referenced, in the notice of data availability required under paragraph (b)(2)(iii)(B) of this section, as all of the owners and operators of a group of TR NO<sub>x</sub> Ozone Season sources and units in the State (and Indian country within the borders of such State) having a common designated representative for such control period and as being required to hold TR NO<sub>x</sub> Ozone Season allowances.

(4)(i) As of midnight of November 1 immediately after the promulgation of each notice of data availability required in paragraph (b)(2)(iii)(B) of this section, the owners and operators described in paragraph (b)(3) of this section shall hold in the assurance account established for the them and for the appropriate TR NO<sub>x</sub> Ozone Season sources, TR NO<sub>x</sub> Ozone Season units, and State (and Indian country within the borders of such State) under paragraph (b)(3) of this section a total amount of TR NO<sub>x</sub> Ozone Season allowances, available for deduction under paragraph (a) of this section, equal to the amount such owners and operators are required to hold with regard to such sources, units and State (and Indian country within the borders of such State) as calculated by the Administrator and referenced in such notice.

(ii) Notwithstanding the allowance-holding deadline specified in paragraph (b)(4)(i) of this section, if November 1 is not a business day, then such allowance-holding deadline shall be midnight of the first business day thereafter.

(5) After November 1 (or the date described in paragraph (b)(4)(ii) of this section) immediately after the promulgation of each notice of data

availability required in paragraph (b)(2)(iii)(B) of this section and after the recordation, in accordance with § 97.523, of TR NO<sub>x</sub> Ozone Season allowance transfers submitted by midnight of such date, the Administrator will determine whether the owners and operators described in paragraph (b)(3) of this section hold, in the assurance account for the appropriate TR NO<sub>x</sub> Ozone Season sources, TR NO<sub>x</sub> Ozone Season units, and State (and Indian country within the borders of such State) established under paragraph (b)(3) of this section, the amount of TR NO<sub>x</sub> Ozone Season allowances available under paragraph (a) of this section that the owners and operators are required to hold with regard to such sources, units, and State (and Indian country within the borders of such State) as calculated by the Administrator and referenced in the notice required in paragraph (b)(2)(iii)(B) of this section.

(6) Notwithstanding any other provision of this subpart and any revision, made by or submitted to the Administrator after the promulgation of the notice of data availability required in paragraph (b)(2)(iii)(B) of this section for a control period in a given year, of any data used in making the calculations referenced in such notice, the amounts of TR NO<sub>x</sub> Ozone Season allowances that the owners and operators are required to hold in accordance with § 97.506(c)(2)(i) for such control period shall continue to be such amounts as calculated by the Administrator and referenced in such notice required in paragraph (b)(2)(iii)(B) of this section, except as follows:

(i) If any such data are revised by the Administrator as a result of a decision in or settlement of litigation concerning such data on appeal under part 78 of this chapter of such notice, or on appeal under section 307 of the Clean Air Act of a decision rendered under part 78 of this chapter on appeal of such notice, then the Administrator will use the data as so revised to recalculate the amounts of TR NO<sub>x</sub> Ozone Season allowances that owners and operators are required to hold in accordance with the calculation formula in § 97.506(c)(2)(i) for such control period with regard to the TR NO<sub>x</sub> Ozone Season sources, TR NO<sub>x</sub> Ozone Season units, and State (and Indian country within the borders of such State) involved, provided that such litigation under part 78 of this chapter, or the proceeding under part 78 of this chapter that resulted in the decision appealed in such litigation under section 307 of the Clean Air Act, was initiated no later than 30 days after

promulgation of such notice required in paragraph (b)(2)(iii)(B) of this section.

(ii) If any such data are revised by the owners and operators of a TR NO<sub>x</sub> Ozone Season source and TR NO<sub>x</sub> Ozone Season unit whose designated representative submitted such data under paragraph (b)(2)(i) of this section, as a result of a decision in or settlement of litigation concerning such submission, then the Administrator will use the data as so revised to recalculate the amounts of TR NO<sub>x</sub> Ozone Season allowances that owners and operators are required to hold in accordance with the calculation formula in § 97.506(c)(2)(i) for such control period with regard to the TR NO<sub>x</sub> Ozone Season sources, TR NO<sub>x</sub> Ozone Season units, and State (and Indian country within the borders of such State) involved, provided that such litigation was initiated no later than 30 days after promulgation of such notice required in paragraph (b)(2)(iii)(B) of this section.

(iii) If the revised data are used to recalculate, in accordance with paragraphs (b)(6)(i) and (ii) of this section, the amount of TR NO<sub>x</sub> Ozone Season allowances that the owners and operators are required to hold for such control period with regard to the TR NO<sub>x</sub> Ozone Season sources, TR NO<sub>x</sub> Ozone Season units, and State (and Indian country within the borders of such State) involved—

(A) Where the amount of TR NO<sub>x</sub> Ozone Season allowances that the owners and operators are required to hold increases as a result of the use of all such revised data, the Administrator will establish a new, reasonable deadline on which the owners and operators shall hold the additional amount of TR NO<sub>x</sub> Ozone Season allowances in the assurance account established by the Administrator for the appropriate TR NO<sub>x</sub> Ozone Season sources, TR NO<sub>x</sub> Ozone Season units, and State (and Indian country within the borders of such State) under paragraph (b)(3) of this section. The owners' and operators' failure to hold such additional amount, as required, before the new deadline shall not be a violation of the Clean Air Act. The owners' and operators' failure to hold such additional amount, as required, as of the new deadline shall be a violation of the Clean Air Act. Each TR NO<sub>x</sub> Ozone Season allowance that the owners and operators fail to hold as required as of the new deadline, and each day in such control period, shall be a separate violation of the Clean Air Act.

(B) For the owners and operators for which the amount of TR NO<sub>x</sub> Ozone Season allowances required to be held decreases as a result of the use of all

such revised data, the Administrator will record, in all accounts from which TR NO<sub>x</sub> Ozone Season allowances were transferred by such owners and operators for such control period to the assurance account established by the Administrator for the appropriate at TR NO<sub>x</sub> Ozone Season sources, TR NO<sub>x</sub> Ozone Season units, and State (and Indian country within the borders of such State) under paragraph (b)(3) of this section, a total amount of the TR NO<sub>x</sub> Ozone Season allowances held in such assurance account equal to the amount of the decrease. If TR NO<sub>x</sub> Ozone Season allowances were transferred to such assurance account from more than one account, the amount of TR NO<sub>x</sub> Ozone Season allowances recorded in each such transferor account will be in proportion to the percentage of the total amount of TR NO<sub>x</sub> Ozone Season allowances transferred to such assurance account for such control period from such transferor account.

(C) Each TR NO<sub>x</sub> Ozone Season allowance held under paragraph (b)(6)(iii)(A) of this section as a result of recalculation of requirements under the TR NO<sub>x</sub> Ozone Season assurance provisions for such control period must be a TR NO<sub>x</sub> Ozone Season allowance allocated for a control period in a year before or the year immediately following, or in the same year as, the year of such control period.

#### § 97.526 Banking.

(a) A TR NO<sub>x</sub> Ozone Season allowance may be banked for future use or transfer in a compliance account or a general account in accordance with paragraph (b) of this section.

(b) Any TR NO<sub>x</sub> Ozone Season allowance that is held in a compliance account or a general account will remain in such account unless and until the TR NO<sub>x</sub> Ozone Season allowance is deducted or transferred under § 97.511(c), § 97.523, § 97.524, § 97.525, § 97.527, or § 97.528.

#### § 97.527 Account error.

The Administrator may, at his or her sole discretion and on his or her own motion, correct any error in any Allowance Management System account. Within 10 business days of making such correction, the Administrator will notify the authorized account representative for the account.

#### § 97.528 Administrator's action on submissions.

(a) The Administrator may review and conduct independent audits concerning any submission under the TR NO<sub>x</sub> Ozone Season Trading Program and

make appropriate adjustments of the information in the submission.

(b) The Administrator may deduct TR NO<sub>x</sub> Ozone Season allowances from or transfer TR NO<sub>x</sub> Ozone Season allowances to a compliance account or an assurance account, based on the information in a submission, as adjusted under paragraph (a)(1) of this section, and record such deductions and transfers.

#### § 97.529 [Reserved]

#### § 97.530 General monitoring, recordkeeping, and reporting requirements.

The owners and operators, and to the extent applicable, the designated representative, of a TR NO<sub>x</sub> Ozone Season unit, shall comply with the monitoring, recordkeeping, and reporting requirements as provided in this subpart and subpart H of part 75 of this chapter. For purposes of applying such requirements, the definitions in § 97.502 and in § 72.2 of this chapter shall apply, the terms "affected unit," "designated representative," and "continuous emission monitoring system" (or "CEMS") in part 75 of this chapter shall be deemed to refer to the terms "TR NO<sub>x</sub> Ozone Season unit," "designated representative," and "continuous emission monitoring system" (or "CEMS") respectively as defined in § 97.502, and the term "newly affected unit" shall be deemed to mean "newly affected TR NO<sub>x</sub> Ozone Season unit". The owner or operator of a unit that is not a TR NO<sub>x</sub> Ozone Season unit but that is monitored under § 75.72(b)(2)(ii) of this chapter shall comply with the same monitoring, recordkeeping, and reporting requirements as a TR NO<sub>x</sub> Ozone Season unit.

(a) *Requirements for installation, certification, and data accounting.* The owner or operator of each TR NO<sub>x</sub> Ozone Season unit shall:

(1) Install all monitoring systems required under this subpart for monitoring NO<sub>x</sub> mass emissions and individual unit heat input (including all systems required to monitor NO<sub>x</sub> emission rate, NO<sub>x</sub> concentration, stack gas moisture content, stack gas flow rate, CO<sub>2</sub> or O<sub>2</sub> concentration, and fuel flow rate, as applicable, in accordance with §§ 75.71 and 75.72 of this chapter);

(2) Successfully complete all certification tests required under § 97.531 and meet all other requirements of this subpart and part 75 of this chapter applicable to the monitoring systems under paragraph (a)(1) of this section; and

(3) Record, report, and quality-assure the data from the monitoring systems under paragraph (a)(1) of this section.

(b) *Compliance deadlines.* Except as provided in paragraph (e) of this section, the owner or operator shall meet the monitoring system certification and other requirements of paragraphs (a)(1) and (2) of this section on or before the following dates and shall record, report, and quality-assure the data from the monitoring systems under paragraph (a)(1) of this section on and after the following dates.

(1) For the owner or operator of a TR NO<sub>x</sub> Ozone Season unit that commences commercial operation before July 1, 2011, May 1, 2012.

(2) For the owner or operator of a TR NO<sub>x</sub> Ozone Season unit that commences commercial operation on or after July 1, 2011 and that reports on an annual basis under § 97.534(d), by the later of the following:

(i) 180 calendar days after the date on which the unit commences commercial operation; or

(ii) May 1, 2012.

(3) For the owner or operator of a TR NO<sub>x</sub> Ozone Season unit that commences commercial operation on or after July 1, 2011 and that reports on a control period basis under § 97.534(d)(2)(ii), by the following date:

(i) 180 calendar days after the date on which the unit commences commercial operation; or

(ii) If the compliance date under paragraph (b)(3)(i) of this section is not during a control period, May 1 immediately after the compliance date under paragraph (b)(3)(i) of this section.

(4) The owner or operator of a TR NO<sub>x</sub> Ozone Season unit for which construction of a new stack or flue or installation of add-on NO<sub>x</sub> emission controls is completed after the applicable deadline under paragraph (b)(1), (2), or (3) of this section shall meet the requirements of §§ 75.4(e)(1) through (e)(4) of this chapter, except that:

(i) Such requirements shall apply to the monitoring systems required under § 97.530 through § 97.535, rather than the monitoring systems required under part 75 of this chapter;

(ii) NO<sub>x</sub> emission rate, NO<sub>x</sub> concentration, stack gas moisture content, stack gas volumetric flow rate, and O<sub>2</sub> or CO<sub>2</sub> concentration data shall be determined and reported, rather than the data listed in § 75.4(e)(2) of this chapter; and

(iii) Any petition for another procedure under § 75.4(e)(2) of this chapter shall be submitted under § 97.535, rather than § 75.66.

(c) *Reporting data.* The owner or operator of a TR NO<sub>x</sub> Ozone Season unit that does not meet the applicable compliance date set forth in paragraph

(b) of this section for any monitoring system under paragraph (a)(1) of this section shall, for each such monitoring system, determine, record, and report maximum potential (or, as appropriate, minimum potential) values for NO<sub>x</sub> concentration, NO<sub>x</sub> emission rate, stack gas flow rate, stack gas moisture content, fuel flow rate, and any other parameters required to determine NO<sub>x</sub> mass emissions and heat input in accordance with § 75.31(b)(2) or (c)(3) of this chapter, section 2.4 of appendix D to part 75 of this chapter, or section 2.5 of appendix E to part 75 of this chapter, as applicable.

(d) *Prohibitions.* (1) No owner or operator of a TR NO<sub>x</sub> Ozone Season unit shall use any alternative monitoring system, alternative reference method, or any other alternative to any requirement of this subpart without having obtained prior written approval in accordance with § 97.535.

(2) No owner or operator of a TR NO<sub>x</sub> Ozone Season unit shall operate the unit so as to discharge, or allow to be discharged, NO<sub>x</sub> to the atmosphere without accounting for all such NO<sub>x</sub> in accordance with the applicable provisions of this subpart and part 75 of this chapter.

(3) No owner or operator of a TR NO<sub>x</sub> Ozone Season unit shall disrupt the continuous emission monitoring system, any portion thereof, or any other approved emission monitoring method, and thereby avoid monitoring and recording NO<sub>x</sub> mass discharged into the atmosphere or heat input, except for periods of recertification or periods when calibration, quality assurance testing, or maintenance is performed in accordance with the applicable provisions of this subpart and part 75 of this chapter.

(4) No owner or operator of a TR NO<sub>x</sub> Ozone Season unit shall retire or permanently discontinue use of the continuous emission monitoring system, any component thereof, or any other approved monitoring system under this subpart, except under any one of the following circumstances:

(i) During the period that the unit is covered by an exemption under § 97.505 that is in effect;

(ii) The owner or operator is monitoring emissions from the unit with another certified monitoring system approved, in accordance with the applicable provisions of this subpart and part 75 of this chapter, by the Administrator for use at that unit that provides emission data for the same pollutant or parameter as the retired or discontinued monitoring system; or

(iii) The designated representative submits notification of the date of

certification testing of a replacement monitoring system for the retired or discontinued monitoring system in accordance with § 97.531(d)(3)(i).

(e) *Long-term cold storage.* The owner or operator of a TR NO<sub>x</sub> Ozone Season unit is subject to the applicable provisions of § 75.4(d) of this chapter concerning units in long-term cold storage.

**§ 97.531 Initial monitoring system certification and recertification procedures.**

(a) The owner or operator of a TR NO<sub>x</sub> Ozone Season unit shall be exempt from the initial certification requirements of this section for a monitoring system under § 97.530(a)(1) if the following conditions are met:

(1) The monitoring system has been previously certified in accordance with part 75 of this chapter; and

(2) The applicable quality-assurance and quality-control requirements of § 75.21 of this chapter and appendices B, D, and E to part 75 of this chapter are fully met for the certified monitoring system described in paragraph (a)(1) of this section.

(b) The recertification provisions of this section shall apply to a monitoring system under § 97.530(a)(1) that is exempt from initial certification requirements under paragraph (a) of this section.

(c) If the Administrator has previously approved a petition under § 75.17(a) or (b) of this chapter for apportioning the NO<sub>x</sub> emission rate measured in a common stack or a petition under § 75.66 of this chapter for an alternative to a requirement in § 75.12 or § 75.17 of this chapter, the designated representative shall resubmit the petition to the Administrator under § 97.535 to determine whether the approval applies under the TR NO<sub>x</sub> Ozone Season Trading Program.

(d) Except as provided in paragraph (a) of this section, the owner or operator of a TR NO<sub>x</sub> Ozone Season unit shall comply with the following initial certification and recertification procedures for a continuous monitoring system (*i.e.*, a continuous emission monitoring system and an excepted monitoring system under appendices D and E to part 75 of this chapter) under § 97.530(a)(1). The owner or operator of a unit that qualifies to use the low mass emissions excepted monitoring methodology under § 75.19 of this chapter or that qualifies to use an alternative monitoring system under subpart E of part 75 of this chapter shall comply with the procedures in paragraph (e) or (f) of this section respectively.

(1) Requirements for initial certification. The owner or operator shall ensure that each continuous monitoring system under § 97.530(a)(1) (including the automated data acquisition and handling system) successfully completes all of the initial certification testing required under § 75.20 of this chapter by the applicable deadline in § 97.530(b). In addition, whenever the owner or operator installs a monitoring system to meet the requirements of this subpart in a location where no such monitoring system was previously installed, initial certification in accordance with § 75.20 of this chapter is required.

(2) Requirements for recertification. Whenever the owner or operator makes a replacement, modification, or change in any certified continuous emission monitoring system under § 97.530(a)(1) that may significantly affect the ability of the system to accurately measure or record NO<sub>x</sub> mass emissions or heat input rate or to meet the quality-assurance and quality-control requirements of § 75.21 of this chapter or appendix B to part 75 of this chapter, the owner or operator shall recertify the monitoring system in accordance with § 75.20(b) of this chapter. Furthermore, whenever the owner or operator makes a replacement, modification, or change to the flue gas handling system or the unit's operation that may significantly change the stack flow or concentration profile, the owner or operator shall recertify each continuous emission monitoring system whose accuracy is potentially affected by the change, in accordance with § 75.20(b) of this chapter. Examples of changes to a continuous emission monitoring system that require recertification include: replacement of the analyzer, complete replacement of an existing continuous emission monitoring system, or change in location or orientation of the sampling probe or site. Any fuel flowmeter system, and any excepted NO<sub>x</sub> monitoring system under appendix E to part 75 of this chapter, under § 97.530(a)(1) are subject to the recertification requirements in § 75.20(g)(6) of this chapter.

(3) Approval process for initial certification and recertification. For initial certification of a continuous monitoring system under § 97.530(a)(1), paragraphs (d)(3)(i) through (v) of this section apply. For recertifications of such monitoring systems, paragraphs (d)(3)(i) through (iv) of this section and the procedures in §§ 75.20(b)(5) and (g)(7) of this chapter (in lieu of the procedures in paragraph (d)(3)(v) of this section) apply, provided that in applying paragraphs (d)(3)(i) through

(iv) of this section, the words "certification" and "initial certification" are replaced by the word "recertification" and the word "certified" is replaced by with the word "recertified".

(i) Notification of certification. The designated representative shall submit to the appropriate EPA Regional Office and the Administrator written notice of the dates of certification testing, in accordance with § 97.533.

(ii) Certification application. The designated representative shall submit to the Administrator a certification application for each monitoring system. A complete certification application shall include the information specified in § 75.63 of this chapter.

(iii) Provisional certification date. The provisional certification date for a monitoring system shall be determined in accordance with § 75.20(a)(3) of this chapter. A provisionally certified monitoring system may be used under the TR NO<sub>x</sub> Ozone Season Trading Program for a period not to exceed 120 days after receipt by the Administrator of the complete certification application for the monitoring system under paragraph (d)(3)(ii) of this section. Data measured and recorded by the provisionally certified monitoring system, in accordance with the requirements of part 75 of this chapter, will be considered valid quality-assured data (retroactive to the date and time of provisional certification), provided that the Administrator does not invalidate the provisional certification by issuing a notice of disapproval within 120 days of the date of receipt of the complete certification application by the Administrator.

(iv) Certification application approval process. The Administrator will issue a written notice of approval or disapproval of the certification application to the owner or operator within 120 days of receipt of the complete certification application under paragraph (d)(3)(ii) of this section. In the event the Administrator does not issue such a notice within such 120-day period, each monitoring system that meets the applicable performance requirements of part 75 of this chapter and is included in the certification application will be deemed certified for use under the TR NO<sub>x</sub> Ozone Season Trading Program.

(A) Approval notice. If the certification application is complete and shows that each monitoring system meets the applicable performance requirements of part 75 of this chapter, then the Administrator will issue a written notice of approval of the

certification application within 120 days of receipt.

(B) Incomplete application notice. If the certification application is not complete, then the Administrator will issue a written notice of incompleteness that sets a reasonable date by which the designated representative must submit the additional information required to complete the certification application. If the designated representative does not comply with the notice of incompleteness by the specified date, then the Administrator may issue a notice of disapproval under paragraph (d)(3)(iv)(C) of this section.

(C) Disapproval notice. If the certification application shows that any monitoring system does not meet the performance requirements of part 75 of this chapter or if the certification application is incomplete and the requirement for disapproval under paragraph (d)(3)(iv)(B) of this section is met, then the Administrator will issue a written notice of disapproval of the certification application. Upon issuance of such notice of disapproval, the provisional certification is invalidated by the Administrator and the data measured and recorded by each uncertified monitoring system shall not be considered valid quality-assured data beginning with the date and hour of provisional certification (as defined under § 75.20(a)(3) of this chapter).

(D) Audit decertification. The Administrator may issue a notice of disapproval of the certification status of a monitor in accordance with § 97.532(b).

(v) Procedures for loss of certification. If the Administrator issues a notice of disapproval of a certification application under paragraph (d)(3)(iv)(C) of this section or a notice of disapproval of certification status under paragraph (d)(3)(iv)(D) of this section, then:

(A) The owner or operator shall substitute the following values, for each disapproved monitoring system, for each hour of unit operation during the period of invalid data specified under § 75.20(a)(4)(iii), § 75.20(g)(7), or § 75.21(e) of this chapter and continuing until the applicable date and hour specified under § 75.20(a)(5)(i) or (g)(7) of this chapter:

(1) For a disapproved NO<sub>x</sub> emission rate (*i.e.*, NO<sub>x</sub>-diluent) system, the maximum potential NO<sub>x</sub> emission rate, as defined in § 72.2 of this chapter.

(2) For a disapproved NO<sub>x</sub> pollutant concentration monitor and disapproved flow monitor, respectively, the maximum potential concentration of NO<sub>x</sub> and the maximum potential flow rate, as defined in sections 2.1.2.1 and



2.1.4.1 of appendix A to part 75 of this chapter.

(3) For a disapproved moisture monitoring system and disapproved diluent gas monitoring system, respectively, the minimum potential moisture percentage and either the maximum potential CO<sub>2</sub> concentration or the minimum potential O<sub>2</sub> concentration (as applicable), as defined in sections 2.1.5, 2.1.3.1, and 2.1.3.2 of appendix A to part 75 of this chapter.

(4) For a disapproved fuel flowmeter system, the maximum potential fuel flow rate, as defined in section 2.4.2.1 of appendix D to part 75 of this chapter.

(5) For a disapproved excepted NO<sub>x</sub> monitoring system under appendix E to part 75 of this chapter, the fuel-specific maximum potential NO<sub>x</sub> emission rate, as defined in § 72.2 of this chapter.

(B) The designated representative shall submit a notification of certification retest dates and a new certification application in accordance with paragraphs (d)(3)(i) and (ii) of this section.

(C) The owner or operator shall repeat all certification tests or other requirements that were failed by the monitoring system, as indicated in the Administrator's notice of disapproval, no later than 30 unit operating days after the date of issuance of the notice of disapproval.

(e) The owner or operator of a unit qualified to use the low mass emissions (LME) excepted methodology under § 75.19 of this chapter shall meet the applicable certification and recertification requirements in §§ 75.19(a)(2) and 75.20(h) of this chapter. If the owner or operator of such a unit elects to certify a fuel flowmeter system for heat input determination, the owner or operator shall also meet the certification and recertification requirements in § 75.20(g) of this chapter.

(f) The designated representative of each unit for which the owner or operator intends to use an alternative monitoring system approved by the Administrator under subpart E of part 75 of this chapter shall comply with the applicable notification and application procedures of § 75.20(f) of this chapter.

**§ 97.532 Monitoring system out-of-control periods.**

(a) *General provisions.* Whenever any monitoring system fails to meet the quality-assurance and quality-control requirements or data validation requirements of part 75 of this chapter, data shall be substituted using the applicable missing data procedures in subpart D or subpart H of, or appendix

D or appendix E to, part 75 of this chapter.

(b) *Audit decertification.* Whenever both an audit of a monitoring system and a review of the initial certification or recertification application reveal that any monitoring system should not have been certified or recertified because it did not meet a particular performance specification or other requirement under § 97.531 or the applicable provisions of part 75 of this chapter, both at the time of the initial certification or recertification application submission and at the time of the audit, the Administrator will issue a notice of disapproval of the certification status of such monitoring system. For the purposes of this paragraph, an audit shall be either a field audit or an audit of any information submitted to the Administrator or any State or permitting authority. By issuing the notice of disapproval, the Administrator revokes prospectively the certification status of the monitoring system. The data measured and recorded by the monitoring system shall not be considered valid quality-assured data from the date of issuance of the notification of the revoked certification status until the date and time that the owner or operator completes subsequently approved initial certification or recertification tests for the monitoring system. The owner or operator shall follow the applicable initial certification or recertification procedures in § 97.531 for each disapproved monitoring system.

**§ 97.533 Notifications concerning monitoring.**

The designated representative of a TR NO<sub>x</sub> Ozone Season unit shall submit written notice to the Administrator in accordance with § 75.61 of this chapter.

**§ 97.534 Recordkeeping and reporting.**

(a) *General provisions.* The designated representative shall comply with all recordkeeping and reporting requirements in paragraphs (b) through (e) of this section, the applicable recordkeeping and reporting requirements under § 75.73 of this chapter, and the requirements of § 97.514(a).

(b) *Monitoring plans.* The owner or operator of a TR NO<sub>x</sub> Ozone Season unit shall comply with requirements of § 75.73(c) and (e) of this chapter.

(c) *Certification applications.* The designated representative shall submit an application to the Administrator within 45 days after completing all initial certification or recertification tests required under § 97.531, including

the information required under § 75.63 of this chapter.

(d) *Quarterly reports.* The designated representative shall submit quarterly reports, as follows:

(1) If the TR NO<sub>x</sub> Ozone Season unit is subject to the Acid Rain Program or a TR NO<sub>x</sub> Annual emissions limitation or if the owner or operator of such unit chooses to report on an annual basis under this subpart, the designated representative shall meet the requirements of subpart H of part 75 of this chapter (concerning monitoring of NO<sub>x</sub> mass emissions) for such unit for the entire year and shall report the NO<sub>x</sub> mass emissions data and heat input data for such unit, in an electronic quarterly report in a format prescribed by the Administrator, for each calendar quarter beginning with:

(i) For a unit that commences commercial operation before July 1, 2011, the calendar quarter covering May 1, 2012 through June 30, 2012; or

(ii) For a unit that commences commercial operation on or after July 1, 2011, the calendar quarter corresponding to the earlier of the date of provisional certification or the applicable deadline for initial certification under § 97.530(b), unless that quarter is the third or fourth quarter of 2011 or the first quarter of 2012, in which case reporting shall commence in the quarter covering May 1, 2012 through June 30, 2012.

(2) If the TR NO<sub>x</sub> Ozone Season unit is not subject to the Acid Rain Program or a TR NO<sub>x</sub> Annual emissions limitation, then the designated representative shall either:

(i) Meet the requirements of subpart H of part 75 (concerning monitoring of NO<sub>x</sub> mass emissions) for such unit for the entire year and report the NO<sub>x</sub> mass emissions data and heat input data for such unit in accordance with paragraph (d)(1) of this section; or

(ii) Meet the requirements of subpart H of part 75 for the control period (including the requirements in § 75.74(c) of this chapter) and report NO<sub>x</sub> mass emissions data and heat input data (including the data described in § 75.74(c)(6) of this chapter) for such unit only for the control period of each year and report, in an electronic quarterly report in a format prescribed by the Administrator, for each calendar quarter beginning with:

(A) For a unit that commences commercial operation before July 1, 2011, the calendar quarter covering May 1, 2012 through June 30, 2012; or

(B) For a unit that commences commercial operation on or after July 1, 2011, the calendar quarter corresponding to the earlier of the date

of provisional certification or the applicable deadline for initial certification under § 97.530(b), unless that date is not during a control period, in which case reporting shall commence in the quarter that includes May 1 through June 30 of the first control period after such date.

(3) The designated representative shall submit each quarterly report to the Administrator within 30 days after the end of the calendar quarter covered by the report. Quarterly reports shall be submitted in the manner specified in § 75.73(f) of this chapter.

(4) For TR NO<sub>x</sub> Ozone Season units that are also subject to the Acid Rain Program, TR NO<sub>x</sub> Annual Trading Program, TR SO<sub>2</sub> Group 1 Trading Program, or TR SO<sub>2</sub> Group 2 Trading Program, quarterly reports shall include the applicable data and information required by subparts F through H of part 75 of this chapter as applicable, in addition to the NO<sub>x</sub> mass emission data, heat input data, and other information required by this subpart.

(5) The Administrator may review and conduct independent audits of any quarterly report in order to determine whether the quarterly report meets the requirements of this subpart and part 75 of this chapter, including the requirement to use substitute data.

(i) The Administrator will notify the designated representative of any determination that the quarterly report fails to meet any such requirements and specify in such notification any corrections that the Administrator believes are necessary to make through resubmission of the quarterly report and a reasonable time period within which the designated representative must respond. Upon request by the designated representative, the Administrator may specify reasonable extensions of such time period. Within the time period (including any such extensions) specified by the Administrator, the designated representative shall resubmit the quarterly report with the corrections specified by the Administrator, except to the extent the designated representative provides information demonstrating that a specified correction is not necessary because the quarterly report already meets the requirements of this subpart and part 75 of this chapter that are relevant to the specified correction.

(6) Any resubmission of a quarterly report shall meet the requirements applicable to the submission of a quarterly report under this subpart and part 75 of this chapter, except for the deadline set forth in paragraph (d)(3) of this section.

(e) *Compliance certification.* The designated representative shall submit to the Administrator a compliance certification (in a format prescribed by the Administrator) in support of each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The certification shall state that:

(1) The monitoring data submitted were recorded in accordance with the applicable requirements of this subpart and part 75 of this chapter, including the quality assurance procedures and specifications;

(2) For a unit with add-on NO<sub>x</sub> emission controls and for all hours where NO<sub>x</sub> data are substituted in accordance with § 75.34(a)(1) of this chapter, the add-on emission controls were operating within the range of parameters listed in the quality assurance/quality control program under appendix B to part 75 of this chapter and the substitute data values do not systematically underestimate NO<sub>x</sub> emissions; and

(3) For a unit that is reporting on a control period basis under paragraph (d)(2)(ii) of this section, the NO<sub>x</sub> emission rate and NO<sub>x</sub> concentration values substituted for missing data under subpart D of part 75 of this chapter are calculated using only values from a control period and do not systematically underestimate NO<sub>x</sub> emissions.

**§ 97.535 Petitions for alternatives to monitoring, recordkeeping, or reporting requirements.**

(a) The designated representative of a TR NO<sub>x</sub> Ozone Season unit may submit a petition under § 75.66 of this chapter to the Administrator, requesting approval to apply an alternative to any requirement of §§ 97.530 through 97.534.

(b) A petition submitted under paragraph (a) of this section shall include sufficient information for the evaluation of the petition, including, at a minimum, the following information:

(i) Identification of each unit and source covered by the petition;

(ii) A detailed explanation of why the proposed alternative is being suggested in lieu of the requirement;

(iii) A description and diagram of any equipment and procedures used in the proposed alternative;

(iv) A demonstration that the proposed alternative is consistent with the purposes of the requirement for which the alternative is proposed and with the purposes of this subpart and part 75 of this chapter and that any

adverse effect of approving the alternative will be *de minimis*; and

(v) Any other relevant information that the Administrator may require.

(c) Use of an alternative to any requirement referenced in paragraph (a) of this section is in accordance with this subpart only to the extent that the petition is approved in writing by the Administrator and that such use is in accordance with such approval.

76. Part 97 is amended by adding subpart CCCCC to read as follows:

**Subpart CCCCC—TR SO<sub>2</sub> Group 1 Trading Program**

Sec.	
97.601	Purpose.
97.602	Definitions.
97.603	Measurements, abbreviations, and acronyms.
97.604	Applicability.
97.605	Retired unit exemption.
97.606	Standard requirements.
97.607	Computation of time.
97.608	Administrative appeal procedures.
97.609	[Reserved]
97.610	State SO <sub>2</sub> Group 1 trading budgets, new unit set-asides, Indian country new unit set-asides and variability limits.
97.611	Timing requirements for TR SO <sub>2</sub> Group 1 allowance allocations.
97.612	TR SO <sub>2</sub> Group 1 allowance allocations to new units.
97.613	Authorization of designated representative and alternate designated representative.
97.614	Responsibilities of designated representative and alternate designated representative.
97.615	Changing designated representative and alternate designated representative; changes in owners and operators.
97.616	Certificate of representation.
97.617	Objections concerning designated representative and alternate designated representative.
97.618	Delegation by designated representative and alternate designated representative.
97.619	[Reserved]
97.620	Establishment of compliance accounts and general accounts.
97.621	Recordation of TR SO <sub>2</sub> Group 1 allowance allocations.
97.622	Submission of TR SO <sub>2</sub> Group 1 allowance transfers.
97.623	Recordation of TR SO <sub>2</sub> Group 1 allowance transfers.
97.624	Compliance with TR SO <sub>2</sub> Group 1 emissions limitation.
97.625	Compliance with TR SO <sub>2</sub> Group 1 assurance provisions.
97.626	Banking.
97.627	Account error.
97.628	Administrator's action on submissions.
97.629	[Reserved]
97.630	General monitoring, recordkeeping, and reporting requirements.
97.631	Initial monitoring system certification and recertification procedures.
97.632	Monitoring system out-of-control periods.

- 97.633 Notifications concerning monitoring.
- 97.634 Recordkeeping and reporting.
- 97.635 Petitions for alternatives to monitoring, recordkeeping, or reporting requirements.

### Subpart CCCCC—TR SO<sub>2</sub> Group 1 Trading Program

#### § 97.601 Purpose.

This subpart sets forth the general, designated representative, allowance, and monitoring provisions for the Transport Rule (TR) SO<sub>2</sub> Group 1 Trading Program, under section 110 of the Clean Air Act and § 52.39 of this chapter, as a means of mitigating interstate transport of fine particulates and sulfur dioxide.

#### § 97.602 Definitions.

The terms used in this subpart shall have the meanings set forth in this section as follows:

*Acid Rain Program* means a multi-state SO<sub>2</sub> and NO<sub>x</sub> air pollution control and emission reduction program established by the Administrator under title IV of the Clean Air Act and parts 72 through 78 of this chapter.

*Administrator* means the Administrator of the United States Environmental Protection Agency or the Director of the Clean Air Markets Division (or its successor determined by the Administrator) of the United States Environmental Protection Agency, the Administrator's duly authorized representative under this subpart.

*Allocate or allocation* means, with regard to TR SO<sub>2</sub> Group 1 allowances, the determination by the Administrator, State, or permitting authority, in accordance with this subpart and any SIP revision submitted by the State and approved by the Administrator under § 52.39(d), (e), or (f) of this chapter, of the amount of such TR SO<sub>2</sub> Group 1 allowances to be initially credited, at no cost to the recipient, to:

- (1) A TR SO<sub>2</sub> Group 1 unit;
- (2) A new unit set-aside;
- (3) An Indian country new unit set-aside; or
- (4) An entity not listed in paragraphs (1) through (3) of this definition;
- (5) Provided that, if the

Administrator, State, or permitting authority initially credits, to a TR SO<sub>2</sub> Group 1 unit qualifying for an initial credit, a credit in the amount of zero TR SO<sub>2</sub> Group 1 allowances, the TR SO<sub>2</sub> Group 1 unit will be treated as being allocated an amount (*i.e.*, zero) of TR SO<sub>2</sub> Group 1 allowances.

*Allowable SO<sub>2</sub> emission rate* means, for a unit, the most stringent State or federal SO<sub>2</sub> emission rate limit (in lb/MWhr or, if in lb/mmBtu, converted to

lb/MWhr by multiplying it by the unit's heat rate in mmBtu/MWhr) that is applicable to the unit and covers the longest averaging period not exceeding one year.

*Allowance Management System* means the system by which the Administrator records allocations, deductions, and transfers of TR SO<sub>2</sub> Group 1 allowances under the TR SO<sub>2</sub> Group 1 Trading Program. Such allowances are allocated, recorded, held, deducted, or transferred only as whole allowances.

*Allowance Management System account* means an account in the Allowance Management System established by the Administrator for purposes of recording the allocation, holding, transfer, or deduction of TR SO<sub>2</sub> Group 1 allowances.

*Allowance transfer deadline* means, for a control period in a given year, midnight of March 1 (if it is a business day), or midnight of the first business day thereafter (if March 1 is not a business day), immediately after such control period and is the deadline by which a TR SO<sub>2</sub> Group 1 allowance transfer must be submitted for recordation in a TR SO<sub>2</sub> Group 1 source's compliance account in order to be available for use in complying with the source's TR SO<sub>2</sub> Group 1 emissions limitation for such control period in accordance with §§ 97.606 and 97.624.

*Alternate designated representative* means, for a TR SO<sub>2</sub> Group 1 source and each TR SO<sub>2</sub> Group 1 unit at the source, the natural person who is authorized by the owners and operators of the source and all such units at the source, in accordance with this subpart, to act on behalf of the designated representative in matters pertaining to the TR SO<sub>2</sub> Group 1 Trading Program. If the TR SO<sub>2</sub> Group 1 source is also subject to the Acid Rain Program, TR NO<sub>x</sub> Annual Trading Program, or TR NO<sub>x</sub> Ozone Season Trading Program, then this natural person shall be the same natural person as the alternate designated representative, as defined in the respective program.

*Assurance account* means an Allowance Management System account, established by the Administrator under § 97.625(b)(3) for certain owners and operators of a group of one or more TR SO<sub>2</sub> Group 1 sources and units in a given State (and Indian country within the borders of such State), in which are held TR SO<sub>2</sub> Group 1 allowances available for use for a control period in a given year in complying with the TR SO<sub>2</sub> Group 1 assurance provisions in accordance with §§ 97.606 and 97.625.

*Authorized account representative* means, for a general account, the natural person who is authorized, in accordance with this subpart, to transfer and otherwise dispose of TR SO<sub>2</sub> Group 1 allowances held in the general account and, for a TR SO<sub>2</sub> Group 1 source's compliance account, the designated representative of the source.

*Automated data acquisition and handling system or DAHS* means the component of the continuous emission monitoring system, or other emissions monitoring system approved for use under this subpart, designed to interpret and convert individual output signals from pollutant concentration monitors, flow monitors, diluent gas monitors, and other component parts of the monitoring system to produce a continuous record of the measured parameters in the measurement units required by this subpart.

*Biomass* means—

- (1) Any organic material grown for the purpose of being converted to energy;
- (2) Any organic byproduct of agriculture that can be converted into energy; or

(3) Any material that can be converted into energy and is nonmerchutable for other purposes, that is segregated from other material that is nonmerchutable for other purposes, and that is;

(i) A forest-related organic resource, including mill residues, precommercial thinnings, slash, brush, or byproduct from conversion of trees to merchantable material; or

(ii) A wood material, including pallets, crates, dunnage, manufacturing and construction materials (other than pressure-treated, chemically-treated, or painted wood products), and landscape or right-of-way tree trimmings.

*Boiler* means an enclosed fossil- or other-fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or other medium.

*Bottoming-cycle unit* means a unit in which the energy input to the unit is first used to produce useful thermal energy, where at least some of the reject heat from the useful thermal energy application or process is then used for electricity production.

*Business day* means a day that does not fall on a weekend or a federal holiday.

*Certifying official* means a natural person who is:

- (1) For a corporation, a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function or any other person who performs similar policy- or decision-making functions for the corporation;

(2) For a partnership or sole proprietorship, a general partner or the proprietor respectively; or

(3) For a local government entity or State, federal, or other public agency, a principal executive officer or ranking elected official.

*Clean Air Act* means the Clean Air Act, 42 U.S.C. 7401, *et seq.*

*Coal* means "coal" as defined in § 72.2 of this chapter.

*Coal-derived fuel* means any fuel (whether in a solid, liquid, or gaseous state) produced by the mechanical, thermal, or chemical processing of coal.

*Cogeneration system* means an integrated group, at a source, of equipment (including a boiler, or combustion turbine, and a steam turbine generator) designed to produce useful thermal energy for industrial, commercial, heating, or cooling purposes and electricity through the sequential use of energy.

*Cogeneration unit* means a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine that is a topping-cycle unit or a bottoming-cycle unit:

(1) Operating as part of a cogeneration system; and

(2) Producing on an annual average basis—

(i) For a topping-cycle unit,

(A) Useful thermal energy not less than 5 percent of total energy output; and

(B) Useful power that, when added to one-half of useful thermal energy produced, is not less than 42.5 percent of total energy input, if useful thermal energy produced is 15 percent or more of total energy output, or not less than 45 percent of total energy input, if useful thermal energy produced is less than 15 percent of total energy output.

(ii) For a bottoming-cycle unit, useful power not less than 45 percent of total energy input;

(3) Provided that the requirements in paragraph (2) of this definition shall not apply to a calendar year referenced in paragraph (2) of this definition during which the unit did not operate at all;

(4) Provided that the total energy input under paragraphs (2)(i)(B) and (2)(ii) of this definition shall equal the unit's total energy input from all fuel, except biomass if the unit is a boiler; and

(5) Provided that, if, throughout its operation during the 12-month period or a calendar year referenced in paragraph (2) of this definition, a unit is operated as part of a cogeneration system and the cogeneration system meets on a system-wide basis the requirement in paragraph (2)(i)(B) or (2)(ii) of this definition, the unit shall be deemed to meet such

requirement during that 12-month period or calendar year.

*Combustion turbine* means an enclosed device comprising:

(1) If the device is simple cycle, a compressor, a combustor, and a turbine and in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine; and

(2) If the device is combined cycle, the equipment described in paragraph (1) of this definition and any associated duct burner, heat recovery steam generator, and steam turbine.

*Commence commercial operation* means, with regard to a unit:

(1) To have begun to produce steam, gas, or other heated medium used to generate electricity for sale or use, including test generation, except as provided in § 97.605.

(i) For a unit that is a TR SO<sub>2</sub> Group 1 unit under § 97.604 on the later of January 1, 2005 or the date the unit commences commercial operation as defined in the introductory text of paragraph (1) of this definition and that subsequently undergoes a physical change or is moved to a new location or source, such date shall remain the date of commencement of commercial operation of the unit, which shall continue to be treated as the same unit.

(ii) For a unit that is a TR SO<sub>2</sub> Group 1 unit under § 97.604 on the later of January 1, 2005 or the date the unit commences commercial operation as defined in the introductory text of paragraph (1) of this definition and that is subsequently replaced by a unit at the same or a different source, such date shall remain the replaced unit's date of commencement of commercial operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of commercial operation as defined in paragraph (1) or (2) of this definition as appropriate.

(2) Notwithstanding paragraph (1) of this definition and except as provided in § 97.605, for a unit that is not a TR SO<sub>2</sub> Group 1 unit under § 97.604 on the later of January 1, 2005 or the date the unit commences commercial operation as defined in introductory text of paragraph (1) of this definition, the unit's date for commencement of commercial operation shall be the date on which the unit becomes a TR SO<sub>2</sub> Group 1 unit under § 97.604.

(i) For a unit with a date for commencement of commercial operation as defined in the introductory text of paragraph (2) of this definition and that subsequently undergoes a physical change or is moved to a different location or source, such date

shall remain the date of commencement of commercial operation of the unit, which shall continue to be treated as the same unit.

(ii) For a unit with a date for commencement of commercial operation as defined in the introductory text of paragraph (2) of this definition and that is subsequently replaced by a unit at the same or a different source, such date shall remain the replaced unit's date of commencement of commercial operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of commercial operation as defined in paragraph (1) or (2) of this definition as appropriate.

*Common designated representative* means, with regard to a control period in a given year, a designated representative where, as of April 1 immediately after the allowance transfer deadline for such control period, the same natural person is authorized under §§ 97.613(a) and 97.615(a) as the designated representative for a group of one or more TR SO<sub>2</sub> Group 1 sources and units located in a State (and Indian country within the borders of such State).

*Common designated representative's assurance level* means, with regard to a specific common designated representative and a State (and Indian country within the borders of such State) and control period in a given year for which the State assurance level is exceeded as described in § 97.606(c)(2)(iii), the common designated representative's share of the State SO<sub>2</sub> Group 1 trading budget with the variability limit for the State for such control period.

*Common designated representative's share* means, with regard to a specific common designated representative for a control period in a given year:

(1) With regard to a total amount of SO<sub>2</sub> emissions from all TR SO<sub>2</sub> Group 1 units in a State (and Indian country within the borders of such State) during such control period, the total tonnage of SO<sub>2</sub> emissions during such control period from a group of one or more TR SO<sub>2</sub> Group 1 units located in such State (and such Indian country) and having the common designated representative for such control period;

(2) With regard to a State SO<sub>2</sub> Group 1 trading budget with the variability limit for such control period, the amount (rounded to the nearest allowance) equal to the sum of the total amount of TR SO<sub>2</sub> Group 1 allowances allocated for such control period to a group of one or more TR SO<sub>2</sub> Group 1 units located in the State (and Indian country within the borders of such

State) and having the common designated representative for such control period and of the total amount of TR SO<sub>2</sub> Group 1 allowances purchased by an owner or operator of such TR SO<sub>2</sub> Group 1 units in an auction for such control period and submitted by the State or the permitting authority to the Administrator for recording in the compliance accounts for such TR SO<sub>2</sub> Group 1 units in accordance with the TR SO<sub>2</sub> Group 1 allowance auction provisions in a SIP revision approved by the Administrator under § 52.39(e) or (f) of this chapter, multiplied by the sum of the State SO<sub>2</sub> Group 1 trading budget under § 97.610(a) and the State's variability limit under § 97.610(b) for such control period and divided by such State SO<sub>2</sub> Group 1 trading budget;

(3) Provided that, in the case of a unit that operates during, but has no amount of TR SO<sub>2</sub> Group 1 allowances allocated under §§ 97.611 and 97.612 for, such control period, the unit shall be treated, solely for purposes of this definition, as being allocated an amount (rounded to the nearest allowance) of TR SO<sub>2</sub> Group 1 allowances for such control period equal to the unit's allowable SO<sub>2</sub> emission rate applicable to such control period, multiplied by a capacity factor of 0.85 (if the unit is a boiler combusting any amount of coal or coal-derived fuel during such control period), 0.24 (if the unit is a simple combustion turbine during such control period), 0.67 (if the unit is a combined cycle turbine during such control period), 0.74 (if the unit is an integrated coal gasification combined cycle unit during such control period), or 0.36 (for any other unit), multiplied by the unit's maximum hourly load as reported in accordance with this subpart and by 8,760 hours/control period, and divided by 2,000 lb/ton.

*Common stack* means a single flue through which emissions from 2 or more units are exhausted.

*Compliance account* means an Allowance Management System account, established by the Administrator for a TR SO<sub>2</sub> Group 1 source under this subpart, in which any TR SO<sub>2</sub> Group 1 allowance allocations to the TR SO<sub>2</sub> Group 1 units at the source are recorded and in which are held any TR SO<sub>2</sub> Group 1 allowances available for use for a control period in a given year in complying with the source's TR SO<sub>2</sub> Group 1 emissions limitation in accordance with §§ 97.606 and 97.624.

*Continuous emission monitoring system* or *CEMS* means the equipment required under this subpart to sample, analyze, measure, and provide, by means of readings recorded at least once

every 15 minutes and using an automated data acquisition and handling system (DAHS), a permanent record of SO<sub>2</sub> emissions, stack gas volumetric flow rate, stack gas moisture content, and O<sub>2</sub> or CO<sub>2</sub> concentration (as applicable), in a manner consistent with part 75 of this chapter and §§ 97.630 through 97.635. The following systems are the principal types of continuous emission monitoring systems:

(1) A flow monitoring system, consisting of a stack flow rate monitor and an automated data acquisition and handling system and providing a permanent, continuous record of stack gas volumetric flow rate, in standard cubic feet per hour (scfh);

(2) A SO<sub>2</sub> monitoring system, consisting of a SO<sub>2</sub> pollutant concentration monitor and an automated data acquisition and handling system and providing a permanent, continuous record of SO<sub>2</sub> emissions, in parts per million (ppm);

(3) A moisture monitoring system, as defined in § 75.11(b)(2) of this chapter and providing a permanent, continuous record of the stack gas moisture content, in percent H<sub>2</sub>O;

(4) A CO<sub>2</sub> monitoring system, consisting of a CO<sub>2</sub> pollutant concentration monitor (or an O<sub>2</sub> monitor plus suitable mathematical equations from which the CO<sub>2</sub> concentration is derived) and an automated data acquisition and handling system and providing a permanent, continuous record of CO<sub>2</sub> emissions, in percent CO<sub>2</sub>; and

(5) An O<sub>2</sub> monitoring system, consisting of an O<sub>2</sub> concentration monitor and an automated data acquisition and handling system and providing a permanent, continuous record of O<sub>2</sub>, in percent O<sub>2</sub>.

*Control period* means the period starting January 1 of a calendar year, except as provided in § 97.606(c)(3), and ending on December 31 of the same year, inclusive.

*Designated representative* means, for a TR SO<sub>2</sub> Group 1 source and each TR SO<sub>2</sub> Group 1 unit at the source, the natural person who is authorized by the owners and operators of the source and all such units at the source, in accordance with this subpart, to represent and legally bind each owner and operator in matters pertaining to the TR SO<sub>2</sub> Group 1 Trading Program. If the TR SO<sub>2</sub> Group 1 source is also subject to the Acid Rain Program, TR NO<sub>x</sub> Annual Trading Program, or TR NO<sub>x</sub> Ozone Season Trading Program, then this natural person shall be the same natural person as the designated representative, as defined in the respective program.

*Emissions* means air pollutants exhausted from a unit or source into the atmosphere, as measured, recorded, and reported to the Administrator by the designated representative, and as modified by the Administrator:

(1) In accordance with this subpart; and

(2) With regard to a period before the unit or source is required to measure, record, and report such air pollutants in accordance with this subpart, in accordance with part 75 of this chapter.

*Excess emissions* means any ton of emissions from the TR SO<sub>2</sub> Group 1 units at a TR SO<sub>2</sub> Group 1 source during a control period in a given year that exceeds the TR SO<sub>2</sub> Group 1 emissions limitation for the source for such control period.

*Fossil fuel* means—

(1) Natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material; or

(2) For purposes of applying the limitation on "average annual fuel consumption of fossil fuel" in §§ 97.604(b)(2)(i)(B) and (ii), natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material for the purpose of creating useful heat.

*Fossil-fuel-fired* means, with regard to a unit, combusting any amount of fossil fuel in 2005 or any calendar year thereafter.

*General account* means an Allowance Management System account, established under this subpart, that is not a compliance account or an assurance account.

*Generator* means a device that produces electricity.

*Gross electrical output* means, for a unit, electricity made available for use, including any such electricity used in the power production process (which process includes, but is not limited to, any on-site processing or treatment of fuel combusted at the unit and any on-site emission controls).

*Heat input* means, for a unit for a specified period of time, the product (in mmBtu/time) of the gross calorific value of the fuel (in mmBtu/lb) fed into the unit multiplied by the fuel feed rate (in lb of fuel/time), as measured, recorded, and reported to the Administrator by the designated representative and as modified by the Administrator in accordance with this subpart and excluding the heat derived from preheated combustion air, recirculated flue gases, or exhaust.

*Heat input rate* means, for a unit, the amount of heat input (in mmBtu) divided by unit operating time (in hr) or, for a unit and a specific fuel, the amount of heat input attributed to the

fuel (in mmBtu) divided by the unit operating time (in hr) during which the unit combusts the fuel.

*Heat rate* means, for a unit, the unit's maximum design heat input (in Btu/hr), divided by the product of 1,000,000 Btu/mmBtu and the unit's maximum hourly load.

*Indian country* means "Indian country" as defined in 18 U.S.C. 1151.

*Life-of-the-unit, firm power contractual arrangement* means a unit participation power sales agreement under which a utility or industrial customer reserves, or is entitled to receive, a specified amount or percentage of nameplate capacity and associated energy generated by any specified unit and pays its proportional amount of such unit's total costs, pursuant to a contract:

- (1) For the life of the unit;
- (2) For a cumulative term of no less than 30 years, including contracts that permit an election for early termination; or
- (3) For a period no less than 25 years or 70 percent of the economic useful life of the unit determined as of the time the unit is built, with option rights to purchase or release some portion of the nameplate capacity and associated energy generated by the unit at the end of the period.

*Maximum design heat input* means, for a unit, the maximum amount of fuel per hour (in Btu/hr) that the unit is capable of combusting on a steady state basis as of the initial installation of the unit as specified by the manufacturer of the unit.

*Monitoring system* means any monitoring system that meets the requirements of this subpart, including a continuous emission monitoring system, an alternative monitoring system, or an excepted monitoring system under part 75 of this chapter.

*Nameplate capacity* means, starting from the initial installation of a generator, the maximum electrical generating output (in MWe, rounded to the nearest tenth) that the generator is capable of producing on a steady state basis and during continuous operation (when not restricted by seasonal or other deratings) as of such installation as specified by the manufacturer of the generator or, starting from the completion of any subsequent physical change in the generator resulting in an increase in the maximum electrical generating output that the generator is capable of producing on a steady state basis and during continuous operation (when not restricted by seasonal or other deratings), such increased maximum amount (in MWe, rounded to the nearest tenth) as of such completion

as specified by the person conducting the physical change.

*Natural gas* means "natural gas" as defined in § 72.2 of this chapter.

*Newly affected TR SO<sub>2</sub> Group 1 unit* means a unit that was not a TR SO<sub>2</sub> Group 1 unit when it began operating but that thereafter becomes a TR SO<sub>2</sub> Group 1 unit.

*Operate or operation* means, with regard to a unit, to combust fuel.

*Operator* means, for a TR SO<sub>2</sub> Group 1 source or a TR SO<sub>2</sub> Group 1 unit at a source respectively, any person who operates, controls, or supervises a TR SO<sub>2</sub> Group 1 unit at the source or the TR SO<sub>2</sub> Group 1 unit and shall include, but not be limited to, any holding company, utility system, or plant manager of such source or unit.

*Owner* means, for a TR SO<sub>2</sub> Group 1 source or a TR SO<sub>2</sub> Group 1 unit at a source respectively, any of the following persons:

- (1) Any holder of any portion of the legal or equitable title in a TR SO<sub>2</sub> Group 1 unit at the source or the TR SO<sub>2</sub> Group 1 unit;
- (2) Any holder of a leasehold interest in a TR SO<sub>2</sub> Group 1 unit at the source or the TR SO<sub>2</sub> Group 1 unit, provided that, unless expressly provided for in a leasehold agreement, "owner" shall not include a passive lessor, or a person who has an equitable interest through such lessor, whose rental payments are not based (either directly or indirectly) on the revenues or income from such TR SO<sub>2</sub> Group 1 unit; and
- (3) Any purchaser of power from a TR SO<sub>2</sub> Group 1 unit at the source or the TR SO<sub>2</sub> Group 1 unit under a life-of-the-unit, firm power contractual arrangement.

*Permanently retired* means, with regard to a unit, a unit that is unavailable for service and that the unit's owners and operators do not expect to return to service in the future.

*Permitting authority* means "permitting authority" as defined in §§ 70.2 and 71.2 of this chapter.

*Potential electrical output capacity* means, for a unit, 33 percent of the unit's maximum design heat input, divided by 3,413 Btu/kWh, divided by 1,000 kWh/MWh, and multiplied by 8,760 hr/yr.

*Receive or receipt of* means, when referring to the Administrator, to come into possession of a document, information, or correspondence (whether sent in hard copy or by authorized electronic transmission), as indicated in an official log, or by a notation made on the document, information, or correspondence, by the Administrator in the regular course of business.

*Recordation, record, or recorded* means, with regard to TR SO<sub>2</sub> Group 1 allowances, the moving of TR SO<sub>2</sub> Group 1 allowances by the Administrator into, out of, or between Allowance Management System accounts, for purposes of allocation, auction, transfer, or deduction.

*Reference method* means any direct test method of sampling and analyzing for an air pollutant as specified in § 75.22 of this chapter.

*Replacement, replace, or replaced* means, with regard to a unit, the demolishing of a unit, or the permanent retirement and permanent disabling of a unit, and the construction of another unit (the replacement unit) to be used instead of the demolished or retired unit (the replaced unit).

*Sequential use of energy* means:

- (1) The use of reject heat from electricity production in a useful thermal energy application or process; or
- (2) The use of reject heat from useful thermal energy application or process in electricity production.

*Serial number* means, for a TR SO<sub>2</sub> Group 1 allowance, the unique identification number assigned to each TR SO<sub>2</sub> Group 1 allowance by the Administrator.

*Solid waste incineration unit* means a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine that is a "solid waste incineration unit" as defined in section 129(g)(1) of the Clean Air Act.

*Source* means all buildings, structures, or installations located in one or more contiguous or adjacent properties under common control of the same person or persons. This definition does not change or otherwise affect the definition of "major source", "stationary source", or "source" as set forth and implemented in a title V operating permit program or any other program under the Clean Air Act.

*State* means one of the States that is subject to the TR SO<sub>2</sub> Group 1 Trading Program pursuant to § 52.39(a), (b), (d), (e), and (f) of this chapter.

*Submit or serve* means to send or transmit a document, information, or correspondence to the person specified in accordance with the applicable regulation:

- (1) In person;
- (2) By United States Postal Service; or
- (3) By other means of dispatch or transmission and delivery;
- (4) Provided that compliance with any "submission" or "service" deadline shall be determined by the date of dispatch, transmission, or mailing and not the date of receipt.

*Topping-cycle unit* means a unit in which the energy input to the unit is first used to produce useful power, including electricity, where at least some of the reject heat from the electricity production is then used to provide useful thermal energy.

*Total energy input* means, for a unit, total energy of all forms supplied to the unit, excluding energy produced by the unit. Each form of energy supplied shall be measured by the lower heating value of that form of energy calculated as follows:

$$\text{LHV} = \text{HHV} - 10.55(\text{W} + 9\text{H})$$

Where:

LHV = lower heating value of the form of energy in Btu/lb,

HHV = higher heating value of the form of energy in Btu/lb,

W = weight % of moisture in the form of energy, and

H = weight % of hydrogen in the form of energy.

*Total energy output* means, for a unit, the sum of useful power and useful thermal energy produced by the unit.

*TR NO<sub>x</sub> Annual Trading Program* means a multi-state NO<sub>x</sub> air pollution control and emission reduction program established in accordance with subpart AAAAA of this part and § 52.38(a) of this chapter (including such a program that is revised in a SIP revision approved by the Administrator under § 52.38(a)(3) or (4) of this chapter or that is established in a SIP revision approved by the Administrator under § 52.38(a)(5) of this chapter), as a means of mitigating interstate transport of fine particulates and NO<sub>x</sub>.

*TR NO<sub>x</sub> Ozone Season Trading Program* means a multi-state NO<sub>x</sub> air pollution control and emission reduction program established in accordance with subpart BBBB of this part and § 52.38(b) of this chapter (including such a program that is revised in a SIP revision approved by the Administrator under § 52.38(b)(3) or (4) of this chapter or that is established in a SIP revision approved by the Administrator under § 52.38(b)(5) of this chapter), as a means of mitigating interstate transport of ozone and NO<sub>x</sub>.

*TR SO<sub>2</sub> Group 1 allowance* means a limited authorization issued and allocated or auctioned by the Administrator under this subpart, or by a State or permitting authority under a SIP revision approved by the Administrator under § 52.39(d), (e), or (f) of this chapter, to emit one ton of SO<sub>2</sub> during a control period of the specified calendar year for which the authorization is allocated or auctioned or of any calendar year thereafter under the TR SO<sub>2</sub> Group 1 Trading Program.

*TR SO<sub>2</sub> Group 1 allowance deduction or deduct TR SO<sub>2</sub> Group 1 allowances* means the permanent withdrawal of TR SO<sub>2</sub> Group 1 allowances by the Administrator from a compliance account (e.g., in order to account for compliance with the TR SO<sub>2</sub> Group 1 emissions limitation) or from an assurance account (e.g., in order to account for compliance with the assurance provisions under §§ 97.606 and 97.625).

*TR SO<sub>2</sub> Group 1 allowances held or hold TR SO<sub>2</sub> Group 1 allowances* means the TR SO<sub>2</sub> Group 1 allowances treated as included in an Allowance Management System account as of a specified point in time because at that time they:

(1) Have been recorded by the Administrator in the account or transferred into the account by a correctly submitted, but not yet recorded, TR SO<sub>2</sub> Group 1 allowance transfer in accordance with this subpart; and

(2) Have not been transferred out of the account by a correctly submitted, but not yet recorded, TR SO<sub>2</sub> Group 1 allowance transfer in accordance with this subpart.

*TR SO<sub>2</sub> Group 1 emissions limitation* means, for a TR SO<sub>2</sub> Group 1 source, the tonnage of SO<sub>2</sub> emissions authorized in a control period by the TR SO<sub>2</sub> Group 1 allowances available for deduction for the source under § 97.624(a) for such control period.

*TR SO<sub>2</sub> Group 1 source* means a source that includes one or more TR SO<sub>2</sub> Group 1 units.

*TR SO<sub>2</sub> Group 1 Trading Program* means a multi-state SO<sub>2</sub> air pollution control and emission reduction program established in accordance with this subpart and § 52.39(a), (b), (d) through (f), (j), and (k) of this chapter (including such a program that is revised in a SIP revision approved by the Administrator under § 52.39(d) or (e) of this chapter or that is established in a SIP revision approved by the Administrator under § 52.39(f) of this chapter), as a means of mitigating interstate transport of fine particulates and SO<sub>2</sub>.

*TR SO<sub>2</sub> Group 1 unit* means a unit that is subject to the TR SO<sub>2</sub> Group 1 Trading Program under § 97.604.

*Unit* means a stationary, fossil-fuel-fired boiler, stationary, fossil-fuel-fired combustion turbine, or other stationary, fossil-fuel-fired combustion device. A unit that undergoes a physical change or is moved to a different location or source shall continue to be treated as the same unit. A unit (the replaced unit) that is replaced by another unit (the replacement unit) at the same or a different source shall continue to be

treated as the same unit, and the replacement unit shall be treated as a separate unit.

*Unit operating day* means, with regard to a unit, a calendar day in which the unit combusts any fuel.

*Unit operating hour or hour of unit operation* means, with regard to a unit, an hour in which the unit combusts any fuel.

*Useful power* means, with regard to a unit, electricity or mechanical energy that the unit makes available for use, excluding any such energy used in the power production process (which process includes, but is not limited to, any on-site processing or treatment of fuel combusted at the unit and any on-site emission controls).

*Useful thermal energy* means thermal energy that is:

(1) Made available to an industrial or commercial process (not a power production process), excluding any heat contained in condensate return or makeup water;

(2) Used in a heating application (e.g., space heating or domestic hot water heating); or

(3) Used in a space cooling application (i.e., in an absorption chiller).

*Utility power distribution system* means the portion of an electricity grid owned or operated by a utility and dedicated to delivering electricity to customers.

#### § 97.603 Measurements, abbreviations, and acronyms.

Measurements, abbreviations, and acronyms used in this subpart are defined as follows:

Btu—British thermal unit

CO<sub>2</sub>—carbon dioxide

H<sub>2</sub>O—water

hr—hour

kW—kilowatt electrical

kWh—kilowatt hour

lb—pound

mmBtu—million Btu

MWe—megawatt electrical

MWh—megawatt hour

NO<sub>x</sub>—nitrogen oxides

O<sub>2</sub>—oxygen

ppm—parts per million

scfh—standard cubic feet per hour

SO<sub>2</sub>—sulfur dioxide

yr—year

#### § 97.604 Applicability.

(a) Except as provided in paragraph (b) of this section:

(1) The following units in a State (and Indian country within the borders of such State) shall be TR SO<sub>2</sub> Group 1 units, and any source that includes one or more such units shall be a TR SO<sub>2</sub> Group 1 source, subject to the requirements of this subpart: any stationary, fossil-fuel-fired boiler or

stationary, fossil-fuel-fired combustion turbine serving at any time, on or after January 1, 2005, a generator with nameplate capacity of more than 25 MWe producing electricity for sale.

(2) If a stationary boiler or stationary combustion turbine that, under paragraph (a)(1) of this section, is not a TR SO<sub>2</sub> Group 1 unit begins to combust fossil fuel or to serve a generator with nameplate capacity of more than 25 MWe producing electricity for sale, the unit shall become a TR SO<sub>2</sub> Group 1 unit as provided in paragraph (a)(1) of this section on the first date on which it both combusts fossil fuel and serves such generator.

(b) Any unit in a State (and Indian country within the borders of such State) that otherwise is a TR SO<sub>2</sub> Group 1 unit under paragraph (a) of this section and that meets the requirements set forth in paragraph (b)(1)(i) or (2)(i) of this section shall not be a TR SO<sub>2</sub> Group 1 unit:

(1)(i) Any unit:

(A) Qualifying as a cogeneration unit throughout the later of 2005 or the 12-month period starting on the date the unit first produces electricity and continuing to qualify as a cogeneration unit throughout each calendar year ending after the later of 2005 or such 12-month period; and

(B) Not supplying in 2005 or any calendar year thereafter more than one-third of the unit's potential electric output capacity or 219,000 MWh, whichever is greater, to any utility power distribution system for sale.

(ii) If, after qualifying under paragraph (b)(1)(i) of this section as not being a TR SO<sub>2</sub> Group 1 unit, a unit subsequently no longer meets all the requirements of paragraph (b)(1)(i) of this section, the unit shall become a TR SO<sub>2</sub> Group 1 unit starting on the earlier of January 1 after the first calendar year during which the unit first no longer qualifies as a cogeneration unit or January 1 after the first calendar year during which the unit no longer meets the requirements of paragraph (b)(1)(i)(B) of this section. The unit shall thereafter continue to be a TR SO<sub>2</sub> Group 1 unit.

(2)(i) Any unit:

(A) Qualifying as a solid waste incineration unit throughout the later of 2005 or the 12-month period starting on the date the unit first produces electricity and continuing to qualify as a solid waste incineration unit throughout each calendar year ending after the later of 2005 or such 12-month period; and

(B) With an average annual fuel consumption of fossil fuel for the first 3 consecutive calendar years of

operation starting no earlier than 2005 of less than 20 percent (on a Btu basis) and an average annual fuel consumption of fossil fuel for any 3 consecutive calendar years thereafter of less than 20 percent (on a Btu basis).

(ii) If, after qualifying under paragraph (b)(2)(i) of this section as not being a TR SO<sub>2</sub> Group 1 unit, a unit subsequently no longer meets all the requirements of paragraph (b)(1)(i) of this section, the unit shall become a TR SO<sub>2</sub> Group 1 unit starting on the earlier of January 1 after the first calendar year during which the unit first no longer qualifies as a solid waste incineration unit or January 1 after the first 3 consecutive calendar years after 2005 for which the unit has an average annual fuel consumption of fossil fuel of 20 percent or more. The unit shall thereafter continue to be a TR SO<sub>2</sub> Group 1 unit.

(c) A certifying official of an owner or operator of any unit or other equipment may submit a petition (including any supporting documents) to the Administrator at any time for a determination concerning the applicability, under paragraphs (a) and (b) of this section or a SIP revision approved under § 52.39(e) or (f) of this chapter, of the TR SO<sub>2</sub> Group 1 Trading Program to the unit or other equipment.

(1) Petition content. The petition shall be in writing and include the identification of the unit or other equipment and the relevant facts about the unit or other equipment. The petition and any other documents provided to the Administrator in connection with the petition shall include the following certification statement, signed by the certifying official: "I am authorized to make this submission on behalf of the owners and operators of the unit or other equipment for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

(2) Response. The Administrator will issue a written response to the petition and may request supplemental information determined by the Administrator to be relevant to such

petition. The Administrator's determination concerning the applicability, under paragraphs (a) and (b) of this section, of the TR SO<sub>2</sub> Group 1 Trading Program to the unit or other equipment shall be binding on any State or permitting authority unless the Administrator determines that the petition or other documents or information provided in connection with the petition contained significant, relevant errors or omissions.

#### § 97.605 Retired unit exemption.

(a)(1) Any TR SO<sub>2</sub> Group 1 unit that is permanently retired shall be exempt from § 97.606(b) and (c)(1), § 97.624, and §§ 97.630 through 97.635.

(2) The exemption under paragraph (a)(1) of this section shall become effective the day on which the TR SO<sub>2</sub> Group 1 unit is permanently retired. Within 30 days of the unit's permanent retirement, the designated representative shall submit a statement to the Administrator. The statement shall state, in a format prescribed by the Administrator, that the unit was permanently retired on a specified date and will comply with the requirements of paragraph (b) of this section.

(b) Special provisions. (1) A unit exempt under paragraph (a) of this section shall not emit any SO<sub>2</sub>, starting on the date that the exemption takes effect.

(2) For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under paragraph (a) of this section shall retain, at the source that includes the unit, records demonstrating that the unit is permanently retired. The 5-year period for keeping records may be extended for cause, at any time before the end of the period, in writing by the Administrator. The owners and operators bear the burden of proof that the unit is permanently retired.

(3) The owners and operators and, to the extent applicable, the designated representative of a unit exempt under paragraph (a) of this section shall comply with the requirements of the TR SO<sub>2</sub> Group 1 Trading Program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.

(4) A unit exempt under paragraph (a) of this section shall lose its exemption on the first date on which the unit resumes operation. Such unit shall be treated, for purposes of applying allocation, monitoring, reporting, and recordkeeping requirements under this subpart, as a unit that commences commercial operation on the first date on which the unit resumes operation.



**§ 97.606 Standard requirements.**

(a) *Designated representative requirements.* The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with §§ 97.613 through 97.618.

(b) *Emissions monitoring, reporting, and recordkeeping requirements.* (1) The owners and operators, and the designated representative, of each TR SO<sub>2</sub> Group 1 source and each TR SO<sub>2</sub> Group 1 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of §§ 97.630 through 97.635.

(2) The emissions data determined in accordance with §§ 97.630 through 97.635 shall be used to calculate allocations of TR SO<sub>2</sub> Group 1 allowances under §§ 97.611(a)(2) and (b) and 97.612 and to determine compliance with the TR SO<sub>2</sub> Group 1 emissions limitation and assurance provisions under paragraph (c) of this section, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with §§ 97.630 through 97.635 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) *SO<sub>2</sub> emissions requirements.* (1) TR SO<sub>2</sub> Group 1 emissions limitation. (i) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR SO<sub>2</sub> Group 1 source and each TR SO<sub>2</sub> Group 1 unit at the source shall hold, in the source's compliance account, TR SO<sub>2</sub> Group 1 allowances available for deduction for such control period under § 97.624(a) in an amount not less than the tons of total SO<sub>2</sub> emissions for such control period from all TR SO<sub>2</sub> Group 1 units at the source.

(ii) If total SO<sub>2</sub> emissions during a control period in a given year from the TR SO<sub>2</sub> Group 1 units at a TR SO<sub>2</sub> Group 1 source are in excess of the TR SO<sub>2</sub> Group 1 emissions limitation set forth in paragraph (c)(1)(i) of this section, then:

(A) The owners and operators of the source and each TR SO<sub>2</sub> Group 1 unit at the source shall hold the TR SO<sub>2</sub> Group 1 allowances required for deduction under § 97.624(d); and

(B) The owners and operators of the source and each TR SO<sub>2</sub> Group 1 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same

violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart and the Clean Air Act.

(2) TR SO<sub>2</sub> Group 1 assurance provisions. (i) If total SO<sub>2</sub> emissions during a control period in a given year from all TR SO<sub>2</sub> Group 1 units at TR SO<sub>2</sub> Group 1 sources in a State (and Indian country within the borders of such State) exceed the State assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such SO<sub>2</sub> emissions during such control period exceeds the common designated representative's assurance level for the State and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR SO<sub>2</sub> Group 1 allowances available for deduction for such control period under § 97.625(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with § 97.625(b), of multiplying—

(A) The quotient of the amount by which the common designated representative's share of such SO<sub>2</sub> emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the State (and Indian country within the borders of such State) for such control period, by which each common designated representative's share of such SO<sub>2</sub> emissions exceeds the respective common designated representative's assurance level; and

(B) The amount by which total SO<sub>2</sub> emissions from all TR SO<sub>2</sub> Group 1 units at TR SO<sub>2</sub> Group 1 sources in the State (and Indian country within the borders of such State) for such control period exceed the State assurance level.

(ii) The owners and operators shall hold the TR SO<sub>2</sub> Group 1 allowances required under paragraph (c)(2)(i) of this section, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.

(iii) Total SO<sub>2</sub> emissions from all TR SO<sub>2</sub> Group 1 units at TR SO<sub>2</sub> Group 1 sources in a State (and Indian country within the borders of such State) during a control period in a given year exceed the State assurance level if such total SO<sub>2</sub> emissions exceed the sum, for such

control period, of the State SO<sub>2</sub> Group 1 trading budget under § 97.610(a) and the State's variability limit under § 97.610(b).

(iv) It shall not be a violation of this subpart or of the Clean Air Act if total SO<sub>2</sub> emissions from all TR SO<sub>2</sub> Group 1 units at TR SO<sub>2</sub> Group 1 sources in a State (and Indian country within the borders of such State) during a control period exceed the State assurance level or if a common designated representative's share of total SO<sub>2</sub> emissions from the TR SO<sub>2</sub> Group 1 units at TR SO<sub>2</sub> Group 1 sources in a State (and Indian country within the borders of such State) during a control period exceeds the common designated representative's assurance level.

(v) To the extent the owners and operators fail to hold TR SO<sub>2</sub> Group 1 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) of this section,

(A) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and

(B) Each TR SO<sub>2</sub> Group 1 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) of this section and each day of such control period shall constitute a separate violation of this subpart and the Clean Air Act.

(3) Compliance periods. A TR SO<sub>2</sub> Group 1 unit shall be subject to the requirements under paragraphs (c)(1) and (c)(2) of this section for the control period starting on the later of January 1, 2012 or the deadline for meeting the unit's monitor certification requirements under § 97.630(b) and for each control period thereafter.

(4) Vintage of allowances held for compliance. (i) A TR SO<sub>2</sub> Group 1 allowance held for compliance with the requirements under paragraph (c)(1)(i) of this section for a control period in a given year must be a TR SO<sub>2</sub> Group 1 allowance that was allocated for such control period or a control period in a prior year.

(ii) A TR SO<sub>2</sub> Group 1 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) of this section for a control period in a given year must be a TR SO<sub>2</sub> Group 1 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

(5) Allowance Management System requirements. Each TR SO<sub>2</sub> Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management

System accounts in accordance with this subpart.

(6) Limited authorization. A TR SO<sub>2</sub> Group 1 allowance is a limited authorization to emit one ton of SO<sub>2</sub> during the control period in one year. Such authorization is limited in its use and duration as follows:

(i) Such authorization shall only be used in accordance with the TR SO<sub>2</sub> Group 1 Trading Program; and

(ii) Notwithstanding any other provision of this subpart, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

(7) Property right. A TR SO<sub>2</sub> Group 1 allowance does not constitute a property right.

(d) *Title V permit requirements.* (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR SO<sub>2</sub> Group 1 allowances in accordance with this subpart.

(2) A description of whether a unit is required to monitor and report SO<sub>2</sub> emissions using a continuous emission monitoring system (under subpart H of part 75 of this chapter), an excepted monitoring system (under appendices D and E to part 75 of this chapter), a low mass emissions excepted monitoring methodology (under § 75.19 of this chapter), or an alternative monitoring system (under subpart E of part 75 of this chapter) in accordance with §§ 97.630 through 97.635 may be added to, or changed in, a title V permit using minor permit modification procedures in accordance with §§ 70.7(e)(2) and 71.7(e)(1) of this chapter, provided that the requirements applicable to the described monitoring and reporting (as added or changed, respectively) are already incorporated in such permit. This paragraph explicitly provides that the addition of, or change to, a unit's description as described in the prior sentence is eligible for minor permit modification procedures in accordance with §§ 70.7(e)(2)(i)(B) and 71.7(e)(1)(i)(B) of this chapter.

(e) *Additional recordkeeping and reporting requirements.* (1) Unless otherwise provided, the owners and operators of each TR SO<sub>2</sub> Group 1 source and each TR SO<sub>2</sub> Group 1 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.

(i) The certificate of representation under § 97.616 for the designated representative for the source and each TR SO<sub>2</sub> Group 1 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under § 97.616 changing the designated representative.

(ii) All emissions monitoring information, in accordance with this subpart.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR SO<sub>2</sub> Group 1 Trading Program.

(2) The designated representative of a TR SO<sub>2</sub> Group 1 source and each TR SO<sub>2</sub> Group 1 unit at the source shall make all submissions required under the TR SO<sub>2</sub> Group 1 Trading Program, except as provided in § 97.618. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in parts 70 and 71 of this chapter.

(f) *Liability.* (1) Any provision of the TR SO<sub>2</sub> Group 1 Trading Program that applies to a TR SO<sub>2</sub> Group 1 source or the designated representative of a TR SO<sub>2</sub> Group 1 source shall also apply to the owners and operators of such source and of the TR SO<sub>2</sub> Group 1 units at the source.

(2) Any provision of the TR SO<sub>2</sub> Group 1 Trading Program that applies to a TR SO<sub>2</sub> Group 1 unit or the designated representative of a TR SO<sub>2</sub> Group 1 unit shall also apply to the owners and operators of such unit.

(g) *Effect on other authorities.* No provision of the TR SO<sub>2</sub> Group 1 Trading Program or exemption under § 97.605 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR SO<sub>2</sub> Group 1 source or TR SO<sub>2</sub> Group 1 unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

**§ 97.607 Computation of time.**

(a) Unless otherwise stated, any time period scheduled, under the TR SO<sub>2</sub> Group 1 Trading Program, to begin on the occurrence of an act or event shall begin on the day the act or event occurs.

(b) Unless otherwise stated, any time period scheduled, under the TR SO<sub>2</sub> Group 1 Trading Program, to begin before the occurrence of an act or event shall be computed so that the period ends the day before the act or event occurs.

(c) Unless otherwise stated, if the final day of any time period, under the TR SO<sub>2</sub> Group 1 Trading Program, is not a business day, the time period shall be extended to the next business day.

**§ 97.608 Administrative appeal procedures.**

The administrative appeal procedures for decisions of the Administrator under the TR SO<sub>2</sub> Group 1 Trading Program are set forth in part 78 of this chapter.

**§ 97.609 [Reserved]**

**§ 97.610 State SO<sub>2</sub> Group 1 trading budgets, new unit set-asides, Indian country new unit set-aside, and variability limits.**

(a) The State SO<sub>2</sub> Group 1 trading budgets, new unit set-asides, and Indian country new unit set-asides for allocations of TR SO<sub>2</sub> Group 1 allowances for the control periods in 2012 and thereafter are as follows:

State	SO <sub>2</sub> Group 1 trading budget (tons)* for 2012 and 2013	New unit set-aside (tons) for 2012 and 2013	Indian country new unit set-aside (tons) for 2012 and 2013
Illinois .....	234,889	11,744	.....
Indiana .....	285,424	8,563	.....
Iowa .....	107,085	2,035	107
Kentucky .....	232,662	13,960	.....
Maryland .....	30,120	602	.....
Michigan .....	229,303	4,357	229
Missouri .....	207,466	4,149	.....
New Jersey .....	5,574	111	.....

State	SO <sub>2</sub> Group 1 trading budget (tons)* for 2012 and 2013	New unit set-aside (tons) for 2012 and 2013	Indian country new unit set-aside (tons) for 2012 and 2013
New York	27,325	520	27
North Carolina	136,881	10,813	137
Ohio	310,230	6,205	
Pennsylvania	278,651	5,573	
Tennessee	148,150	2,963	
Virginia	70,820	2,833	
West Virginia	146,174	10,232	
Wisconsin	79,480	3,894	80

State	SO <sub>2</sub> Group 1 trading budget (tons)* for 2014 and thereafter	New unit set-aside (tons) for 2014 and thereafter	Indian country new unit set-aside (tons) for 2014 and thereafter
Illinois	124,123	6,206	
Indiana	161,111	4,833	
Iowa	75,184	1,429	75
Kentucky	106,284	6,377	
Maryland	28,203	564	
Michigan	143,995	2,736	144
Missouri	165,941	3,319	
New Jersey	5,574	111	
New York	18,585	353	19
North Carolina	57,620	4,552	58
Ohio	137,077	2,742	
Pennsylvania	112,021	2,240	
Tennessee	58,833	1,177	
Virginia	35,057	1,402	
West Virginia	75,668	5,297	
Wisconsin	40,126	1,966	40

\*Each trading budget includes the new unit set-aside and, where applicable, the Indian country new unit set-aside and does not include the variability limit.

(b) The States' variability limits for the State SO<sub>2</sub> Group 1 trading budgets for the control periods in 2012 and thereafter are as follows:

State	Variability limits for 2012 and 2013	Variability limits for 2014 and thereafter
Illinois	42,280	22,342
Indiana	51,376	29,000
Iowa	19,275	13,533
Kentucky	41,879	19,131
Maryland	5,422	5,077
Michigan	41,275	25,919
Missouri	37,344	29,869
New Jersey	1,003	1,003
New York	4,919	3,345
North Carolina	24,639	10,372
Ohio	55,841	24,674
Pennsylvania	50,157	20,164
Tennessee	26,667	10,590
Virginia	12,748	6,310
West Virginia	26,311	13,620
Wisconsin	14,306	7,223

**§ 97.611 Timing requirements for TR SO<sub>2</sub> Group 1 allowance allocations.**

(a) Existing units. (1) TR SO<sub>2</sub> Group 1 allowances are allocated, for the control periods in 2012 and each year thereafter, as provided in a notice of data availability issued by the Administrator. Providing an allocation to a unit in such notice does not constitute a determination that the unit

is a TR SO<sub>2</sub> Group 1 unit, and not providing an allocation to a unit in such notice does not constitute a determination that the unit is not a TR SO<sub>2</sub> Group 1 unit.

(2) Notwithstanding paragraph (a)(1) of this section, if a unit provided an allocation in the notice of data availability issued under paragraph (a)(1) of this section does not operate,

starting after 2011, during the control period in two consecutive years, such unit will not be allocated the TR SO<sub>2</sub> Group 1 allowances provided in such notice for the unit for the control periods in the fifth year after the first such year and in each year after that fifth year. All TR SO<sub>2</sub> Group 1 allowances that would otherwise have been allocated to such unit will be

allocated to the new unit set-aside for the State where such unit is located and for the respective years involved. If such unit resumes operation, the Administrator will allocate TR SO<sub>2</sub> Group 1 allowances to the unit in accordance with paragraph (b) of this section.

(b) *New units.* (1) New unit set-asides. (i) By June 1, 2012 and June 1 of each year thereafter, the Administrator will calculate the TR SO<sub>2</sub> Group 1 allowance allocation to each TR SO<sub>2</sub> Group 1 unit in a State, in accordance with § 97.612(a)(2) through (7) and (12), for the control period in the year of the applicable calculation deadline under this paragraph and will promulgate a notice of data availability of the results of the calculations.

(ii) For each notice of data availability required in paragraph (b)(1)(i) of this section, the Administrator will provide an opportunity for submission of objections to the calculations referenced in such notice.

(A) Objections shall be submitted by the deadline specified in each notice of data availability required in paragraph (b)(1)(i) of this section and shall be limited to addressing whether the calculations (including the identification of the TR SO<sub>2</sub> Group 1 units) are in accordance with § 97.612(a)(2) through (7) and (12) and §§ 97.606(b)(2) and 97.630 through 97.635.

(B) The Administrator will adjust the calculations to the extent necessary to ensure that they are in accordance with the provisions referenced in paragraph (b)(1)(ii)(A) of this section. By August 1 immediately after the promulgation of each notice of data availability required in paragraph (b)(1)(i) of this section, the Administrator will promulgate a notice of data availability of any adjustments that the Administrator determines to be necessary with regard to allocations under § 97.612(a)(2) through (7) and (12) and the reasons for accepting or rejecting any objections submitted in accordance with paragraph (b)(1)(ii)(A) of this section.

(iii) If the new unit set-aside for such control period contains any TR SO<sub>2</sub> Group 1 allowances that have not been allocated in the applicable notice of data availability required in paragraph (b)(1)(i) of this section, the Administrator will promulgate, by December 15 immediately after such notice, a notice of data availability that identifies any TR SO<sub>2</sub> Group 1 units that commenced commercial operation during the period starting January 1 of the year before the year of such control period and ending November 30 of year of such control period.

(iv) For each notice of data availability required in paragraph (b)(1)(iii) of this section, the Administrator will provide an opportunity for submission of objections to the identification of TR SO<sub>2</sub> annual units in such notice.

(A) Objections shall be submitted by the deadline specified in each notice of data availability required in paragraph (b)(1)(iii) of this section and shall be limited to addressing whether the identification of TR SO<sub>2</sub> annual units in such notice is in accordance with paragraph (b)(1)(iii) of this section.

(B) The Administrator will adjust the identification of TR SO<sub>2</sub> Group 1 units in each notice of data availability required in paragraph (b)(1)(iii) of this section to the extent necessary to ensure that it is in accordance with paragraph (b)(1)(iii) of this section and will calculate the TR SO<sub>2</sub> Group 1 allowance allocation to each TR SO<sub>2</sub> Group 1 unit in accordance with § 97.612(a)(9), (10), and (12) and §§ 97.606(b)(2) and 97.630 through 97.635. By February 15 immediately after the promulgation of each notice of data availability required in paragraph (b)(1)(iii) of this section, the Administrator will promulgate a notice of data availability of any adjustments of the identification of TR SO<sub>2</sub> Group 1 units that the Administrator determines to be necessary, the reasons for accepting or rejecting any objections submitted in accordance with paragraph (b)(1)(iv)(A) of this section, and the results of such calculations.

(v) To the extent any TR SO<sub>2</sub> Group 1 allowances are added to the new unit set-aside after promulgation of each notice of data availability required in paragraph (b)(1)(iv) of this section, the Administrator will promulgate additional notices of data availability, as deemed appropriate, of the allocation of such TR SO<sub>2</sub> Group 1 allowances in accordance with § 97.612(a)(10).

(2) Indian country new unit set-asides. (i) By June 1, 2012 and June 1 of each year thereafter, the Administrator will calculate the TR SO<sub>2</sub> Group 1 allowance allocation to each TR SO<sub>2</sub> Group 1 unit in Indian country within the borders of a State, in accordance with § 97.612(b)(2) through (7) and (12), for the control period in the year of the applicable calculation deadline under this paragraph and will promulgate a notice of data availability of the results of the calculations.

(ii) For each notice of data availability required in paragraph (b)(2)(i) of this section, the Administrator will provide an opportunity for submission of objections to the calculations referenced in such notice.

(A) Objections shall be submitted by the deadline specified in each notice of data availability required in paragraph (b)(2)(i) of this section and shall be limited to addressing whether the calculations (including the identification of the TR SO<sub>2</sub> Group 1 units) are in accordance with § 97.612(b)(2) through (7) and (12) and §§ 97.606(b)(2) and 97.630 through 97.635.

(B) The Administrator will adjust the calculations to the extent necessary to ensure that they are in accordance with the provisions referenced in paragraph (b)(2)(ii)(A) of this section. By August 1 immediately after the promulgation of each notice of data availability required in paragraph (b)(2)(i) of this section, the Administrator will promulgate a notice of data availability of any adjustments that the Administrator determines to be necessary with regard to allocations under § 97.612(b)(2) through (7) and (12) and the reasons for accepting or rejecting any objections submitted in accordance with paragraph (b)(2)(ii)(A) of this section.

(iii) If the Indian country new unit set-aside for such control period contains any TR SO<sub>2</sub> Group 1 allowances that have not been allocated in the applicable notice of data availability required in paragraph (b)(2)(i) of this section, the Administrator will promulgate, by December 15 immediately after such notice, a notice of data availability that identifies any TR SO<sub>2</sub> Group 1 units that commenced commercial operation during the period starting January 1 of the year before the year of such control period and ending November 30 of year of such control period.

(iv) For each notice of data availability required in paragraph (b)(2)(iii) of this section, the Administrator will provide an opportunity for submission of objections to the identification of TR SO<sub>2</sub> annual units in such notice.

(A) Objections shall be submitted by the deadline specified in each notice of data availability required in paragraph (b)(2)(iii) of this section and shall be limited to addressing whether the identification of TR SO<sub>2</sub> annual units in such notice is in accordance with paragraph (b)(2)(iii) of this section.

(B) The Administrator will adjust the identification of TR SO<sub>2</sub> Group 1 units in each notice of data availability required in paragraph (b)(2)(iii) of this section to the extent necessary to ensure that it is in accordance with paragraph (b)(2)(iii) of this section and will calculate the TR SO<sub>2</sub> Group 1 allowance allocation to each TR SO<sub>2</sub> Group 1 unit in accordance with § 97.612(b)(9), (10),

and (12) and §§ 97.606(b)(2) and 97.630 through 97.635. By February 15 immediately after the promulgation of each notice of data availability required in paragraph (b)(2)(iii) of this section, the Administrator will promulgate a notice of data availability of any adjustments of the identification of TR SO<sub>2</sub> Group 1 units that the Administrator determines to be necessary, the reasons for accepting or rejecting any objections submitted in accordance with paragraph (b)(2)(iv)(A) of this section, and the results of such calculations.

(v) To the extent any TR SO<sub>2</sub> Group 1 allowances are added to the Indian country new unit set-aside after promulgation of each notice of data availability required in paragraph (b)(2)(iv) of this section, the Administrator will promulgate additional notices of data availability, as deemed appropriate, of the allocation of such TR NO<sub>x</sub> Annual allowances in accordance with § 97.612(b)(10).

(c) *Units incorrectly allocated TR SO<sub>2</sub> Group 1 allowances.* (1) For each control period in 2012 and thereafter, if the Administrator determines that TR SO<sub>2</sub> Group 1 allowances were allocated under paragraph (a) of this section, or under a provision of a SIP revision approved under § 52.39(d), (e), or (f) of this chapter, where such control period and the recipient are covered by the provisions of paragraph (c)(1)(i) of this section or were allocated under § 97.612(a)(2) through (7), (9), and (12) and (b)(2) through (7), (9), and (12), or under a provision of a SIP revision approved under § 52.39(e) or (f) of this chapter, where such control period and the recipient are covered by the provisions of paragraph (c)(1)(ii) of this section, then the Administrator will notify the designated representative of the recipient and will act in accordance with the procedures set forth in paragraphs (c)(2) through (5) of this section:

(i)(A) The recipient is not actually a TR SO<sub>2</sub> Group 1 unit under § 97.604 as of January 1, 2012 and is allocated TR SO<sub>2</sub> Group 1 allowances for such control period or, in the case of an allocation under a provision of a SIP revision approved under § 52.39(d), (e), or (f) of this chapter, the recipient is not actually a TR SO<sub>2</sub> Group 1 unit as of January 1, 2012 and is allocated TR SO<sub>2</sub> Group 1 allowances for such control period that the SIP revision provides should be allocated only to recipients that are TR SO<sub>2</sub> Group 1 units as of January 1, 2012; or

(B) The recipient is not located as of January 1 of the control period in the State from whose SO<sub>2</sub> Group 1 trading

budget the TR SO<sub>2</sub> Group 1 allowances allocated under paragraph (a) of this section, or under a provision of a SIP revision approved under § 52.39(d), (e), or (f) of this chapter, were allocated for such control period.

(ii) The recipient is not actually a TR SO<sub>2</sub> Group 1 unit under § 97.604 as of January 1 of such control period and is allocated TR SO<sub>2</sub> Group 1 allowances for such control period or, in the case of an allocation under a provision of a SIP revision approved under § 52.39(d), (e), or (f) of this chapter, the recipient is not actually a TR SO<sub>2</sub> Group 1 unit as of January 1 of such control period and is allocated TR SO<sub>2</sub> Group 1 allowances for such control period that the SIP revision provides should be allocated only to recipients that are TR SO<sub>2</sub> Group 1 units as of January 1 of such control period.

(2) Except as provided in paragraph (c)(3) or (4) of this section, the Administrator will not record such TR SO<sub>2</sub> Group 1 allowances under § 97.621.

(3) If the Administrator already recorded such TR SO<sub>2</sub> Group 1 allowances under § 97.621 and if the Administrator makes the determination under paragraph (c)(1) of this section before making deductions for the source that includes such recipient under § 97.624(b) for such control period, then the Administrator will deduct from the account in which such TR SO<sub>2</sub> Group 1 allowances were recorded an amount of TR SO<sub>2</sub> Group 1 allowances allocated for the same or a prior control period equal to the amount of such already recorded TR SO<sub>2</sub> Group 1 allowances. The authorized account representative shall ensure that there are sufficient TR SO<sub>2</sub> Group 1 allowances in such account for completion of the deduction.

(4) If the Administrator already recorded such TR SO<sub>2</sub> Group 1 allowances under § 97.621 and if the Administrator makes the determination under paragraph (c)(1) of this section after making deductions for the source that includes such recipient under § 97.624(b) for such control period, then the Administrator will not make any deduction to take account of such already recorded TR SO<sub>2</sub> Group 1 allowances.

(5)(i) With regard to the TR SO<sub>2</sub> Group 1 allowances that are not recorded, or that are deducted as an incorrect allocation, in accordance with paragraphs (c)(2) and (3) of this section for a recipient under paragraph (c)(1)(i) of this section, the Administrator will:

(A) Transfer such TR SO<sub>2</sub> Group 1 allowances to the new unit set-aside for such control period for the State from whose SO<sub>2</sub> Group 1 trading budget the

TR SO<sub>2</sub> Group 1 allowances were allocated; or

(B) If the State has a SIP revision approved under § 52.39(e) or (f) covering such control period, include such TR SO<sub>2</sub> Group 1 allowances in the portion of the State SO<sub>2</sub> Group 1 trading budget that may be allocated for such control period in accordance with such SIP revision.

(ii) With regard to the TR SO<sub>2</sub> Group 1 allowances that were not allocated from the Indian country new unit set-aside for such control period and that are not recorded, or that are deducted as an incorrect allocation, in accordance with paragraphs (c)(2) and (3) of this section for a recipient under paragraph (c)(1)(ii) of this paragraph, the Administrator will:

(A) Transfer such TR SO<sub>2</sub> Group 1 allowances to the new unit set-aside for such control period; or

(B) If the State has a SIP revision approved under § 52.39(e) or (f) covering such control period, include such TR SO<sub>2</sub> Group 1 allowances in the portion of the State SO<sub>2</sub> Group 1 trading budget that may be allocated for such control period in accordance with such SIP revision.

(iii) With regard to the TR SO<sub>2</sub> Group 1 allowances that were allocated from the Indian country new unit set-aside for such control period and that are not recorded, or that are deducted as an incorrect allocation, in accordance with paragraphs (c)(2) and (3) of this section for a recipient under paragraph (c)(1)(ii) of this paragraph, the Administrator will transfer such TR SO<sub>2</sub> Group 1 allowances to the Indian country new unit set-aside for such control period.

**§ 97.612 TR SO<sub>2</sub> Group 1 allowance allocations to new units.**

(a) For each control period in 2012 and thereafter and for the TR SO<sub>2</sub> Group 1 units in each State, the Administrator will allocate TR SO<sub>2</sub> Group 1 allowances to the TR SO<sub>2</sub> Group 1 units as follows:

(1) The TR SO<sub>2</sub> Group 1 allowances will be allocated to the following TR SO<sub>2</sub> Group 1 units, except as provided in paragraph (a)(10) of this section:

(i) TR SO<sub>2</sub> Group 1 units that are not allocated an amount of TR SO<sub>2</sub> Group 1 allowances in the notice of data availability issued under § 97.611(a)(1);

(ii) TR SO<sub>2</sub> Group 1 units whose allocation of an amount of TR SO<sub>2</sub> Group 1 allowances for such control period in the notice of data availability issued under § 97.611(a)(1) is covered by § 97.611(c)(2) or (3);

(iii) TR SO<sub>2</sub> Group 1 units that are allocated an amount of TR SO<sub>2</sub> Group 1 allowances for such control period in

the notice of data availability issued under § 97.611(a)(1), which allocation is terminated for such control period pursuant to § 97.611(a)(2), and that operate during the control period immediately preceding such control period; or

(iv) For purposes of paragraph (a)(9) of this section, TR SO<sub>2</sub> Group 1 units under § 97.611(c)(1)(ii) whose allocation of an amount of TR SO<sub>2</sub> Group 1 allowances for such control period in the notice of data availability issued under § 97.611(b)(1)(ii)(B) is covered by § 97.611(c)(2) or (3).

(2) The Administrator will establish a separate new unit set-aside for the State for each such control period. Each such new unit set-aside will be allocated TR SO<sub>2</sub> Group 1 allowances in an amount equal to the applicable amount of tons of SO<sub>2</sub> emissions as set forth in § 97.610(a) and will be allocated additional TR SO<sub>2</sub> Group 1 allowances (if any) in accordance with §§ 97.611(a)(2) and (c)(5) and paragraph (b)(10) of this section.

(3) The Administrator will determine, for each TR SO<sub>2</sub> Group 1 unit described in paragraph (a)(1) of this section, an allocation of TR SO<sub>2</sub> Group 1 allowances for the later of the following control periods and for each subsequent control period:

(i) The control period in 2012;

(ii) The first control period after the control period in which the TR SO<sub>2</sub> Group 1 unit commences commercial operation;

(iii) For a unit described in paragraph (a)(1)(ii) of this section, the first control period in which the TR SO<sub>2</sub> Group 1 unit operates in the State after operating in another jurisdiction and for which the unit is not already allocated one or more TR SO<sub>2</sub> Group 1 allowances; and

(iv) For a unit described in paragraph (a)(1)(iii) of this section, the first control period after the control period in which the unit resumes operation.

(4)(i) The allocation to each TR SO<sub>2</sub> annual unit described in paragraph (a)(1)(i) through (iii) of this section and for each control period described in paragraph (a)(3) of this section will be an amount equal to the unit's total tons of SO<sub>2</sub> emissions during the immediately preceding control period.

(ii) The Administrator will adjust the allocation amount in paragraph (a)(4)(i) in accordance with paragraphs (a)(5) through (7) and (12) of this section.

(5) The Administrator will calculate the sum of the TR SO<sub>2</sub> Group 1 allowances determined for all such TR SO<sub>2</sub> Group 1 units under paragraph (a)(4)(i) of this section in the State for such control period.

(6) If the amount of TR SO<sub>2</sub> Group 1 allowances in the new unit set-aside for the State for such control period is greater than or equal to the sum under paragraph (a)(5) of this section, then the Administrator will allocate the amount of TR SO<sub>2</sub> Group 1 allowances determined for each such TR SO<sub>2</sub> Group 1 unit under paragraph (a)(4)(i) of this section.

(7) If the amount of TR SO<sub>2</sub> Group 1 allowances in the new unit set-aside for the State for such control period is less than the sum under paragraph (a)(5) of this section, then the Administrator will allocate to each such TR SO<sub>2</sub> Group 1 unit the amount of the TR SO<sub>2</sub> Group 1 allowances determined under paragraph (a)(4)(i) of this section for the unit, multiplied by the amount of TR SO<sub>2</sub> Group 1 allowances in the new unit set-aside for such control period, divided by the sum under paragraph (a)(5) of this section, and rounded to the nearest allowance.

(8) The Administrator will notify the public, through the promulgation of the notices of data availability described in § 97.611(b)(1)(i) and (ii), of the amount of TR SO<sub>2</sub> Group 1 allowances allocated under paragraphs (a)(2) through (7) and (12) of this section for such control period to each TR SO<sub>2</sub> Group 1 unit eligible for such allocation.

(9) If, after completion of the procedures under paragraphs (a)(5) through (8) of this section for such control period, any unallocated TR SO<sub>2</sub> Group 1 allowances remain in the new unit set-aside for the State for such control period, the Administrator will allocate such TR SO<sub>2</sub> Group 1 allowances as follows—

(i) The Administrator will determine, for each unit described in paragraph (a)(1) of this section that commenced commercial operation during the period starting January 1 of the year before the year of such control period and ending November 30 of year of such control period, the positive difference (if any) between the unit's emissions during such control period and the amount of TR SO<sub>2</sub> Group 1 allowances referenced in the notice of data availability required under § 97.611(b)(1)(ii) for the unit for such control period;

(ii) The Administrator will determine the sum of the positive differences determined under paragraph (a)(9)(i) of this section;

(iii) If the amount of unallocated TR SO<sub>2</sub> Group 1 allowances remaining in the new unit set-aside for the State for such control period is greater than or equal to the sum determined under paragraph (a)(9)(ii) of this section, then the Administrator will allocate the amount of TR SO<sub>2</sub> Group 1 allowances

determined for each such TR SO<sub>2</sub> Group 1 unit under paragraph (a)(9)(i) of this section; and

(iv) If the amount of unallocated TR SO<sub>2</sub> Group 1 allowances remaining in the new unit set-aside for the State for such control period is less than the sum under paragraph (a)(9)(ii) of this section, then the Administrator will allocate to each such TR SO<sub>2</sub> Group 1 unit the amount of the TR SO<sub>2</sub> Group 1 allowances determined under paragraph (a)(9)(i) of this section for the unit, multiplied by the amount of unallocated TR SO<sub>2</sub> Group 1 allowances remaining in the new unit set-aside for such control period, divided by the sum under paragraph (a)(9)(ii) of this section, and rounded to the nearest allowance.

(10) If, after completion of the procedures under paragraphs (a)(9) and (12) of this section for such control period, any unallocated TR SO<sub>2</sub> Group 1 allowances remain in the new unit set-aside for the State for such control period, the Administrator will allocate to each TR SO<sub>2</sub> Group 1 unit that is in the State, is allocated an amount of TR SO<sub>2</sub> Group 1 allowances in the notice of data availability issued under § 97.611(a)(1), and continues to be allocated TR SO<sub>2</sub> Group 1 allowances for such control period in accordance with § 97.611(a)(2), an amount of TR SO<sub>2</sub> Group 1 allowances equal to the following: The total amount of such remaining unallocated TR SO<sub>2</sub> Group 1 allowances in such new unit set-aside, multiplied by the unit's allocation under § 97.611(a) for such control period, divided by the remainder of the amount of tons in the applicable State SO<sub>2</sub> Group 1 trading budget minus the sum of the amounts of tons in such new unit set-aside and the Indian country new unit set-aside for the State for such control period, and rounded to the nearest allowance.

(11) The Administrator will notify the public, through the promulgation of the notices of data availability described in § 97.611(b)(1)(iii), (iv), and (v), of the amount of TR SO<sub>2</sub> Group 1 allowances allocated under paragraphs (a)(9), (10), and (12) of this section for such control period to each TR SO<sub>2</sub> Group 1 unit eligible for such allocation.

(12)(i) Notwithstanding the requirements of paragraphs (a)(2) through (11) of this section, if the calculations of allocations of a new unit set-aside for a control period in a given year under paragraph (a)(7) of this section, paragraphs (a)(6) and (9)(iv) of this section, or paragraphs (a)(6), (9)(iii), and (10) of this section would otherwise result in total allocations of such new unit set-aside exceeding the total amount of such new unit set-aside, then

the Administrator will adjust the results of the calculations under paragraph (a)(7), (9)(iv), or (10) of this section, as applicable, as follows. The Administrator will list the TR SO<sub>2</sub> Group 1 units in descending order based on the amount of such units' allocations under paragraph (a)(7), (9)(iv), or (10) of this section, as applicable, and, in cases of equal allocation amounts, in alphabetical order of the relevant source's name and numerical order of the relevant unit's identification number, and will reduce each unit's allocation under paragraph (a)(7), (9)(iv), or (10) of this section, as applicable, by one TR SO<sub>2</sub> Group 1 allowance (but not below zero) in the order in which the units are listed and will repeat this reduction process as necessary, until the total allocations of such new unit set-aside equal the total amount of such new unit set-aside.

(ii) Notwithstanding the requirements of paragraphs (a)(10) and (11) of this section, if the calculations of allocations of a new unit set-aside for a control period in a given year under paragraphs (a)(6), (9)(iii), and (10) of this section would otherwise result in a total allocations of such new unit set-aside less than the total amount of such new unit set-aside, then the Administrator will adjust the results of the calculations under paragraph (a)(10) of this section, as follows. The Administrator will list the TR SO<sub>2</sub> Group 1 units in descending order based on the amount of such units' allocations under paragraph (a)(10) of this section and, in cases of equal allocation amounts, in alphabetical order of the relevant source's name and numerical order of the relevant unit's identification number, and will increase each unit's allocation under paragraph (a)(10) of this section by one TR SO<sub>2</sub> Group 1 allowance in the order in which the units are listed and will repeat this increase process as necessary, until the total allocations of such new unit set-aside equal the total amount of such new unit set-aside.

(b) For each control period in 2012 and thereafter and for the TR SO<sub>2</sub> Group 1 units located in Indian country within the borders of each State, the Administrator will allocate TR SO<sub>2</sub> Group 1 allowances to the TR SO<sub>2</sub> Group 1 units as follows:

(1) The TR SO<sub>2</sub> Group 1 allowances will be allocated to the following TR SO<sub>2</sub> Group 1 units, except as provided in paragraph (b)(10) of this section:

(i) TR SO<sub>2</sub> Group 1 units that are not allocated an amount of TR SO<sub>2</sub> Group 1 allowances in the notice of data availability issued under § 97.611(a)(1); or

(ii) For purposes of paragraph (b)(9) of this section, TR SO<sub>2</sub> Group 1 units under § 97.611(c)(1)(ii) whose allocation of an amount of TR SO<sub>2</sub> Group 1 allowances for such control period in the notice of data availability issued under § 97.611(b)(2)(ii)(B) is covered by § 97.611(c)(2) or (3).

(2) The Administrator will establish a separate Indian country new unit set-aside for the State for each such control period. Each such Indian country new unit set-aside will be allocated TR SO<sub>2</sub> Group 1 allowances in an amount equal to the applicable amount of tons of SO<sub>2</sub> emissions as set forth in § 97.610(a) and will be allocated additional TR SO<sub>2</sub> Group 1 allowances (if any) in accordance with § 97.611(c)(5).

(3) The Administrator will determine, for each TR SO<sub>2</sub> Group 1 unit described in paragraph (b)(1) of this section, an allocation of TR SO<sub>2</sub> Group 1 allowances for the later of the following control periods and for each subsequent control period:

(i) The control period in 2012; and

(ii) The first control period after the control period in which the TR SO<sub>2</sub> Group 1 unit commences commercial operation.

(4)(i) The allocation to each TR SO<sub>2</sub> annual unit described in paragraph (b)(1)(i) of this section and for each control period described in paragraph (b)(3) of this section will be an amount equal to the unit's total tons of SO<sub>2</sub> emissions during the immediately preceding control period.

(ii) The Administrator will adjust the allocation amount in paragraph (b)(4)(i) in accordance with paragraphs (b)(5) through (7) and (12) of this section.

(5) The Administrator will calculate the sum of the TR SO<sub>2</sub> Group 1 allowances determined for all such TR SO<sub>2</sub> Group 1 units under paragraph (b)(4)(i) of this section in Indian country within the borders of the State for such control period.

(6) If the amount of TR SO<sub>2</sub> Group 1 allowances in the Indian country new unit set-aside for the State for such control period is greater than or equal to the sum under paragraph (b)(5) of this section, then the Administrator will allocate the amount of TR SO<sub>2</sub> Group 1 allowances determined for each such TR SO<sub>2</sub> Group 1 unit under paragraph (b)(4)(i) of this section.

(7) If the amount of TR SO<sub>2</sub> Group 1 allowances in the Indian country new unit set-aside for the State for such control period is less than the sum under paragraph (b)(5) of this section, then the Administrator will allocate to each such TR SO<sub>2</sub> Group 1 unit the amount of the TR SO<sub>2</sub> Group 1 allowances determined under paragraph

(b)(4)(i) of this section for the unit, multiplied by the amount of TR SO<sub>2</sub> Group 1 allowances in the Indian country new unit set-aside for such control period, divided by the sum under paragraph (b)(5) of this section, and rounded to the nearest allowance.

(8) The Administrator will notify the public, through the promulgation of the notices of data availability described in § 97.611(b)(2)(i) and (ii), of the amount of TR SO<sub>2</sub> Group 1 allowances allocated under paragraphs (b)(2) through (7) and (12) of this section for such control period to each TR SO<sub>2</sub> Group 1 unit eligible for such allocation.

(9) If, after completion of the procedures under paragraphs (b)(5) through (8) of this section for such control period, any unallocated TR SO<sub>2</sub> Group 1 allowances remain in the Indian country new unit set-aside for the State for such control period, the Administrator will allocate such TR SO<sub>2</sub> Group 1 allowances as follows—

(i) The Administrator will determine, for each unit described in paragraph (b)(1) of this section that commenced commercial operation during the period starting January 1 of the year before the year of such control period and ending November 30 of year of such control period, the positive difference (if any) between the unit's emissions during such control period and the amount of TR SO<sub>2</sub> Group 1 allowances referenced in the notice of data availability required under § 97.611(b)(2)(ii) for the unit for such control period;

(ii) The Administrator will determine the sum of the positive differences determined under paragraph (b)(9)(i) of this section;

(iii) If the amount of unallocated TR SO<sub>2</sub> Group 1 allowances remaining in the Indian country new unit set-aside for the State for such control period is greater than or equal to the sum determined under paragraph (b)(9)(ii) of this section, then the Administrator will allocate the amount of TR SO<sub>2</sub> Group 1 allowances determined for each such TR SO<sub>2</sub> Group 1 unit under paragraph (b)(9)(i) of this section; and

(iv) If the amount of unallocated TR SO<sub>2</sub> Group 1 allowances remaining in the Indian country new unit set-aside for the State for such control period is less than the sum under paragraph (b)(9)(ii) of this section, then the Administrator will allocate to each such TR SO<sub>2</sub> Group 1 unit the amount of the TR SO<sub>2</sub> Group 1 allowances determined under paragraph (b)(9)(i) of this section for the unit, multiplied by the amount of unallocated TR SO<sub>2</sub> Group 1 allowances remaining in the Indian country new unit set-aside for such control period, divided by the sum

under paragraph (b)(9)(ii) of this section, and rounded to the nearest allowance.

(10) If, after completion of the procedures under paragraphs (b)(9) and (12) of this section for such control period, any unallocated TR SO<sub>2</sub> Group 1 allowances remain in the Indian country new unit set-aside for the State for such control period, the Administrator will:

(i) Transfer such unallocated TR SO<sub>2</sub> Group 1 allowances to the new unit set-aside for the State for such control period; or

(ii) If the State has a SIP revision approved under § 52.39(d), (e), or (f) of this chapter covering such control period, include such unallocated TR SO<sub>2</sub> Group 1 allowances in the portion of the State SO<sub>2</sub> Group 1 trading budget that may be allocated for such control period in accordance with such SIP revision.

(11) The Administrator will notify the public, through the promulgation of the notices of data availability described in § 97.611(b)(2)(iii), (iv), and (v), of the amount of TR SO<sub>2</sub> Group 1 allowances allocated under paragraphs (b)(9), (10), and (12) for such control period to each TR SO<sub>2</sub> Group 1 unit eligible for such allocation.

(12)(i) Notwithstanding the requirements of paragraphs (b)(2) through (11) of this section, if the calculations of allocations of an Indian country new unit set-aside for a control period in a given year under paragraph (b)(7) of this section, paragraphs (b)(6) and (9)(iv) of this section, or paragraphs (b)(6), (9)(iii), and (10) of this section would otherwise result in total allocations of such Indian country new unit set-aside exceeding the total amount of such Indian country new unit set-aside, then the Administrator will adjust the results of the calculations under paragraph (b)(7), (9)(iv), or (10) of this section, as applicable, as follows. The Administrator will list the TR SO<sub>2</sub> Group 1 units in descending order based on the amount of such units' allocations under paragraph (b)(7), (9)(iv), or (10) of this section, as applicable, and, in cases of equal allocation amounts, in alphabetical order of the relevant source's name and numerical order of the relevant unit's identification number, and will reduce each unit's allocation under paragraph (b)(7), (9)(iv), or (10) of this section, as applicable, by one TR SO<sub>2</sub> Group 1 allowance (but not below zero) in the order in which the units are listed and will repeat this reduction process as necessary, until the total allocations of such Indian country new unit set-aside equal the total amount of such Indian country new unit set-aside.

(ii) Notwithstanding the requirements of paragraphs (b)(10) and (11) of this section, if the calculations of allocations of an Indian country new unit set-aside for a control period in a given year under paragraphs (b)(6), (9)(iii), and (10) of this section would otherwise result in a total allocations of such Indian country new unit set-aside less than the total amount of such Indian country new unit set-aside, then the Administrator will adjust the results of the calculations under paragraph (b)(10) of this section, as follows. The Administrator will list the TR SO<sub>2</sub> Group 1 units in descending order based on the amount of such units' allocations under paragraph (b)(10) of this section and, in cases of equal allocation amounts, in alphabetical order of the relevant source's name and numerical order of the relevant unit's identification number, and will increase each unit's allocation under paragraph (b)(10) of this section by one TR SO<sub>2</sub> Group 1 allowance in the order in which the units are listed and will repeat this increase process as necessary, until the total allocations of such Indian country new unit set-aside equal the total amount of such Indian country new unit set-aside.

**§ 97.613 Authorization of designated representative and alternate designated representative.**

(a) Except as provided under § 97.615, each TR SO<sub>2</sub> Group 1 source, including all TR SO<sub>2</sub> Group 1 units at the source, shall have one and only one designated representative, with regard to all matters under the TR SO<sub>2</sub> Group 1 Trading Program.

(1) The designated representative shall be selected by an agreement binding on the owners and operators of the source and all TR SO<sub>2</sub> Group 1 units at the source and shall act in accordance with the certification statement in § 97.616(a)(4)(iii).

(2) Upon and after receipt by the Administrator of a complete certificate of representation under § 97.616:

(i) The designated representative shall be authorized and shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each owner and operator of the source and each TR SO<sub>2</sub> Group 1 unit at the source in all matters pertaining to the TR SO<sub>2</sub> Group 1 Trading Program, notwithstanding any agreement between the designated representative and such owners and operators; and

(ii) The owners and operators of the source and each TR SO<sub>2</sub> Group 1 unit at the source shall be bound by any decision or order issued to the designated representative by the

Administrator regarding the source or any such unit.

(b) Except as provided under § 97.615, each TR SO<sub>2</sub> Group 1 source may have one and only one alternate designated representative, who may act on behalf of the designated representative. The agreement by which the alternate designated representative is selected shall include a procedure for authorizing the alternate designated representative to act in lieu of the designated representative.

(1) The alternate designated representative shall be selected by an agreement binding on the owners and operators of the source and all TR SO<sub>2</sub> Group 1 units at the source and shall act in accordance with the certification statement in § 97.616(a)(4)(iii).

(2) Upon and after receipt by the Administrator of a complete certificate of representation under § 97.616,

(i) The alternate designated representative shall be authorized;

(ii) Any representation, action, inaction, or submission by the alternate designated representative shall be deemed to be a representation, action, inaction, or submission by the designated representative; and

(iii) The owners and operators of the source and each TR SO<sub>2</sub> Group 1 unit at the source shall be bound by any decision or order issued to the alternate designated representative by the Administrator regarding the source or any such unit.

(c) Except in this section, § 97.602, and §§ 97.614 through 97.618, whenever the term "designated representative" (as distinguished from the term "common designated representative") is used in this subpart, the term shall be construed to include the designated representative or any alternate designated representative.

**§ 97.614 Responsibilities of designated representative and alternate designated representative.**

(a) Except as provided under § 97.618 concerning delegation of authority to make submissions, each submission under the TR SO<sub>2</sub> Group 1 Trading Program shall be made, signed, and certified by the designated representative or alternate designated representative for each TR SO<sub>2</sub> Group 1 source and TR SO<sub>2</sub> Group 1 unit for which the submission is made. Each such submission shall include the following certification statement by the designated representative or alternate designated representative: "I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under



penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.”

(b) The Administrator will accept or act on a submission made for a TR SO<sub>2</sub> Group 1 source or a TR SO<sub>2</sub> Group 1 unit only if the submission has been made, signed, and certified in accordance with paragraph (a) of this section and § 97.618.

**§ 97.615 Changing designated representative and alternate designated representative; changes in owners and operators; changes in units at the source.**

(a) *Changing designated representative.* The designated representative may be changed at any time upon receipt by the Administrator of a superseding complete certificate of representation under § 97.616.

Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous designated representative before the time and date when the Administrator receives the superseding certificate of representation shall be binding on the new designated representative and the owners and operators of the TR SO<sub>2</sub> Group 1 source and the TR SO<sub>2</sub> Group 1 units at the source.

(b) *Changing alternate designated representative.* The alternate designated representative may be changed at any time upon receipt by the Administrator of a superseding complete certificate of representation under § 97.616.

Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous alternate designated representative before the time and date when the Administrator receives the superseding certificate of representation shall be binding on the new alternate designated representative, the designated representative, and the owners and operators of the TR SO<sub>2</sub> Group 1 source and the TR SO<sub>2</sub> Group 1 units at the source.

(c) *Changes in owners and operators.* (1) In the event an owner or operator of a TR SO<sub>2</sub> Group 1 source or a TR SO<sub>2</sub> Group 1 unit at the source is not included in the list of owners and operators in the certificate of

representation under § 97.616, such owner or operator shall be deemed to be subject to and bound by the certificate of representation, the representations, actions, inactions, and submissions of the designated representative and any alternate designated representative of the source or unit, and the decisions and orders of the Administrator, as if the owner or operator were included in such list.

(2) Within 30 days after any change in the owners and operators of a TR SO<sub>2</sub> Group 1 source or a TR SO<sub>2</sub> Group 1 unit at the source, including the addition or removal of an owner or operator, the designated representative or any alternate designated representative shall submit a revision to the certificate of representation under § 97.616 amending the list of owners and operators to reflect the change.

(d) *Changes in units at the source.* Within 30 days of any change in which units are located at a TR SO<sub>2</sub> Group 1 source (including the addition or removal of a unit), the designated representative or any alternate designated representative shall submit a certificate of representation under § 97.616 amending the list of units to reflect the change.

(1) If the change is the addition of a unit that operated (other than for purposes of testing by the manufacturer before initial installation) before being located at the source, then the certificate of representation shall identify, in a format prescribed by the Administrator, the entity from whom the unit was purchased or otherwise obtained (including name, address, telephone number, and facsimile number (if any)), the date on which the unit was purchased or otherwise obtained, and the date on which the unit became located at the source.

(2) If the change is the removal of a unit, then the certificate of representation shall identify, in a format prescribed by the Administrator, the entity to which the unit was sold or that otherwise obtained the unit (including name, address, telephone number, and facsimile number (if any)), the date on which the unit was sold or otherwise obtained, and the date on which the unit became no longer located at the source.

**§ 97.616 Certificate of representation.**

(a) A complete certificate of representation for a designated representative or an alternate designated representative shall include the following elements in a format prescribed by the Administrator:

(1) Identification of the TR SO<sub>2</sub> Group 1 source, and each TR SO<sub>2</sub> Group 1 unit

at the source, for which the certificate of representation is submitted, including source name, source category and NAICS code (or, in the absence of a NAICS code, an equivalent code), State, plant code, county, latitude and longitude, unit identification number and type, identification number and nameplate capacity (in MWe, rounded to the nearest tenth) of each generator served by each such unit, actual or projected date of commencement of commercial operation, and a statement of whether such source is located in Indian Country. If a projected date of commencement of commercial operation is provided, the actual date of commencement of commercial operation shall be provided when such information becomes available.

(2) The name, address, e-mail address (if any), telephone number, and facsimile transmission number (if any) of the designated representative and any alternate designated representative.

(3) A list of the owners and operators of the TR SO<sub>2</sub> Group 1 source and of each TR SO<sub>2</sub> Group 1 unit at the source.

(4) The following certification statements by the designated representative and any alternate designated representative—

(i) “I certify that I was selected as the designated representative or alternate designated representative, as applicable, by an agreement binding on the owners and operators of the source and each TR SO<sub>2</sub> Group 1 unit at the source.”

(ii) “I certify that I have all the necessary authority to carry out my duties and responsibilities under the TR SO<sub>2</sub> Group 1 Trading Program on behalf of the owners and operators of the source and of each TR SO<sub>2</sub> Group 1 unit at the source and that each such owner and operator shall be fully bound by my representations, actions, inactions, or submissions and by any decision or order issued to me by the Administrator regarding the source or unit.”

(iii) “Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, a TR SO<sub>2</sub> Group 1 unit, or where a utility or industrial customer purchases power from a TR SO<sub>2</sub> Group 1 unit under a life-of-the-unit, firm power contractual arrangement, I certify that: I have given a written notice of my selection as the ‘designated representative’ or ‘alternate designated representative’, as applicable, and of the agreement by which I was selected to each owner and operator of the source and of each TR SO<sub>2</sub> Group 1 unit at the source; and TR SO<sub>2</sub> Group 1 allowances and proceeds of transactions involving TR SO<sub>2</sub> Group 1 allowances will be deemed to be held or distributed in proportion to each

holder's legal, equitable, leasehold, or contractual reservation or entitlement, except that, if such multiple holders have expressly provided for a different distribution of TR SO<sub>2</sub> Group 1 allowances by contract, TR SO<sub>2</sub> Group 1 allowances and proceeds of transactions involving TR SO<sub>2</sub> Group 1 allowances will be deemed to be held or distributed in accordance with the contract."

(5) The signature of the designated representative and any alternate designated representative and the dates signed.

(b) Unless otherwise required by the Administrator, documents of agreement referred to in the certificate of representation shall not be submitted to the Administrator. The Administrator shall not be under any obligation to review or evaluate the sufficiency of such documents, if submitted.

**§ 97.617 Objections concerning designated representative and alternate designated representative.**

(a) Once a complete certificate of representation under § 97.616 has been submitted and received, the Administrator will rely on the certificate of representation unless and until a superseding complete certificate of representation under § 97.616 is received by the Administrator.

(b) Except as provided in paragraph (a) of this section, no objection or other communication submitted to the Administrator concerning the authorization, or any representation, action, inaction, or submission, of a designated representative or alternate designated representative shall affect any representation, action, inaction, or submission of the designated representative or alternate designated representative or the finality of any decision or order by the Administrator under the TR SO<sub>2</sub> Group 1 Trading Program.

(c) The Administrator will not adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of any designated representative or alternate designated representative, including private legal disputes concerning the proceeds of TR SO<sub>2</sub> Group 1 allowance transfers.

**§ 97.618 Delegation by designated representative and alternate designated representative.**

(a) A designated representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator provided for or required under this subpart.

(b) An alternate designated representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator provided for or required under this subpart.

(c) In order to delegate authority to a natural person to make an electronic submission to the Administrator in accordance with paragraph (a) or (b) of this section, the designated representative or alternate designated representative, as appropriate, must submit to the Administrator a notice of delegation, in a format prescribed by the Administrator, that includes the following elements:

(1) The name, address, e-mail address, telephone number, and facsimile transmission number (if any) of such designated representative or alternate designated representative;

(2) The name, address, e-mail address, telephone number, and facsimile transmission number (if any) of each such natural person (referred to in this section as an "agent");

(3) For each such natural person, a list of the type or types of electronic submissions under paragraph (a) or (b) of this section for which authority is delegated to him or her; and

(4) The following certification statements by such designated representative or alternate designated representative:

(i) "I agree that any electronic submission to the Administrator that is made by an agent identified in this notice of delegation and of a type listed for such agent in this notice of delegation and that is made when I am a designated representative or alternate designated representative, as appropriate, and before this notice of delegation is superseded by another notice of delegation under 40 CFR 97.618(d) shall be deemed to be an electronic submission by me."

(ii) "Until this notice of delegation is superseded by another notice of delegation under 40 CFR 97.618(d), I agree to maintain an e-mail account and to notify the Administrator immediately of any change in my e-mail address unless all delegation of authority by me under 40 CFR 97.618 is terminated."

(d) A notice of delegation submitted under paragraph (c) of this section shall be effective, with regard to the designated representative or alternate designated representative identified in such notice, upon receipt of such notice by the Administrator and until receipt by the Administrator of a superseding notice of delegation submitted by such designated representative or alternate designated representative, as

appropriate. The superseding notice of delegation may replace any previously identified agent, add a new agent, or eliminate entirely any delegation of authority.

(e) Any electronic submission covered by the certification in paragraph (c)(4)(i) of this section and made in accordance with a notice of delegation effective under paragraph (d) of this section shall be deemed to be an electronic submission by the designated representative or alternate designated representative submitting such notice of delegation.

**§ 97.619 [Reserved]**

**§ 97.620 Establishment of compliance accounts, assurance accounts, and general accounts.**

(a) *Compliance accounts.* Upon receipt of a complete certificate of representation under § 97.616, the Administrator will establish a compliance account for the TR SO<sub>2</sub> Group 1 source for which the certificate of representation was submitted, unless the source already has a compliance account. The designated representative and any alternate designated representative of the source shall be the authorized account representative and the alternate authorized account representative respectively of the compliance account.

(b) *Assurance accounts.* The Administrator will establish assurance accounts for certain owners and operators and States in accordance with § 97.625(b)(3).

(c) *General accounts.* (1) Application for general account. (i) Any person may apply to open a general account, for the purpose of holding and transferring TR SO<sub>2</sub> Group 1 allowances, by submitting to the Administrator a complete application for a general account. Such application shall designate one and only one authorized account representative and may designate one and only one alternate authorized account representative who may act on behalf of the authorized account representative.

(A) The authorized account representative and alternate authorized account representative shall be selected by an agreement binding on the persons who have an ownership interest with respect to TR SO<sub>2</sub> Group 1 allowances held in the general account.

(B) The agreement by which the alternate authorized account representative is selected shall include a procedure for authorizing the alternate authorized account representative to act in lieu of the authorized account representative.

(ii) A complete application for a general account shall include the

following elements in a format prescribed by the Administrator:

(A) Name, mailing address, e-mail address (if any), telephone number, and facsimile transmission number (if any) of the authorized account representative and any alternate authorized account representative;

(B) An identifying name for the general account;

(C) A list of all persons subject to a binding agreement for the authorized account representative and any alternate authorized account representative to represent their ownership interest with respect to the TR SO<sub>2</sub> Group 1 allowances held in the general account;

(D) The following certification statement by the authorized account representative and any alternate authorized account representative: "I certify that I was selected as the authorized account representative or the alternate authorized account representative, as applicable, by an agreement that is binding on all persons who have an ownership interest with respect to TR SO<sub>2</sub> Group 1 allowances held in the general account. I certify that I have all the necessary authority to carry out my duties and responsibilities under the TR SO<sub>2</sub> Group 1 Trading Program on behalf of such persons and that each such person shall be fully bound by my representations, actions, inactions, or submissions and by any decision or order issued to me by the Administrator regarding the general account."

(E) The signature of the authorized account representative and any alternate authorized account representative and the dates signed.

(iii) Unless otherwise required by the Administrator, documents of agreement referred to in the application for a general account shall not be submitted to the Administrator. The Administrator shall not be under any obligation to review or evaluate the sufficiency of such documents, if submitted.

(2) Authorization of authorized account representative and alternate authorized account representative. (i) Upon receipt by the Administrator of a complete application for a general account under paragraph (b)(1) of this section, the Administrator will establish a general account for the person or persons for whom the application is submitted, and upon and after such receipt by the Administrator:

(A) The authorized account representative of the general account shall be authorized and shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each person who has an ownership interest with respect to TR

SO<sub>2</sub> Group 1 allowances held in the general account in all matters pertaining to the TR SO<sub>2</sub> Group 1 Trading Program, notwithstanding any agreement between the authorized account representative and such person.

(B) Any alternate authorized account representative shall be authorized, and any representation, action, inaction, or submission by any alternate authorized account representative shall be deemed to be a representation, action, inaction, or submission by the authorized account representative.

(C) Each person who has an ownership interest with respect to TR SO<sub>2</sub> Group 1 allowances held in the general account shall be bound by any decision or order issued to the authorized account representative or alternate authorized account representative by the Administrator regarding the general account.

(ii) Except as provided in paragraph (c)(5) of this section concerning delegation of authority to make submissions, each submission concerning the general account shall be made, signed, and certified by the authorized account representative or any alternate authorized account representative for the persons having an ownership interest with respect to TR SO<sub>2</sub> Group 1 allowances held in the general account. Each such submission shall include the following certification statement by the authorized account representative or any alternate authorized account representative: "I am authorized to make this submission on behalf of the persons having an ownership interest with respect to the TR SO<sub>2</sub> Group 1 allowances held in the general account. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information, including the possibility of fine or imprisonment."

(iii) Except in this section, whenever the term "authorized account representative" is used in this subpart, the term shall be construed to include the authorized account representative or any alternate authorized account representative.

(3) Changing authorized account representative and alternate authorized account representative; changes in

persons with ownership interest. (i) The authorized account representative of a general account may be changed at any time upon receipt by the Administrator of a superseding complete application for a general account under paragraph (c)(1) of this section. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous authorized account representative before the time and date when the Administrator receives the superseding application for a general account shall be binding on the new authorized account representative and the persons with an ownership interest with respect to the TR SO<sub>2</sub> Group 1 allowances in the general account.

(ii) The alternate authorized account representative of a general account may be changed at any time upon receipt by the Administrator of a superseding complete application for a general account under paragraph (c)(1) of this section. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous alternate authorized account representative before the time and date when the Administrator receives the superseding application for a general account shall be binding on the new alternate authorized account representative, the authorized account representative, and the persons with an ownership interest with respect to the TR SO<sub>2</sub> Group 1 allowances in the general account.

(iii)(A) In the event a person having an ownership interest with respect to TR SO<sub>2</sub> Group 1 allowances in the general account is not included in the list of such persons in the application for a general account, such person shall be deemed to be subject to and bound by the application for a general account, the representation, actions, inactions, and submissions of the authorized account representative and any alternate authorized account representative of the account, and the decisions and orders of the Administrator, as if the person were included in such list.

(B) Within 30 days after any change in the persons having an ownership interest with respect to SO<sub>2</sub> Group 1 allowances in the general account, including the addition or removal of a person, the authorized account representative or any alternate authorized account representative shall submit a revision to the application for a general account amending the list of persons having an ownership interest with respect to the TR SO<sub>2</sub> Group 1 allowances in the general account to include the change.

(4) Objections concerning authorized account representative and alternate

authorized account representative. (i) Once a complete application for a general account under paragraph (c)(1) of this section has been submitted and received, the Administrator will rely on the application unless and until a superseding complete application for a general account under paragraph (b)(1) of this section is received by the Administrator.

(ii) Except as provided in paragraph (c)(4)(i) of this section, no objection or other communication submitted to the Administrator concerning the authorization, or any representation, action, inaction, or submission of the authorized account representative or any alternate authorized account representative of a general account shall affect any representation, action, inaction, or submission of the authorized account representative or any alternate authorized account representative or the finality of any decision or order by the Administrator under the TR SO<sub>2</sub> Group 1 Trading Program.

(iii) The Administrator will not adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of the authorized account representative or any alternate authorized account representative of a general account, including private legal disputes concerning the proceeds of TR SO<sub>2</sub> Group 1 allowance transfers.

(5) Delegation by authorized account representative and alternate authorized account representative. (i) An authorized account representative of a general account may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator provided for or required under this subpart.

(ii) An alternate authorized account representative of a general account may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator provided for or required under this subpart.

(iii) In order to delegate authority to a natural person to make an electronic submission to the Administrator in accordance with paragraph (c)(5)(i) or (ii) of this section, the authorized account representative or alternate authorized account representative, as appropriate, must submit to the Administrator a notice of delegation, in a format prescribed by the Administrator, that includes the following elements:

(A) The name, address, e-mail address, telephone number, and facsimile transmission number (if any)

of such authorized account representative or alternate authorized account representative;

(B) The name, address, e-mail address, telephone number, and facsimile transmission number (if any) of each such natural person (referred to in this section as an "agent");

(C) For each such natural person, a list of the type or types of electronic submissions under paragraph (c)(5)(i) or (ii) of this section for which authority is delegated to him or her;

(D) The following certification statement by such authorized account representative or alternate authorized account representative: "I agree that any electronic submission to the Administrator that is made by an agent identified in this notice of delegation and of a type listed for such agent in this notice of delegation and that is made when I am an authorized account representative or alternate authorized account representative, as appropriate, and before this notice of delegation is superseded by another notice of delegation under 40 CFR 97.620(c)(5)(iv) shall be deemed to be an electronic submission by me."; and

(E) The following certification statement by such authorized account representative or alternate authorized account representative: "Until this notice of delegation is superseded by another notice of delegation under 40 CFR 97.620(c)(5)(iv), I agree to maintain an e-mail account and to notify the Administrator immediately of any change in my e-mail address unless all delegation of authority by me under 40 CFR 97.620(c)(5) is terminated."

(iv) A notice of delegation submitted under paragraph (c)(5)(iii) of this section shall be effective, with regard to the authorized account representative or alternate authorized account representative identified in such notice, upon receipt of such notice by the Administrator and until receipt by the Administrator of a superseding notice of delegation submitted by such authorized account representative or alternate authorized account representative, as appropriate. The superseding notice of delegation may replace any previously identified agent, add a new agent, or eliminate entirely any delegation of authority.

(v) Any electronic submission covered by the certification in paragraph (c)(5)(iii)(D) of this section and made in accordance with a notice of delegation effective under paragraph (c)(5)(iv) of this section shall be deemed to be an electronic submission by the designated representative or alternate designated representative submitting such notice of delegation.

(6) Closing a general account. (i) The authorized account representative or alternate authorized account representative of a general account may submit to the Administrator a request to close the account. Such request shall include a correctly submitted TR SO<sub>2</sub> Group 1 allowance transfer under § 97.622 for any TR SO<sub>2</sub> Group 1 allowances in the account to one or more other Allowance Management System accounts.

(ii) If a general account has no TR SO<sub>2</sub> Group 1 allowance transfers to or from the account for a 12-month period or longer and does not contain any TR SO<sub>2</sub> Group 1 allowances, the Administrator may notify the authorized account representative for the account that the account will be closed after 30 days after the notice is sent. The account will be closed after the 30-day period unless, before the end of the 30-day period, the Administrator receives a correctly submitted TR SO<sub>2</sub> Group 1 allowance transfer under § 97.622 to the account or a statement submitted by the authorized account representative or alternate authorized account representative demonstrating to the satisfaction of the Administrator good cause as to why the account should not be closed.

(d) *Account identification.* The Administrator will assign a unique identifying number to each account established under paragraph (a), (b), or (c) of this section.

(e) *Responsibilities of authorized account representative and alternate authorized account representative.* After the establishment of a compliance account or general account, the Administrator will accept or act on a submission pertaining to the account, including, but not limited to, submissions concerning the deduction or transfer of TR SO<sub>2</sub> Group 1 allowances in the account, only if the submission has been made, signed, and certified in accordance with §§ 97.614(a) and 97.618 or paragraphs (c)(2)(ii) and (c)(5) of this section.

#### **§ 97.621 Recordation of TR SO<sub>2</sub> Group 1 allowance allocations and auction results.**

(a) By November 7, 2011, the Administrator will record in each TR SO<sub>2</sub> Group 1 source's compliance account the TR SO<sub>2</sub> Group 1 allowances allocated to the TR SO<sub>2</sub> Group 1 units at the source in accordance with § 97.611(a) for the control period in 2012.

(b) By November 7, 2011, the Administrator will record in each TR SO<sub>2</sub> Group 1 source's compliance account the TR SO<sub>2</sub> Group 1 allowances allocated to the TR SO<sub>2</sub> Group 1 units at the source in accordance with

§ 97.611(a) for the control period in 2013, unless the State in which the source is located notifies the Administrator in writing by October 17, 2011 of the State's intent to submit to the Administrator a complete SIP revision by April 1, 2012 meeting the requirements of § 52.39(d)(1) through (4) of this chapter.

(1) If, by April 1, 2012, the State does not submit to the Administrator such complete SIP revision, the Administrator will record by April 15, 2012 in each TR SO<sub>2</sub> Group 1 source's compliance account the TR SO<sub>2</sub> Group 1 allowances allocated to the TR SO<sub>2</sub> Group 1 units at the source in accordance with § 97.611(a) for the control period in 2013.

(2) If the State submits to the Administrator by April 1, 2012, and the Administrator approves by October 1, 2012, such complete SIP revision, the Administrator will record by October 1, 2012 in each TR SO<sub>2</sub> Group 1 source's compliance account the TR SO<sub>2</sub> Group 1 allowances allocated to the TR SO<sub>2</sub> Group 1 units at the source as provided in such approved, complete SIP revision for the control period in 2013.

(3) If the State submits to the Administrator by April 1, 2012, and the Administrator does not approve by October 1, 2012, such complete SIP revision, the Administrator will record by October 1, 2012 in each TR SO<sub>2</sub> Group 1 source's compliance account the TR SO<sub>2</sub> Group 1 allowances allocated to the TR SO<sub>2</sub> Group 1 units at the source in accordance with § 97.611(a) for the control period in 2013.

(c) By July 1, 2013, the Administrator will record in each TR SO<sub>2</sub> Group 1 source's compliance account the TR SO<sub>2</sub> Group 1 allowances allocated to the TR SO<sub>2</sub> Group 1 units at the source, or in each appropriate Allowance Management System account the TR SO<sub>2</sub> Group 1 allowances auctioned to TR SO<sub>2</sub> Group 1 units, in accordance with § 97.611(a), or with a SIP revision approved under § 52.39(e) or (f) of this chapter, for the control period in 2014 and 2015.

(d) By July 1, 2014, the Administrator will record in each TR SO<sub>2</sub> Group 1 source's compliance account the TR SO<sub>2</sub> Group 1 allowances allocated to the TR SO<sub>2</sub> Group 1 units at the source, or in each appropriate Allowance Management System account the TR SO<sub>2</sub> Group 1 allowances auctioned to TR SO<sub>2</sub> Group 1 units, in accordance with § 97.611(a), or with a SIP revision approved under § 52.39(e) or (f) of this chapter, for the control period in 2016 and 2017.

(e) By July 1, 2015, the Administrator will record in each TR SO<sub>2</sub> Group 1 source's compliance account the TR SO<sub>2</sub> Group 1 allowances allocated to the TR SO<sub>2</sub> Group 1 units at the source, or in each appropriate Allowance Management System account the TR SO<sub>2</sub> Group 1 allowances auctioned to TR SO<sub>2</sub> Group 1 units, in accordance with § 97.611(a), or with a SIP revision approved under § 52.39(e) or (f) of this chapter, for the control period in 2018 and 2019.

(f) By July 1, 2016 and July 1 of each year thereafter, the Administrator will record in each TR SO<sub>2</sub> Group 1 source's compliance account the TR SO<sub>2</sub> Group 1 allowances allocated to the TR SO<sub>2</sub> Group 1 units at the source, or in each appropriate Allowance Management System account the TR SO<sub>2</sub> Group 1 allowances auctioned to TR SO<sub>2</sub> Group 1 units, in accordance with § 97.611(a), or with a SIP revision approved under § 52.39(e) and (f) of this chapter, for the control period in the fourth year after the year of the applicable recordation deadline under this paragraph.

(g) By August 1, 2012 and August 1 of each year thereafter, the Administrator will record in each TR SO<sub>2</sub> Group 1 source's compliance account the TR SO<sub>2</sub> Group 1 allowances allocated to the TR SO<sub>2</sub> Group 1 units at the source, or in each appropriate Allowance Management System account the TR SO<sub>2</sub> Group 1 allowances auctioned to TR SO<sub>2</sub> Group 1 units, in accordance with § 97.612(a)(2) through (8) and (12), or with a SIP revision approved under § 52.39(e) and (f) of this chapter, for the control period in the year of the applicable recordation deadline under this paragraph.

(h) By August 1, 2012 and August 1 of each year thereafter, the Administrator will record in each TR SO<sub>2</sub> Group 1 source's compliance account the TR SO<sub>2</sub> Group 1 allowances allocated to the TR SO<sub>2</sub> Group 1 units at the source in accordance with § 97.612(b)(2) through (8) and (12) for the control period in the year of the applicable recordation deadline under this paragraph.

(i) By February 15, 2013 and February 15 of each year thereafter, the Administrator will record in each TR SO<sub>2</sub> Group 1 source's compliance account the TR SO<sub>2</sub> Group 1 allowances allocated to the TR SO<sub>2</sub> Group 1 units at the source in accordance with § 97.612(a)(9) through (12), for the control period in the year before the year of the applicable recordation deadline under this paragraph.

(j) By the date on which any allocation or auction results, other than an allocation or auction results

described in paragraphs (a) through (i) of this section, of TR SO<sub>2</sub> Group 1 allowances to a recipient is made by or are submitted to the Administrator in accordance with § 97.611 or § 97.612 or with a SIP revision approved under § 52.39(e) or (f) of this chapter, the Administrator will record such allocation or auction results in the appropriate Allowance Management System account.

(k) When recording the allocation or auction of TR SO<sub>2</sub> Group 1 allowances to a TR SO<sub>2</sub> Group 1 unit or other entity in an Allowance Management System account, the Administrator will assign each TR SO<sub>2</sub> Group 1 allowance a unique identification number that will include digits identifying the year of the control period for which the TR SO<sub>2</sub> Group 1 allowance is allocated or auctioned.

#### **§ 97.622 Submission of TR SO<sub>2</sub> Group 1 allowance transfers.**

(a) An authorized account representative seeking recordation of a TR SO<sub>2</sub> Group 1 allowance transfer shall submit the transfer to the Administrator.

(b) A TR SO<sub>2</sub> Group 1 allowance transfer shall be correctly submitted if:

- (1) The transfer includes the following elements, in a format prescribed by the Administrator:

- (i) The account numbers established by the Administrator for both the transferor and transferee accounts;

- (ii) The serial number of each TR SO<sub>2</sub> Group 1 allowance that is in the transferor account and is to be transferred; and

- (iii) The name and signature of the authorized account representative of the transferor account and the date signed; and

- (2) When the Administrator attempts to record the transfer, the transferor account includes each TR SO<sub>2</sub> Group 1 allowance identified by serial number in the transfer.

#### **§ 97.623 Recordation of TR SO<sub>2</sub> Group 1 allowance transfers.**

(a) Within 5 business days (except as provided in paragraph (b) of this section) of receiving a TR SO<sub>2</sub> Group 1 allowance transfer that is correctly submitted under § 97.622, the Administrator will record a TR SO<sub>2</sub> Group 1 allowance transfer by moving each TR SO<sub>2</sub> Group 1 allowance from the transferor account to the transferee account as specified in the transfer.

(b) A TR SO<sub>2</sub> Group 1 allowance transfer to or from a compliance account that is submitted for recordation after the allowance transfer deadline for a control period and that includes any TR SO<sub>2</sub> Group 1 allowances allocated for

any control period before such allowance transfer deadline will not be recorded until after the Administrator completes the deductions from such compliance account under § 97.624 for the control period immediately before such allowance transfer deadline.

(c) Where a TR SO<sub>2</sub> Group 1 allowance transfer is not correctly submitted under § 97.622, the Administrator will not record such transfer.

(d) Within 5 business days of recordation of a TR SO<sub>2</sub> Group 1 allowance transfer under paragraphs (a) and (b) of the section, the Administrator will notify the authorized account representatives of both the transferor and transferee accounts.

(e) Within 10 business days of receipt of a TR SO<sub>2</sub> Group 1 allowance transfer that is not correctly submitted under § 97.622, the Administrator will notify the authorized account representatives of both accounts subject to the transfer of:

(1) A decision not to record the transfer, and

(2) The reasons for such non-recordation.

**§ 97.624 Compliance with TR SO<sub>2</sub> Group 1 emissions limitation.**

(a) *Availability for deduction for compliance.* TR SO<sub>2</sub> Group 1 allowances are available to be deducted for compliance with a source's TR SO<sub>2</sub> Group 1 emissions limitation for a control period in a given year only if the TR SO<sub>2</sub> Group 1 allowances:

(1) Were allocated for such control period or a control period in a prior year; and

(2) Are held in the source's compliance account as of the allowance transfer deadline for such control period.

(b) *Deductions for compliance.* After the recordation, in accordance with § 97.623, of TR SO<sub>2</sub> Group 1 allowance transfers submitted by the allowance transfer deadline for a control period in a given year, the Administrator will deduct from each source's compliance account TR SO<sub>2</sub> Group 1 allowances available under paragraph (a) of this section in order to determine whether the source meets the TR SO<sub>2</sub> Group 1 emissions limitation for such control period, as follows:

(1) Until the amount of TR SO<sub>2</sub> Group 1 allowances deducted equals the number of tons of total SO<sub>2</sub> emissions from all TR SO<sub>2</sub> Group 1 units at the source for such control period; or

(2) If there are insufficient TR SO<sub>2</sub> Group 1 allowances to complete the deductions in paragraph (b)(1) of this section, until no more TR SO<sub>2</sub> Group 1

allowances available under paragraph (a) of this section remain in the compliance account.

(c)(1) *Identification of TR SO<sub>2</sub> Group 1 allowances by serial number.* The authorized account representative for a source's compliance account may request that specific TR SO<sub>2</sub> Group 1 allowances, identified by serial number, in the compliance account be deducted for emissions or excess emissions for a control period in a given year in accordance with paragraph (b) or (d) of this section. In order to be complete, such request shall be submitted to the Administrator by the allowance transfer deadline for such control period and include, in a format prescribed by the Administrator, the identification of the TR SO<sub>2</sub> Group 1 source and the appropriate serial numbers.

(2) *First-in, first-out.* The Administrator will deduct TR SO<sub>2</sub> Group 1 allowances under paragraph (b) or (d) of this section from the source's compliance account in accordance with a complete request under paragraph (c)(1) of this section or, in the absence of such request or in the case of identification of an insufficient amount of TR SO<sub>2</sub> Group 1 allowances in such request, on a first-in, first-out accounting basis in the following order:

(i) Any TR SO<sub>2</sub> Group 1 allowances that were allocated to the units at the source and not transferred out of the compliance account, in the order of recordation; and then

(ii) Any TR SO<sub>2</sub> Group 1 allowances that were allocated to any unit and transferred to and recorded in the compliance account pursuant to this subpart, in the order of recordation.

(d) *Deductions for excess emissions.* After making the deductions for compliance under paragraph (b) of this section for a control period in a year in which the TR SO<sub>2</sub> Group 1 source has excess emissions, the Administrator will deduct from the source's compliance account an amount of TR SO<sub>2</sub> Group 1 allowances, allocated for a control period in a prior year or the control period in the year of the excess emissions or in the immediately following year, equal to two times the number of tons of the source's excess emissions.

(e) *Recordation of deductions.* The Administrator will record in the appropriate compliance account all deductions from such an account under paragraphs (b) and (d) of this section.

**§ 97.625 Compliance with TR SO<sub>2</sub> Group 1 assurance provisions.**

(a) *Availability for deduction.* TR SO<sub>2</sub> Group 1 allowances are available to be deducted for compliance with the TR

SO<sub>2</sub> Group 1 assurance provisions for a control period in a given year by the owners and operators of a group of one or more TR SO<sub>2</sub> Group 1 sources and units in a State (and Indian country within the borders of such State) only if the TR SO<sub>2</sub> Group 1 allowances:

(1) Were allocated for a control period in a prior year or the control period in the given year or in the immediately following year; and

(2) Are held in the assurance account, established by the Administrator for such owners and operators of such group of TR SO<sub>2</sub> Group 1 sources and units in such State (and Indian country within the borders of such State) under paragraph (b)(3) of this section, as of the deadline established in paragraph (b)(4) of this section.

(b) *Deductions for compliance.* The Administrator will deduct TR SO<sub>2</sub> Group 1 allowances available under paragraph (a) of this section for compliance with the TR SO<sub>2</sub> Group 1 assurance provisions for a State for a control period in a given year in accordance with the following procedures:

(1) By June 1, 2013 and June 1 of each year thereafter, the Administrator will:

(i) Calculate, for each State (and Indian country within the borders of such State), the total SO<sub>2</sub> emissions from all TR SO<sub>2</sub> Group 1 units at TR SO<sub>2</sub> Group 1 sources in the State (and Indian country within the borders of such State) during the control period in the year before the year of this calculation deadline and the amount, if any, by which such total SO<sub>2</sub> emissions exceed the State assurance level as described in § 97.606(c)(2)(iii); and

(ii) Promulgate a notice of data availability of the results of the calculations required in paragraph (b)(1)(i) of this section, including separate calculations of the SO<sub>2</sub> emissions from each TR SO<sub>2</sub> Group 1 source.

(2) For each notice of data availability required in paragraph (b)(1)(ii) of this section and for any State (and Indian country within the borders of such State) identified in such notice as having TR SO<sub>2</sub> Group 1 units with total SO<sub>2</sub> emissions exceeding the State assurance level for a control period in a given year, as described in § 97.606(c)(2)(iii):

(i) By July 1 immediately after the promulgation of such notice, the designated representative of each TR SO<sub>2</sub> Group 1 source in each such State (and Indian country within the borders of such State) shall submit a statement, in a format prescribed by the Administrator, providing for each TR SO<sub>2</sub> Group 1 unit (if any) at the source

that operates during, but is not allocated an amount of TR SO<sub>2</sub> Group 1 allowances for, such control period, the unit's allowable SO<sub>2</sub> emission rate for such control period and, if such rate is expressed in lb per mmBtu, the unit's heat rate.

(ii) By August 1 immediately after the promulgation of such notice, the Administrator will calculate, for each such State (and Indian country within the borders of such State) and such control period and each common designated representative for such control period for a group of one or more TR SO<sub>2</sub> Group 1 sources and units in the State (and Indian country within the borders of such State), the common designated representative's share of the total SO<sub>2</sub> emissions from all TR SO<sub>2</sub> Group 1 units at TR SO<sub>2</sub> Group 1 sources in the State (and Indian country within the borders of such State), the common designated representative's assurance level, and the amount (if any) of TR SO<sub>2</sub> Group 1 allowances that the owners and operators of such group of sources and units must hold in accordance with the calculation formula in § 97.606(c)(2)(i) and will promulgate a notice of data availability of the results of these calculations.

(iii) The Administrator will provide an opportunity for submission of objections to the calculations referenced by the notice of data availability required in paragraph (b)(2)(ii) of this section and the calculations referenced by the relevant notice of data availability required in paragraph (b)(1)(i) of this section.

(A) Objections shall be submitted by the deadline specified in such notice and shall be limited to addressing whether the calculations referenced in the relevant notice required under paragraph (b)(1)(ii) of this section and referenced in the notice required under paragraph (b)(2)(ii) of this section are in accordance with § 97.606(c)(2)(iii), §§ 97.606(b) and 97.630 through 97.635, the definitions of "common designated representative", "common designated representative's assurance level", and "common designated representative's share" in § 97.602, and the calculation formula in § 97.606(c)(2)(i).

(B) The Administrator will adjust the calculations to the extent necessary to ensure that they are in accordance with the provisions referenced in paragraph (b)(2)(iii)(A) of this section. By October 1 immediately after the promulgation of such notice, the Administrator will promulgate a notice of data availability of any adjustments that the Administrator determines to be necessary and the reasons for accepting or rejecting any objections submitted in

accordance with paragraph (b)(2)(iii)(A) of this section.

(3) For any State (and Indian country within the borders of such State) referenced in each notice of data availability required in paragraph (b)(2)(iii)(B) of this section as having TR SO<sub>2</sub> Group 1 units with total SO<sub>2</sub> emissions exceeding the State assurance level for a control period in a given year, the Administrator will establish one assurance account for each set of owners and operators referenced, in the notice of data availability required under paragraph (b)(2)(iii)(B) of this section, as all of the owners and operators of a group of TR SO<sub>2</sub> Group 1 sources and units in the State (and Indian country within the borders of such State) having a common designated representative for such control period and as being required to hold TR SO<sub>2</sub> Group 1 allowances.

(4)(i) As of midnight of November 1 immediately after the promulgation of each notice of data availability required in paragraph (b)(2)(iii)(B) of this section, the owners and operators described in paragraph (b)(3) of this section shall hold in the assurance account established for them and for the appropriate TR SO<sub>2</sub> Group 1 sources, TR SO<sub>2</sub> Group 1 units, and State (and Indian country within the borders of such State) under paragraph (b)(3) of this section a total amount of TR SO<sub>2</sub> Group 1 allowances, available for deduction under paragraph (a) of this section, equal to the amount such owners and operators are required to hold with regard to such sources, units and State (and Indian country within the borders of such State) as calculated by the Administrator and referenced in such notice.

(ii) Notwithstanding the allowance-holding deadline specified in paragraph (b)(4)(i) of this section, if November 1 is not a business day, then such allowance-holding deadline shall be midnight of the first business day thereafter.

(5) After November 1 (or the date described in paragraph (b)(4)(ii) of this section) immediately after the promulgation of each notice of data availability required in paragraph (b)(2)(iii)(B) of this section and after the recording, in accordance with § 97.623, of TR SO<sub>2</sub> Group 1 allowance transfers submitted by midnight of such date, the Administrator will determine whether the owners and operators described in paragraph (b)(3) of this section hold, in the assurance account for the appropriate TR SO<sub>2</sub> Group 1 sources, TR SO<sub>2</sub> Group 1 units, and State (and Indian country within the borders of such State) established under

paragraph (b)(3) of this section, the amount of TR SO<sub>2</sub> Group 1 allowances available under paragraph (a) of this section that the owners and operators are required to hold with regard to such sources, units, and State (and Indian country within the borders of such State) as calculated by the Administrator and referenced in the notice required in paragraph (b)(2)(iii)(B) of this section.

(6) Notwithstanding any other provision of this subpart and any revision, made by or submitted to the Administrator after the promulgation of the notice of data availability required in paragraph (b)(2)(iii)(B) of this section for a control period in a given year, of any data used in making the calculations referenced in such notice, the amounts of TR SO<sub>2</sub> Group 1 allowances that the owners and operators are required to hold in accordance with § 97.606(c)(2)(i) for such control period shall continue to be such amounts as calculated by the Administrator and referenced in such notice required in paragraph (b)(2)(iii)(B) of this section, except as follows:

(i) If any such data are revised by the Administrator as a result of a decision in or settlement of litigation concerning such data on appeal under part 78 of this chapter of such notice, or on appeal under section 307 of the Clean Air Act of a decision rendered under part 78 of this chapter on appeal of such notice, then the Administrator will use the data as so revised to recalculate the amounts of TR SO<sub>2</sub> Group 1 allowances that owners and operators are required to hold in accordance with the calculation formula in § 97.606(c)(2)(i) for such control period with regard to the TR SO<sub>2</sub> Group 1 sources, TR SO<sub>2</sub> Group 1 units, and State (and Indian country within the borders of such State) involved, provided that such litigation under part 78 of this chapter, or the proceeding under part 78 of this chapter that resulted in the decision appealed in such litigation under section 307 of the Clean Air Act, was initiated no later than 30 days after promulgation of such notice required in paragraph (b)(2)(iii)(B) of this section.

(ii) If any such data are revised by the owners and operators of a TR SO<sub>2</sub> Group 1 source and TR SO<sub>2</sub> Group 1 unit whose designated representative submitted such data under paragraph (b)(2)(i) of this section, as a result of a decision in or settlement of litigation concerning such submission, then the Administrator will use the data as so revised to recalculate the amounts of TR SO<sub>2</sub> Group 1 allowances that owners and operators are required to hold in

accordance with the calculation formula in § 97.606(c)(2)(i) for such control period with regard to the TR SO<sub>2</sub> Group 1 sources, TR SO<sub>2</sub> Group 1 units, and State (and Indian country within the borders of such State) involved, provided that such litigation was initiated no later than 30 days after promulgation of such notice required in paragraph (b)(2)(iii)(B) of this section.

(iii) If the revised data are used to recalculate, in accordance with paragraphs (b)(6)(i) and (ii) of this section, the amount of TR SO<sub>2</sub> Group 1 allowances that the owners and operators are required to hold for such control period with regard to the TR SO<sub>2</sub> Group 1 sources, TR SO<sub>2</sub> Group 1 units, and State (and Indian country within the borders of such State) involved—

(A) Where the amount of TR SO<sub>2</sub> Group 1 allowances that the owners and operators are required to hold increases as a result of the use of all such revised data, the Administrator will establish a new, reasonable deadline on which the owners and operators shall hold the additional amount of TR SO<sub>2</sub> Group 1 allowances in the assurance account established by the Administrator for the appropriate TR SO<sub>2</sub> Group 1 sources, TR SO<sub>2</sub> Group 1 units, and State (and Indian country within the borders of such State) under paragraph (b)(3) of this section. The owners' and operators' failure to hold such additional amount, as required, before the new deadline shall not be a violation of the Clean Air Act. The owners' and operators' failure to hold such additional amount, as required, as of the new deadline shall be a violation of the Clean Air Act. Each TR SO<sub>2</sub> Group 1 allowance that the owners and operators fail to hold as required as of the new deadline, and each day in such control period, shall be a separate violation of the Clean Air Act.

(B) For the owners and operators for which the amount of TR SO<sub>2</sub> Group 1 allowances required to be held decreases as a result of the use of all such revised data, the Administrator will record, in all accounts from which TR SO<sub>2</sub> Group 1 allowances were transferred by such owners and operators for such control period to the assurance account established by the Administrator for the appropriate TR SO<sub>2</sub> Group 1 sources, TR SO<sub>2</sub> Group 1 units, and State (and Indian country within the borders of such State) under paragraph (b)(3) of this section, a total amount of the TR SO<sub>2</sub> Group 1 allowances held in such assurance account equal to the amount of the decrease. If TR SO<sub>2</sub> Group 1 allowances were transferred to such assurance account from more than one account, the amount of TR SO<sub>2</sub> Group 1

allowances recorded in each such transferor account will be in proportion to the percentage of the total amount of TR SO<sub>2</sub> Group 1 allowances transferred to such assurance account for such control period from such transferor account.

(C) Each TR SO<sub>2</sub> Group 1 allowance held under paragraph (b)(6)(iii)(A) of this section as a result of recalculation of requirements under the TR SO<sub>2</sub> Group 1 assurance provisions for such control period must be a TR SO<sub>2</sub> Group 1 allowance allocated for a control period in a year before or the year immediately following, or in the same year as, the year of such control period.

#### § 97.626 Banking.

(a) A TR SO<sub>2</sub> Group 1 allowance may be banked for future use or transfer in a compliance account or a general account in accordance with paragraph (b) of this section.

(b) Any TR SO<sub>2</sub> Group 1 allowance that is held in a compliance account or a general account will remain in such account unless and until the TR SO<sub>2</sub> Group 1 allowance is deducted or transferred under § 97.611(c), § 97.623, § 97.624, § 97.625, § 97.627, or § 97.628.

#### § 97.627 Account error.

The Administrator may, at his or her sole discretion and on his or her own motion, correct any error in any Allowance Management System account. Within 10 business days of making such correction, the Administrator will notify the authorized account representative for the account.

#### § 97.628 Administrator's action on submissions.

(a) The Administrator may review and conduct independent audits concerning any submission under the TR SO<sub>2</sub> Group 1 Trading Program and make appropriate adjustments of the information in the submission.

(b) The Administrator may deduct TR SO<sub>2</sub> Group 1 allowances from or transfer TR SO<sub>2</sub> Group 1 allowances to a compliance account or an assurance account, based on the information in a submission, as adjusted under paragraph (a)(1) of this section, and record such deductions and transfers.

#### § 97.629 [Reserved]

#### § 97.630 General monitoring, recordkeeping, and reporting requirements.

The owners and operators, and to the extent applicable, the designated representative, of a TR SO<sub>2</sub> Group 1 unit, shall comply with the monitoring, recordkeeping, and reporting requirements as provided in this subpart and subparts F and G of part 75 of this

chapter. For purposes of applying such requirements, the definitions in § 97.602 and in § 72.2 of this chapter shall apply, the terms "affected unit," "designated representative," and "continuous emission monitoring system" (or "CEMS") in part 75 of this chapter shall be deemed to refer to the terms "TR SO<sub>2</sub> Group 1 unit," "designated representative," and "continuous emission monitoring system" (or "CEMS") respectively as defined in § 97.602, and the term "newly affected unit" shall be deemed to mean "newly affected TR SO<sub>2</sub> Group 1 unit". The owner or operator of a unit that is not a TR SO<sub>2</sub> Group 1 unit but that is monitored under § 75.16(b)(2) of this chapter shall comply with the same monitoring, recordkeeping, and reporting requirements as a TR SO<sub>2</sub> Group 1 unit.

(a) *Requirements for installation, certification, and data accounting.* The owner or operator of each TR SO<sub>2</sub> Group 1 unit shall:

(1) Install all monitoring systems required under this subpart for monitoring SO<sub>2</sub> mass emissions and individual unit heat input (including all systems required to monitor SO<sub>2</sub> concentration, stack gas moisture content, stack gas flow rate, CO<sub>2</sub> or O<sub>2</sub> concentration, and fuel flow rate, as applicable, in accordance with §§ 75.11 and 75.16 of this chapter);

(2) Successfully complete all certification tests required under § 97.631 and meet all other requirements of this subpart and part 75 of this chapter applicable to the monitoring systems under paragraph (a)(1) of this section; and

(3) Record, report, and quality-assure the data from the monitoring systems under paragraph (a)(1) of this section.

(b) *Compliance deadlines.* Except as provided in paragraph (e) of this section, the owner or operator shall meet the monitoring system certification and other requirements of paragraphs (a)(1) and (2) of this section on or before the following dates and shall record, report, and quality-assure the data from the monitoring systems under paragraph (a)(1) of this section on and after the following dates.

(1) For the owner or operator of a TR SO<sub>2</sub> Group 1 unit that commences commercial operation before July 1, 2011, January 1, 2012.

(2) For the owner or operator of a TR SO<sub>2</sub> Group 1 unit that commences commercial operation on or after July 1, 2011, by the later of the following:

(i) January 1, 2012; or  
(ii) 180 calendar days after the date on which the unit commences commercial operation.



(3) The owner or operator of a TR SO<sub>2</sub> Group 1 unit for which construction of a new stack or flue or installation of add-on SO<sub>2</sub> emission controls is completed after the applicable deadline under paragraph (b)(1) or (2) of this section shall meet the requirements of § 75.4(e)(1) through (e)(4) of this chapter, except that:

(i) Such requirements shall apply to the monitoring systems required under § 97.630 through § 97.635, rather than the monitoring systems required under part 75 of this chapter;

(ii) SO<sub>2</sub> concentration, stack gas moisture content, stack gas volumetric flow rate, and O<sub>2</sub> or CO<sub>2</sub> concentration data shall be determined and reported, rather than the data listed in § 75.4(e)(2) of this chapter; and

(iii) Any petition for another procedure under § 75.4(e)(2) of this chapter shall be submitted under § 97.635, rather than § 75.66.

(c) *Reporting data.* The owner or operator of a TR SO<sub>2</sub> Group 1 unit that does not meet the applicable compliance date set forth in paragraph (b) of this section for any monitoring system under paragraph (a)(1) of this section shall, for each such monitoring system, determine, record, and report maximum potential (or, as appropriate, minimum potential) values for SO<sub>2</sub> concentration, stack gas flow rate, stack gas moisture content, fuel flow rate, and any other parameters required to determine SO<sub>2</sub> mass emissions and heat input in accordance with § 75.31(b)(2) or (c)(3) of this chapter or section 2.4 of appendix D to part 75 of this chapter, as applicable.

(d) *Prohibitions.* (1) No owner or operator of a TR SO<sub>2</sub> Group 1 unit shall use any alternative monitoring system, alternative reference method, or any other alternative to any requirement of this subpart without having obtained prior written approval in accordance with § 97.635.

(2) No owner or operator of a TR SO<sub>2</sub> Group 1 unit shall operate the unit so as to discharge, or allow to be discharged, SO<sub>2</sub> to the atmosphere without accounting for all such SO<sub>2</sub> in accordance with the applicable provisions of this subpart and part 75 of this chapter.

(3) No owner or operator of a TR SO<sub>2</sub> Group 1 unit shall disrupt the continuous emission monitoring system, any portion thereof, or any other approved emission monitoring method, and thereby avoid monitoring and recording SO<sub>2</sub> mass discharged into the atmosphere or heat input, except for periods of recertification or periods when calibration, quality assurance testing, or maintenance is performed in

accordance with the applicable provisions of this subpart and part 75 of this chapter.

(4) No owner or operator of a TR SO<sub>2</sub> Group 1 unit shall retire or permanently discontinue use of the continuous emission monitoring system, any component thereof, or any other approved monitoring system under this subpart, except under any one of the following circumstances:

(i) During the period that the unit is covered by an exemption under § 97.605 that is in effect;

(ii) The owner or operator is monitoring emissions from the unit with another certified monitoring system approved, in accordance with the applicable provisions of this subpart and part 75 of this chapter, by the Administrator for use at that unit that provides emission data for the same pollutant or parameter as the retired or discontinued monitoring system; or

(iii) The designated representative submits notification of the date of certification testing of a replacement monitoring system for the retired or discontinued monitoring system in accordance with § 97.631(d)(3)(i).

(e) *Long-term cold storage.* The owner or operator of a TR SO<sub>2</sub> Group 1 unit is subject to the applicable provisions of § 75.4(d) of this chapter concerning units in long-term cold storage.

#### **§ 97.631 Initial monitoring system certification and recertification procedures.**

(a) The owner or operator of a TR SO<sub>2</sub> Group 1 unit shall be exempt from the initial certification requirements of this section for a monitoring system under § 97.630(a)(1) if the following conditions are met:

(1) The monitoring system has been previously certified in accordance with part 75 of this chapter; and

(2) The applicable quality-assurance and quality-control requirements of § 75.21 of this chapter and appendices B and D to part 75 of this chapter are fully met for the certified monitoring system described in paragraph (a)(1) of this section.

(b) The recertification provisions of this section shall apply to a monitoring system under § 97.630(a)(1) that is exempt from initial certification requirements under paragraph (a) of this section.

(c) [Reserved]

(d) Except as provided in paragraph (a) of this section, the owner or operator of a TR SO<sub>2</sub> Group 1 unit shall comply with the following initial certification and recertification procedures, for a continuous monitoring system (*i.e.*, a continuous emission monitoring system and an excepted monitoring system

under appendix D to part 75 of this chapter) under § 97.630(a)(1). The owner or operator of a unit that qualifies to use the low mass emissions excepted monitoring methodology under § 75.19 of this chapter or that qualifies to use an alternative monitoring system under subpart E of part 75 of this chapter shall comply with the procedures in paragraph (e) or (f) of this section respectively.

(1) Requirements for initial certification. The owner or operator shall ensure that each continuous monitoring system under § 97.630(a)(1) (including the automated data acquisition and handling system) successfully completes all of the initial certification testing required under § 75.20 of this chapter by the applicable deadline in § 97.630(b). In addition, whenever the owner or operator installs a monitoring system to meet the requirements of this subpart in a location where no such monitoring system was previously installed, initial certification in accordance with § 75.20 of this chapter is required.

(2) Requirements for recertification. Whenever the owner or operator makes a replacement, modification, or change in any certified continuous emission monitoring system under § 97.630(a)(1) that may significantly affect the ability of the system to accurately measure or record SO<sub>2</sub> mass emissions or heat input rate or to meet the quality-assurance and quality-control requirements of § 75.21 of this chapter or appendix B to part 75 of this chapter, the owner or operator shall recertify the monitoring system in accordance with § 75.20(b) of this chapter. Furthermore, whenever the owner or operator makes a replacement, modification, or change to the flue gas handling system or the unit's operation that may significantly change the stack flow or concentration profile, the owner or operator shall recertify each continuous emission monitoring system whose accuracy is potentially affected by the change, in accordance with § 75.20(b) of this chapter. Examples of changes to a continuous emission monitoring system that require recertification include: Replacement of the analyzer, complete replacement of an existing continuous emission monitoring system, or change in location or orientation of the sampling probe or site. Any fuel flowmeter system under § 97.630(a)(1) is subject to the recertification requirements in § 75.20(g)(6) of this chapter.

(3) Approval process for initial certification and recertification. For initial certification of a continuous monitoring system under § 97.630(a)(1), paragraphs (d)(3)(i) through (v) of this

section apply. For recertifications of such monitoring systems, paragraphs (d)(3)(i) through (iv) of this section and the procedures in §§ 75.20(b)(5) and (g)(7) of this chapter (in lieu of the procedures in paragraph (d)(3)(v) of this section) apply, provided that in applying paragraphs (d)(3)(i) through (iv) of this section, the words “certification” and “initial certification” are replaced by the word “recertification” and the word “certified” is replaced by the word “recertified”.

(i) Notification of certification. The designated representative shall submit to the appropriate EPA Regional Office and the Administrator written notice of the dates of certification testing, in accordance with § 97.633.

(ii) Certification application. The designated representative shall submit to the Administrator a certification application for each monitoring system. A complete certification application shall include the information specified in § 75.63 of this chapter.

(iii) Provisional certification date. The provisional certification date for a monitoring system shall be determined in accordance with § 75.20(a)(3) of this chapter. A provisionally certified monitoring system may be used under the TR SO<sub>2</sub> Group 1 Trading Program for a period not to exceed 120 days after receipt by the Administrator of the complete certification application for the monitoring system under paragraph (d)(3)(ii) of this section. Data measured and recorded by the provisionally certified monitoring system, in accordance with the requirements of part 75 of this chapter, will be considered valid quality-assured data (retroactive to the date and time of provisional certification), provided that the Administrator does not invalidate the provisional certification by issuing a notice of disapproval within 120 days of the date of receipt of the complete certification application by the Administrator.

(iv) Certification application approval process. The Administrator will issue a written notice of approval or disapproval of the certification application to the owner or operator within 120 days of receipt of the complete certification application under paragraph (d)(3)(ii) of this section. In the event the Administrator does not issue such a notice within such 120-day period, each monitoring system that meets the applicable performance requirements of part 75 of this chapter and is included in the certification application will be deemed certified for use under the TR SO<sub>2</sub> Group 1 Trading Program.

(A) Approval notice. If the certification application is complete and shows that each monitoring system meets the applicable performance requirements of part 75 of this chapter, then the Administrator will issue a written notice of approval of the certification application within 120 days of receipt.

(B) Incomplete application notice. If the certification application is not complete, then the Administrator will issue a written notice of incompleteness that sets a reasonable date by which the designated representative must submit the additional information required to complete the certification application. If the designated representative does not comply with the notice of incompleteness by the specified date, then the Administrator may issue a notice of disapproval under paragraph (d)(3)(iv)(C) of this section.

(C) Disapproval notice. If the certification application shows that any monitoring system does not meet the performance requirements of part 75 of this chapter or if the certification application is incomplete and the requirement for disapproval under paragraph (d)(3)(iv)(B) of this section is met, then the Administrator will issue a written notice of disapproval of the certification application. Upon issuance of such notice of disapproval, the provisional certification is invalidated by the Administrator and the data measured and recorded by each uncertified monitoring system shall not be considered valid quality-assured data beginning with the date and hour of provisional certification (as defined under § 75.20(a)(3) of this chapter).

(D) Audit decertification. The Administrator may issue a notice of disapproval of the certification status of a monitor in accordance with § 97.632(b).

(v) Procedures for loss of certification. If the Administrator issues a notice of disapproval of a certification application under paragraph (d)(3)(iv)(C) of this section or a notice of disapproval of certification status under paragraph (d)(3)(iv)(D) of this section, then:

(A) The owner or operator shall substitute the following values, for each disapproved monitoring system, for each hour of unit operation during the period of invalid data specified under § 75.20(a)(4)(iii), § 75.20(g)(7), or § 75.21(e) of this chapter and continuing until the applicable date and hour specified under § 75.20(a)(5)(i) or (g)(7) of this chapter:

(1) For a disapproved SO<sub>2</sub> pollutant concentration monitor and disapproved flow monitor, respectively, the

maximum potential concentration of SO<sub>2</sub> and the maximum potential flow rate, as defined in sections 2.1.1.1 and 2.1.4.1 of appendix A to part 75 of this chapter.

(2) For a disapproved moisture monitoring system and disapproved diluent gas monitoring system, respectively, the minimum potential moisture percentage and either the maximum potential CO<sub>2</sub> concentration or the minimum potential O<sub>2</sub> concentration (as applicable), as defined in sections 2.1.5, 2.1.3.1, and 2.1.3.2 of appendix A to part 75 of this chapter.

(3) For a disapproved fuel flowmeter system, the maximum potential fuel flow rate, as defined in section 2.4.2.1 of appendix D to part 75 of this chapter.

(B) The designated representative shall submit a notification of certification retest dates and a new certification application in accordance with paragraphs (d)(3)(i) and (ii) of this section.

(C) The owner or operator shall repeat all certification tests or other requirements that were failed by the monitoring system, as indicated in the Administrator's notice of disapproval, no later than 30 unit operating days after the date of issuance of the notice of disapproval.

(e) The owner or operator of a unit qualified to use the low mass emissions (LME) excepted methodology under § 75.19 of this chapter shall meet the applicable certification and recertification requirements in §§ 75.19(a)(2) and 75.20(h) of this chapter. If the owner or operator of such a unit elects to certify a fuel flowmeter system for heat input determination, the owner or operator shall also meet the certification and recertification requirements in § 75.20(g) of this chapter.

(f) The designated representative of each unit for which the owner or operator intends to use an alternative monitoring system approved by the Administrator under subpart E of part 75 of this chapter shall comply with the applicable notification and application procedures of § 75.20(f) of this chapter.

#### **§ 97.632 Monitoring system out-of-control periods.**

(a) *General provisions.* Whenever any monitoring system fails to meet the quality-assurance and quality-control requirements or data validation requirements of part 75 of this chapter, data shall be substituted using the applicable missing data procedures in subpart D or appendix D to part 75 of this chapter.

(b) *Audit decertification.* Whenever both an audit of a monitoring system

and a review of the initial certification or recertification application reveal that any monitoring system should not have been certified or recertified because it did not meet a particular performance specification or other requirement under § 97.631 or the applicable provisions of part 75 of this chapter, both at the time of the initial certification or recertification application submission and at the time of the audit, the Administrator will issue a notice of disapproval of the certification status of such monitoring system. For the purposes of this paragraph, an audit shall be either a field audit or an audit of any information submitted to the Administrator or any State or permitting authority. By issuing the notice of disapproval, the Administrator revokes prospectively the certification status of the monitoring system. The data measured and recorded by the monitoring system shall not be considered valid quality-assured data from the date of issuance of the notification of the revoked certification status until the date and time that the owner or operator completes subsequently approved initial certification or recertification tests for the monitoring system. The owner or operator shall follow the applicable initial certification or recertification procedures in § 97.631 for each disapproved monitoring system.

**§ 97.633 Notifications concerning monitoring.**

The designated representative of a TR SO<sub>2</sub> Group 1 unit shall submit written notice to the Administrator in accordance with § 75.61 of this chapter.

**§ 97.634 Recordkeeping and reporting.**

(a) *General provisions.* The designated representative shall comply with all recordkeeping and reporting requirements in paragraphs (b) through (e) of this section, the applicable recordkeeping and reporting requirements in subparts F and G of part 75 of this chapter, and the requirements of § 97.614(a).

(b) *Monitoring plans.* The owner or operator of a TR SO<sub>2</sub> Group 1 unit shall comply with requirements of § 75.62 of this chapter.

(c) *Certification applications.* The designated representative shall submit an application to the Administrator within 45 days after completing all initial certification or recertification tests required under § 97.631, including the information required under § 75.63 of this chapter.

(d) *Quarterly reports.* The designated representative shall submit quarterly reports, as follows:

(1) The designated representative shall report the SO<sub>2</sub> mass emissions data and heat input data for the TR SO<sub>2</sub> Group 1 unit, in an electronic quarterly report in a format prescribed by the Administrator, for each calendar quarter beginning with:

(i) For a unit that commences commercial operation before July 1, 2011, the calendar quarter covering January 1, 2012 through March 31, 2012; or

(ii) For a unit that commences commercial operation on or after July 1, 2011, the calendar quarter corresponding to the earlier of the date of provisional certification or the applicable deadline for initial certification under § 97.630(b), unless that quarter is the third or fourth quarter of 2011, in which case reporting shall commence in the quarter covering January 1, 2012 through March 31, 2012.

(2) The designated representative shall submit each quarterly report to the Administrator within 30 days after the end of the calendar quarter covered by the report. Quarterly reports shall be submitted in the manner specified in § 75.64 of this chapter.

(3) For TR SO<sub>2</sub> Group 1 units that are also subject to the Acid Rain Program, TR NO<sub>x</sub> Annual Trading Program, or TR NO<sub>x</sub> Ozone Season Trading Program, quarterly reports shall include the applicable data and information required by subparts F through H of part 75 of this chapter as applicable, in addition to the SO<sub>2</sub> mass emission data, heat input data, and other information required by this subpart.

(4) The Administrator may review and conduct independent audits of any quarterly report in order to determine whether the quarterly report meets the requirements of this subpart and part 75 of this chapter, including the requirement to use substitute data.

(i) The Administrator will notify the designated representative of any determination that the quarterly report fails to meet any such requirements and specify in such notification any corrections that the Administrator believes are necessary to make through resubmission of the quarterly report and a reasonable time period within which the designated representative must respond. Upon request by the designated representative, the Administrator may specify reasonable extensions of such time period. Within the time period (including any such extensions) specified by the Administrator, the designated representative shall resubmit the quarterly report with the corrections specified by the Administrator, except to the extent the designated

representative provides information demonstrating that a specified correction is not necessary because the quarterly report already meets the requirements of this subpart and part 75 of this chapter that are relevant to the specified correction.

(ii) Any resubmission of a quarterly report shall meet the requirements applicable to the submission of a quarterly report under this subpart and part 75 of this chapter, except for the deadline set forth in paragraph (d)(2) of this section.

(e) *Compliance certification.* The designated representative shall submit to the Administrator a compliance certification (in a format prescribed by the Administrator) in support of each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The certification shall state that:

(1) The monitoring data submitted were recorded in accordance with the applicable requirements of this subpart and part 75 of this chapter, including the quality assurance procedures and specifications; and

(2) For a unit with add-on SO<sub>2</sub> emission controls and for all hours where SO<sub>2</sub> data are substituted in accordance with § 75.34(a)(1) of this chapter, the add-on emission controls were operating within the range of parameters listed in the quality assurance/quality control program under appendix B to part 75 of this chapter and the substitute data values do not systematically underestimate SO<sub>2</sub> emissions.

**§ 97.635 Petitions for alternatives to monitoring, recordkeeping, or reporting requirements.**

(a) The designated representative of a TR SO<sub>2</sub> Group 1 unit may submit a petition under § 75.66 of this chapter to the Administrator, requesting approval to apply an alternative to any requirement of §§ 97.630 through 97.634.

(b) A petition submitted under paragraph (a) of this section shall include sufficient information for the evaluation of the petition, including, at a minimum, the following information:

(i) Identification of each unit and source covered by the petition;

(ii) A detailed explanation of why the proposed alternative is being suggested in lieu of the requirement;

(iii) A description and diagram of any equipment and procedures used in the proposed alternative;

(iv) A demonstration that the proposed alternative is consistent with

the purposes of the requirement for which the alternative is proposed and with the purposes of this subpart and part 75 of this chapter and that any adverse effect of approving the alternative will be *de minimis*; and

(v) Any other relevant information that the Administrator may require.

(c) Use of an alternative to any requirement referenced in paragraph (a) of this section is in accordance with this subpart only to the extent that the petition is approved in writing by the Administrator and that such use is in accordance with such approval.

77. Part 97 is amended by adding subpart DDDDD to read as follows:

**Subpart DDDDD—TR SO<sub>2</sub> Group 2 Trading Program**

Sec.

- 97.701 Purpose.
- 97.702 Definitions.
- 97.703 Measurements, abbreviations, and acronyms.
- 97.704 Applicability.
- 97.705 Retired unit exemption.
- 97.706 Standard requirements.
- 97.707 Computation of time.
- 97.708 Administrative appeal procedures.
- 97.709 [Reserved]
- 97.710 State SO<sub>2</sub> Group 2 trading budgets, new unit set-asides, Indian country new unit set-asides and variability limits.
- 97.711 Timing requirements for TR SO<sub>2</sub> Group 2 allowance allocations.
- 97.712 TR SO<sub>2</sub> Group 2 allowance allocations to new units.
- 97.713 Authorization of designated representative and alternate designated representative.
- 97.714 Responsibilities of designated representative and alternate designated representative.
- 97.715 Changing designated representative and alternate designated representative; changes in owners and operators.
- 97.716 Certificate of representation.
- 97.717 Objections concerning designated representative and alternate designated representative.
- 97.718 Delegation by designated representative and alternate designated representative.
- 97.719 [Reserved]
- 97.720 Establishment of compliance accounts and general accounts.
- 97.721 Recordation of TR SO<sub>2</sub> Group 2 allowance allocations.
- 97.722 Submission of TR SO<sub>2</sub> Group 2 allowance transfers.
- 97.723 Recordation of TR SO<sub>2</sub> Group 2 allowance transfers.
- 97.724 Compliance with TR SO<sub>2</sub> Group 2 emissions limitation.
- 97.725 Compliance with TR SO<sub>2</sub> Group 2 assurance provisions.
- 97.726 Banking.
- 97.727 Account error.
- 97.728 Administrator's action on submissions.
- 97.729 [Reserved]
- 97.730 General monitoring, recordkeeping, and reporting requirements.

97.731 Initial monitoring system certification and recertification procedures.

97.732 Monitoring system out-of-control periods.

97.733 Notifications concerning monitoring.

97.734 Recordkeeping and reporting.

97.735 Petitions for alternatives to monitoring, recordkeeping, or reporting requirements.

**Subpart DDDDD—TR SO<sub>2</sub> Group 2 Trading Program**

**§ 97.701 Purpose.**

This subpart sets forth the general, designated representative, allowance, and monitoring provisions for the Transport Rule (TR) SO<sub>2</sub> Group 2 Trading Program, under section 110 of the Clean Air Act and § 52.39 of this chapter, as a means of mitigating interstate transport of fine particulates and sulfur dioxide.

**§ 97.702 Definitions.**

The terms used in this subpart shall have the meanings set forth in this section as follows:

*Acid Rain Program* means a multi-state SO<sub>2</sub> and NO<sub>x</sub> air pollution control and emission reduction program established by the Administrator under title IV of the Clean Air Act and parts 72 through 78 of this chapter.

*Administrator* means the Administrator of the United States Environmental Protection Agency or the Director of the Clean Air Markets Division (or its successor determined by the Administrator) of the United States Environmental Protection Agency, the Administrator's duly authorized representative under this subpart.

*Allocate* or *allocation* means, with regard to TR SO<sub>2</sub> Group 2 allowances, the determination by the Administrator, State, or permitting authority, in accordance with this subpart and any SIP revision submitted by the State and approved by the Administrator under § 52.39(g), (h), or (i) of this chapter, of the amount of such TR SO<sub>2</sub> Group 2 allowances to be initially credited, at no cost to the recipient, to:

- (1) A TR SO<sub>2</sub> Group 2 unit;
- (2) A new unit set-aside;
- (3) An Indian country new unit set-aside; or
- (4) An entity not listed in paragraphs (1) through (3) of this definition;
- (5) Provided that, if the Administrator, State, or permitting authority initially credits, to a TR SO<sub>2</sub> Group 2 unit qualifying for an initial credit, a credit in the amount of zero TR SO<sub>2</sub> Group 2 allowances, the TR SO<sub>2</sub> Group 2 unit will be treated as being allocated an amount (*i.e.*, zero) of TR SO<sub>2</sub> Group 2 allowances.

*Allowable SO<sub>2</sub> emission rate* means, for a unit, the most stringent State or federal SO<sub>2</sub> emission rate limit (in lb/MWhr or, if in lb/mmBtu, converted to lb/MWhr by multiplying it by the unit's heat rate in mmBtu/MWhr) that is applicable to the unit and covers the longest averaging period not exceeding one year.

*Allowance Management System* means the system by which the Administrator records allocations, deductions, and transfers of TR SO<sub>2</sub> Group 2 allowances under the TR SO<sub>2</sub> Group 2 Trading Program. Such allowances are allocated, recorded, held, deducted, or transferred only as whole allowances.

*Allowance Management System account* means an account in the Allowance Management System established by the Administrator for purposes of recording the allocation, holding, transfer, or deduction of TR SO<sub>2</sub> Group 2 allowances.

*Allowance transfer deadline* means, for a control period in a given year, midnight of March 1 (if it is a business day), or midnight of the first business day thereafter (if March 1 is not a business day), immediately after such control period and is the deadline by which a TR SO<sub>2</sub> Group 2 allowance transfer must be submitted for recordation in a TR SO<sub>2</sub> Group 2 source's compliance account in order to be available for use in complying with the source's TR SO<sub>2</sub> Group 2 emissions limitation for such control period in accordance with §§ 97.706 and 97.724.

*Alternate designated representative* means, for a TR SO<sub>2</sub> Group 2 source and each TR SO<sub>2</sub> Group 2 unit at the source, the natural person who is authorized by the owners and operators of the source and all such units at the source, in accordance with this subpart, to act on behalf of the designated representative in matters pertaining to the TR SO<sub>2</sub> Group 2 Trading Program. If the TR SO<sub>2</sub> Group 2 source is also subject to the Acid Rain Program, TR NO<sub>x</sub> Annual Trading Program, or TR NO<sub>x</sub> Ozone Season Trading Program, then this natural person shall be the same natural person as the alternate designated representative, as defined in the respective program.

*Assurance account* means an Allowance Management System account, established by the Administrator under § 97.725(b)(3) for certain owners and operators of a group of one or more TR SO<sub>2</sub> Group 2 sources and units in a given State (and Indian country within the borders of such State), in which are held TR SO<sub>2</sub> Group 2 allowances available for use for a control period in a given year in

complying with the TR SO<sub>2</sub> Group 2 assurance provisions in accordance with §§ 97.706 and 97.725.

*Authorized account representative* means, for a general account, the natural person who is authorized, in accordance with this subpart, to transfer and otherwise dispose of TR SO<sub>2</sub> Group 2 allowances held in the general account and, for a TR SO<sub>2</sub> Group 2 source's compliance account, the designated representative of the source.

*Automated data acquisition and handling system* or *DAHS* means the component of the continuous emission monitoring system, or other emissions monitoring system approved for use under this subpart, designed to interpret and convert individual output signals from pollutant concentration monitors, flow monitors, diluent gas monitors, and other component parts of the monitoring system to produce a continuous record of the measured parameters in the measurement units required by this subpart.

*Biomass* means—

(1) Any organic material grown for the purpose of being converted to energy;

(2) Any organic byproduct of agriculture that can be converted into energy; or

(3) Any material that can be converted into energy and is nonmerchantable for other purposes, that is segregated from other material that is nonmerchantable for other purposes, and that is;

(i) A forest-related organic resource, including mill residues, precommercial thinnings, slash, brush, or byproduct from conversion of trees to merchantable material; or

(ii) A wood material, including pallets, crates, dunnage, manufacturing and construction materials (other than pressure-treated, chemically-treated, or painted wood products), and landscape or right-of-way tree trimmings.

*Boiler* means an enclosed fossil- or other-fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or other medium.

*Bottoming-cycle unit* means a unit in which the energy input to the unit is first used to produce useful thermal energy, where at least some of the reject heat from the useful thermal energy application or process is then used for electricity production.

*Business day* means a day that does not fall on a weekend or a federal holiday.

*Certifying official* means a natural person who is:

(1) For a corporation, a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function or any other person

who performs similar policy- or decision-making functions for the corporation;

(2) For a partnership or sole proprietorship, a general partner or the proprietor respectively; or

(3) For a local government entity or State, federal, or other public agency, a principal executive officer or ranking elected official.

*Clean Air Act* means the Clean Air Act, 42 U.S.C. 7401, *et seq.*

*Coal* means "coal" as defined in § 72.2 of this chapter.

*Coal-derived fuel* means any fuel (whether in a solid, liquid, or gaseous state) produced by the mechanical, thermal, or chemical processing of coal.

*Cogeneration system* means an integrated group, at a source, of equipment (including a boiler, or combustion turbine, and a steam turbine generator) designed to produce useful thermal energy for industrial, commercial, heating, or cooling purposes and electricity through the sequential use of energy.

*Cogeneration unit* means a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine that is a topping-cycle unit or a bottoming-cycle unit:

(1) Operating as part of a cogeneration system; and

(2) Producing on an annual average basis—

(i) For a topping-cycle unit,

(A) Useful thermal energy not less than 5 percent of total energy output; and

(B) Useful power that, when added to one-half of useful thermal energy produced, is not less than 42.5 percent of total energy input, if useful thermal energy produced is 15 percent or more of total energy output, or not less than 45 percent of total energy input, if useful thermal energy produced is less than 15 percent of total energy output.

(ii) For a bottoming-cycle unit, useful power not less than 45 percent of total energy input;

(3) Provided that the requirements in paragraph (2) of this definition shall not apply to a calendar year referenced in paragraph (2) of this definition during which the unit did not operate at all;

(4) Provided that the total energy input under paragraphs (2)(i)(B) and (2)(ii) of this definition shall equal the unit's total energy input from all fuel, except biomass if the unit is a boiler; and

(5) Provided that, if, throughout its operation during the 12-month period or a calendar year referenced in paragraph (2) of this definition, a unit is operated as part of a cogeneration system and the cogeneration system meets on a system-

wide basis the requirement in paragraph (2)(i)(B) or (2)(ii) of this definition, the unit shall be deemed to meet such requirement during that 12-month period or calendar year.

*Combustion turbine* means an enclosed device comprising:

(1) If the device is simple cycle, a compressor, a combustor, and a turbine and in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine; and

(2) If the device is combined cycle, the equipment described in paragraph (1) of this definition and any associated duct burner, heat recovery steam generator, and steam turbine.

*Commence commercial operation* means, with regard to a unit:

(1) To have begun to produce steam, gas, or other heated medium used to generate electricity for sale or use, including test generation, except as provided in § 97.705.

(i) For a unit that is a TR SO<sub>2</sub> Group 2 unit under § 97.704 on the later of January 1, 2005 or the date the unit commences commercial operation as defined in the introductory text of paragraph (1) of this definition and that subsequently undergoes a physical change or is moved to a new location or source, such date shall remain the date of commencement of commercial operation of the unit, which shall continue to be treated as the same unit.

(ii) For a unit that is a TR SO<sub>2</sub> Group 2 unit under § 97.704 on the later of January 1, 2005 or the date the unit commences commercial operation as defined in the introductory text of paragraph (1) of this definition and that is subsequently replaced by a unit at the same or a different source, such date shall remain the replaced unit's date of commencement of commercial operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of commercial operation as defined in paragraph (1) or (2) of this definition as appropriate.

(2) Notwithstanding paragraph (1) of this definition and except as provided in § 97.705, for a unit that is not a TR SO<sub>2</sub> Group 2 unit under § 97.704 on the later of January 1, 2005 or the date the unit commences commercial operation as defined in introductory text of paragraph (1) of this definition, the unit's date for commencement of commercial operation shall be the date on which the unit becomes a TR SO<sub>2</sub> Group 2 unit under § 97.704.

(i) For a unit with a date for commencement of commercial operation as defined in the introductory text of paragraph (2) of this definition

and that subsequently undergoes a physical change or is moved to a different location or source, such date shall remain the date of commencement of commercial operation of the unit, which shall continue to be treated as the same unit.

(ii) For a unit with a date for commencement of commercial operation as defined in the introductory text of paragraph (2) of this definition and that is subsequently replaced by a unit at the same or a different source, such date shall remain the replaced unit's date of commencement of commercial operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of commercial operation as defined in paragraph (1) or (2) of this definition as appropriate.

*Common designated representative* means, with regard to a control period in a given year, a designated representative where, as of April 1 immediately after the allowance transfer deadline for such control period, the same natural person is authorized under §§ 97.713(a) and 97.715(a) as the designated representative for a group of one or more TR SO<sub>2</sub> Group 2 sources and units located in a State (and Indian country within the borders of such State).

*Common designated representative's assurance level* means, with regard to a specific common designated representative and a State (and Indian country within the borders of such State) and control period in a given year for which the State assurance level is exceeded as described in § 97.706(c)(2)(iii), the common designated representative's share of the State SO<sub>2</sub> Group 2 trading budget with the variability limit for the State for such control period.

*Common designated representative's share* means, with regard to a specific common designated representative for a control period in a given year:

(1) With regard to a total amount of SO<sub>2</sub> emissions from all TR SO<sub>2</sub> Group 2 units in a State (and Indian country within the borders of such State) during such control period, the total tonnage of SO<sub>2</sub> emissions during such control period from a group of one or more TR SO<sub>2</sub> Group 2 units located in such State (and such Indian country) and having the common designated representative for such control period;

(2) With regard to a State SO<sub>2</sub> Group 2 trading budget with the variability limit for such control period, the amount (rounded to the nearest allowance) equal to the sum of the total amount of TR SO<sub>2</sub> Group 2 allowances allocated for such control period to a

group of one or more TR SO<sub>2</sub> Group 2 units located in the State (and Indian country within the borders of such State) and having the common designated representative for such control period and of the total amount of TR SO<sub>2</sub> Group 2 allowances purchased by an owner or operator of such TR SO<sub>2</sub> Group 2 units in an auction for such control period and submitted by the State or the permitting authority to the Administrator for recordation in the compliance accounts for such TR SO<sub>2</sub> Group 2 units in accordance with the TR SO<sub>2</sub> Group 2 allowance auction provisions in a SIP revision approved by the Administrator under § 52.39(h) or (i) of this chapter, multiplied by the sum of the State SO<sub>2</sub> Group 2 trading budget under § 97.710(a) and the State's variability limit under § 97.710(b) for such control period and divided by such State SO<sub>2</sub> Group 2 trading budget;

(3) Provided that, in the case of a unit that operates during, but has no amount of TR SO<sub>2</sub> Group 2 allowances allocated under §§ 97.711 and 97.712 for, such control period, the unit shall be treated, solely for purposes of this definition, as being allocated an amount (rounded to the nearest allowance) of TR SO<sub>2</sub> Group 2 allowances for such control period equal to the unit's allowable SO<sub>2</sub> emission rate applicable to such control period, multiplied by a capacity factor of 0.85 (if the unit is a boiler combusting any amount of coal or coal-derived fuel during such control period), 0.24 (if the unit is a simple combustion turbine during such control period), 0.67 (if the unit is a combined cycle turbine during such control period), 0.74 (if the unit is an integrated coal gasification combined cycle unit during such control period), or 0.36 (for any other unit), multiplied by the unit's maximum hourly load as reported in accordance with this subpart and by 8,760 hours/control period, and divided by 2,000 lb/ton.

*Common stack* means a single flue through which emissions from 2 or more units are exhausted.

*Compliance account* means an Allowance Management System account, established by the Administrator for a TR SO<sub>2</sub> Group 2 source under this subpart, in which any TR SO<sub>2</sub> Group 2 allowance allocations to the TR SO<sub>2</sub> Group 2 units at the source are recorded and in which are held any TR SO<sub>2</sub> Group 2 allowances available for use for a control period in a given year in complying with the source's TR SO<sub>2</sub> Group 2 emissions limitation in accordance with §§ 97.706 and 97.724.

*Continuous emission monitoring system* or *CEMS* means the equipment

required under this subpart to sample, analyze, measure, and provide, by means of readings recorded at least once every 15 minutes and using an automated data acquisition and handling system (DAHS), a permanent record of SO<sub>2</sub> emissions, stack gas volumetric flow rate, stack gas moisture content, and O<sub>2</sub> or CO<sub>2</sub> concentration (as applicable), in a manner consistent with part 75 of this chapter and §§ 97.730 through 97.735. The following systems are the principal types of continuous emission monitoring systems:

(1) A flow monitoring system, consisting of a stack flow rate monitor and an automated data acquisition and handling system and providing a permanent, continuous record of stack gas volumetric flow rate, in standard cubic feet per hour (scfh);

(2) A SO<sub>2</sub> monitoring system, consisting of a SO<sub>2</sub> pollutant concentration monitor and an automated data acquisition and handling system and providing a permanent, continuous record of SO<sub>2</sub> emissions, in parts per million (ppm);

(3) A moisture monitoring system, as defined in § 75.11(b)(2) of this chapter and providing a permanent, continuous record of the stack gas moisture content, in percent H<sub>2</sub>O;

(4) A CO<sub>2</sub> monitoring system, consisting of a CO<sub>2</sub> pollutant concentration monitor (or an O<sub>2</sub> monitor plus suitable mathematical equations from which the CO<sub>2</sub> concentration is derived) and an automated data acquisition and handling system and providing a permanent, continuous record of CO<sub>2</sub> emissions, in percent CO<sub>2</sub>; and

(5) An O<sub>2</sub> monitoring system, consisting of an O<sub>2</sub> concentration monitor and an automated data acquisition and handling system and providing a permanent, continuous record of O<sub>2</sub>, in percent O<sub>2</sub>.

*Control period* means the period starting January 1 of a calendar year, except as provided in § 97.706(c)(3), and ending on December 31 of the same year, inclusive.

*Designated representative* means, for a TR SO<sub>2</sub> Group 2 source and each TR SO<sub>2</sub> Group 2 unit at the source, the natural person who is authorized by the owners and operators of the source and all such units at the source, in accordance with this subpart, to represent and legally bind each owner and operator in matters pertaining to the TR SO<sub>2</sub> Group 2 Trading Program. If the TR SO<sub>2</sub> Group 2 source is also subject to the Acid Rain Program, TR NO<sub>x</sub> Annual Trading Program, or TR NO<sub>x</sub> Ozone Season Trading Program, then this natural person shall be the same

natural person as the designated representative, as defined in the respective program.

*Emissions* means air pollutants exhausted from a unit or source into the atmosphere, as measured, recorded, and reported to the Administrator by the designated representative, and as modified by the Administrator:

(1) In accordance with this subpart; and

(2) With regard to a period before the unit or source is required to measure, record, and report such air pollutants in accordance with this subpart, in accordance with part 75 of this chapter.

*Excess emissions* means any ton of emissions from the TR SO<sub>2</sub> Group 2 units at a TR SO<sub>2</sub> Group 2 source during a control period in a given year that exceeds the TR SO<sub>2</sub> Group 2 emissions limitation for the source for such control period.

*Fossil fuel* means—

(1) Natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material; or

(2) For purposes of applying the limitation on “average annual fuel consumption of fossil fuel” in §§ 97.704(b)(2)(i)(B) and (ii), natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material for the purpose of creating useful heat.

*Fossil-fuel-fired* means, with regard to a unit, combusting any amount of fossil fuel in 2005 or any calendar year thereafter.

*General account* means an Allowance Management System account, established under this subpart, that is not a compliance account or an assurance account.

*Generator* means a device that produces electricity.

*Gross electrical output* means, for a unit, electricity made available for use, including any such electricity used in the power production process (which process includes, but is not limited to, any on-site processing or treatment of fuel combusted at the unit and any on-site emission controls).

*Heat input* means, for a unit for a specified period of time, the product (in mmBtu/time) of the gross calorific value of the fuel (in mmBtu/lb) fed into the unit multiplied by the fuel feed rate (in lb of fuel/time), as measured, recorded, and reported to the Administrator by the designated representative and as modified by the Administrator in accordance with this subpart and excluding the heat derived from preheated combustion air, recirculated flue gases, or exhaust.

*Heat input rate* means, for a unit, the amount of heat input (in mmBtu)

divided by unit operating time (in hr) or, for a unit and a specific fuel, the amount of heat input attributed to the fuel (in mmBtu) divided by the unit operating time (in hr) during which the unit combusts the fuel.

*Heat rate* means, for a unit, the unit's maximum design heat input (in Btu/hr), divided by the product of 1,000,000 Btu/mmBtu and the unit's maximum hourly load.

*Indian country* means “Indian country” as defined in 18 U.S.C. 1151.

*Life-of-the-unit, firm power contractual arrangement* means a unit participation power sales agreement under which a utility or industrial customer reserves, or is entitled to receive, a specified amount or percentage of nameplate capacity and associated energy generated by any specified unit and pays its proportional amount of such unit's total costs, pursuant to a contract:

(1) For the life of the unit;

(2) For a cumulative term of no less than 30 years, including contracts that permit an election for early termination; or

(3) For a period no less than 25 years or 70 percent of the economic useful life of the unit determined as of the time the unit is built, with option rights to purchase or release some portion of the nameplate capacity and associated energy generated by the unit at the end of the period.

*Maximum design heat input* means, for a unit, the maximum amount of fuel per hour (in Btu/hr) that the unit is capable of combusting on a steady state basis as of the initial installation of the unit as specified by the manufacturer of the unit.

*Monitoring system* means any monitoring system that meets the requirements of this subpart, including a continuous emission monitoring system, an alternative monitoring system, or an excepted monitoring system under part 75 of this chapter.

*Nameplate capacity* means, starting from the initial installation of a generator, the maximum electrical generating output (in MWe, rounded to the nearest tenth) that the generator is capable of producing on a steady state basis and during continuous operation (when not restricted by seasonal or other deratings) as of such installation as specified by the manufacturer of the generator or, starting from the completion of any subsequent physical change in the generator resulting in an increase in the maximum electrical generating output that the generator is capable of producing on a steady state basis and during continuous operation (when not restricted by seasonal or

other deratings), such increased maximum amount (in MWe, rounded to the nearest tenth) as of such completion as specified by the person conducting the physical change.

*Natural gas* means “natural gas” as defined in § 72.2 of this chapter.

*Newly affected TR SO<sub>2</sub> Group 2 unit* means a unit that was not a TR SO<sub>2</sub> Group 2 unit when it began operating but that thereafter becomes a TR SO<sub>2</sub> Group 2 unit.

*Operate* or *operation* means, with regard to a unit, to combust fuel.

*Operator* means, for a TR SO<sub>2</sub> Group 2 source or a TR SO<sub>2</sub> Group 2 unit at a source respectively, any person who operates, controls, or supervises a TR SO<sub>2</sub> Group 2 unit at the source or the TR SO<sub>2</sub> Group 2 unit and shall include, but not be limited to, any holding company, utility system, or plant manager of such source or unit.

*Owner* means, for a TR SO<sub>2</sub> Group 2 source or a TR SO<sub>2</sub> Group 2 unit at a source respectively, any of the following persons:

(1) Any holder of any portion of the legal or equitable title in a TR SO<sub>2</sub> Group 2 unit at the source or the TR SO<sub>2</sub> Group 2 unit;

(2) Any holder of a leasehold interest in a TR SO<sub>2</sub> Group 2 unit at the source or the TR SO<sub>2</sub> Group 2 unit, provided that, unless expressly provided for in a leasehold agreement, “owner” shall not include a passive lessor, or a person who has an equitable interest through such lessor, whose rental payments are not based (either directly or indirectly) on the revenues or income from such TR SO<sub>2</sub> Group 2 unit; and

(3) Any purchaser of power from a TR SO<sub>2</sub> Group 2 unit at the source or the TR SO<sub>2</sub> Group 2 unit under a life-of-the-unit, firm power contractual arrangement.

*Permanently retired* means, with regard to a unit, a unit that is unavailable for service and that the unit's owners and operators do not expect to return to service in the future.

*Permitting authority* means “permitting authority” as defined in §§ 70.2 and 71.2 of this chapter.

*Potential electrical output capacity* means, for a unit, 33 percent of the unit's maximum design heat input, divided by 3,413 Btu/kWh, divided by 1,000 kWh/MWh, and multiplied by 8,760 hr/yr.

*Receive* or *receipt of* means, when referring to the Administrator, to come into possession of a document, information, or correspondence (whether sent in hard copy or by authorized electronic transmission), as indicated in an official log, or by a notation made on the document,

information, or correspondence, by the Administrator in the regular course of business.

*Recordation, record, or recorded* means, with regard to TR SO<sub>2</sub> Group 2 allowances, the moving of TR SO<sub>2</sub> Group 2 allowances by the Administrator into, out of, or between Allowance Management System accounts, for purposes of allocation, auction, transfer, or deduction.

*Reference method* means any direct test method of sampling and analyzing for an air pollutant as specified in § 75.22 of this chapter.

*Replacement, replace, or replaced* means, with regard to a unit, the demolishing of a unit, or the permanent retirement and permanent disabling of a unit, and the construction of another unit (the replacement unit) to be used instead of the demolished or retired unit (the replaced unit).

*Sequential use of energy* means:

(1) The use of reject heat from electricity production in a useful thermal energy application or process; or

(2) The use of reject heat from useful thermal energy application or process in electricity production.

*Serial number* means, for a TR SO<sub>2</sub> Group 2 allowance, the unique identification number assigned to each TR SO<sub>2</sub> Group 2 allowance by the Administrator.

*Solid waste incineration unit* means a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine that is a "solid waste incineration unit" as defined in section 129(g)(1) of the Clean Air Act.

*Source* means all buildings, structures, or installations located in one or more contiguous or adjacent properties under common control of the same person or persons. This definition does not change or otherwise affect the definition of "major source", "stationary source", or "source" as set forth and implemented in a title V operating permit program or any other program under the Clean Air Act.

*State* means one of the States that is subject to the TR SO<sub>2</sub> Group 2 Trading Program pursuant to § 52.39(a), (c), (g), (h), and (i) of this chapter.

*Submit* or *serve* means to send or transmit a document, information, or correspondence to the person specified in accordance with the applicable regulation:

- (1) In person;
- (2) By United States Postal Service; or
- (3) By other means of dispatch or transmission and delivery;
- (4) Provided that compliance with any "submission" or "service" deadline shall be determined by the date of

dispatch, transmission, or mailing and not the date of receipt.

*Topping-cycle unit* means a unit in which the energy input to the unit is first used to produce useful power, including electricity, where at least some of the reject heat from the electricity production is then used to provide useful thermal energy.

*Total energy input* means, for a unit, total energy of all forms supplied to the unit, excluding energy produced by the unit. Each form of energy supplied shall be measured by the lower heating value of that form of energy calculated as follows:

$$\text{LHV} = \text{HHV} - 10.55(\text{W} + 9\text{H})$$

Where:

LHV = lower heating value of the form of energy in Btu/lb,  
 HHV = higher heating value of the form of energy in Btu/lb,  
 W = weight % of moisture in the form of energy, and  
 H = weight % of hydrogen in the form of energy.

*Total energy output* means, for a unit, the sum of useful power and useful thermal energy produced by the unit.

*TR NO<sub>x</sub> Annual Trading Program* means a multi-state NO<sub>x</sub> air pollution control and emission reduction program established in accordance with subpart AAAAA of this part and § 52.38(a) of this chapter (including such a program that is revised in a SIP revision approved by the Administrator under § 52.38(a)(3) or (4) of this chapter or that is established in a SIP revision approved by the Administrator under § 52.38(a)(5) of this chapter), as a means of mitigating interstate transport of fine particulates and NO<sub>x</sub>.

*TR NO<sub>x</sub> Ozone Season Trading Program* means a multi-state NO<sub>x</sub> air pollution control and emission reduction program established in accordance with subpart BBBBB of this part and § 52.38(b) of this chapter (including such a program that is revised in a SIP revision approved by the Administrator under § 52.38(b)(3) or (4) of this chapter or that is established in a SIP revision approved by the Administrator under § 52.38(b)(5) of this chapter), as a means of mitigating interstate transport of ozone and NO<sub>x</sub>.

*TR SO<sub>2</sub> Group 2 allowance* means a limited authorization issued and allocated or auctioned by the Administrator under this subpart, or by a State or permitting authority under a SIP revision approved by the Administrator under § 52.39(g), (h), or (i) of this chapter, to emit one ton of SO<sub>2</sub> during a control period of the specified calendar year for which the authorization is allocated or auctioned

or of any calendar year thereafter under the TR SO<sub>2</sub> Group 2 Trading Program.

*TR SO<sub>2</sub> Group 2 allowance deduction* or *deduct TR SO<sub>2</sub> Group 2 allowances* means the permanent withdrawal of TR SO<sub>2</sub> Group 2 allowances by the Administrator from a compliance account (e.g., in order to account for compliance with the TR SO<sub>2</sub> Group 2 emissions limitation) or from an assurance account (e.g., in order to account for compliance with the assurance provisions under §§ 97.706 and 97.725).

*TR SO<sub>2</sub> Group 2 allowances held or hold TR SO<sub>2</sub> Group 2 allowances* means the TR SO<sub>2</sub> Group 2 allowances treated as included in an Allowance Management System account as of a specified point in time because at that time they:

(1) Have been recorded by the Administrator in the account or transferred into the account by a correctly submitted, but not yet recorded, TR SO<sub>2</sub> Group 2 allowance transfer in accordance with this subpart; and

(2) Have not been transferred out of the account by a correctly submitted, but not yet recorded, TR SO<sub>2</sub> Group 2 allowance transfer in accordance with this subpart.

*TR SO<sub>2</sub> Group 2 emissions limitation* means, for a TR SO<sub>2</sub> Group 2 source, the tonnage of SO<sub>2</sub> emissions authorized in a control period by the TR SO<sub>2</sub> Group 2 allowances available for deduction for the source under § 97.724(a) for such control period.

*TR SO<sub>2</sub> Group 2 source* means a source that includes one or more TR SO<sub>2</sub> Group 2 units.

*TR SO<sub>2</sub> Group 2 Trading Program* means a multi-state SO<sub>2</sub> air pollution control and emission reduction program established in accordance with this subpart and § 52.39(a), (c), and (g) through (k) of this chapter (including such a program that is revised in a SIP revision approved by the Administrator under § 52.39(g) or (h) of this chapter or that is established in a SIP revision approved by the Administrator under § 52.39(i) of this chapter), as a means of mitigating interstate transport of fine particulates and SO<sub>2</sub>.

*TR SO<sub>2</sub> Group 2 unit* means a unit that is subject to the TR SO<sub>2</sub> Group 2 Trading Program under § 97.704.

*Unit* means a stationary, fossil-fuel-fired boiler, stationary, fossil-fuel-fired combustion turbine, or other stationary, fossil-fuel-fired combustion device. A unit that undergoes a physical change or is moved to a different location or source shall continue to be treated as the same unit. A unit (the replaced unit) that is replaced by another unit (the



replacement unit) at the same or a different source shall continue to be treated as the same unit, and the replacement unit shall be treated as a separate unit.

*Unit operating day* means, with regard to a unit, a calendar day in which the unit combusts any fuel.

*Unit operating hour or hour of unit operation* means, with regard to a unit, an hour in which the unit combusts any fuel.

*Useful power* means, with regard to a unit, electricity or mechanical energy that the unit makes available for use, excluding any such energy used in the power production process (which process includes, but is not limited to, any on-site processing or treatment of fuel combusted at the unit and any on-site emission controls).

*Useful thermal energy* means thermal energy that is:

(1) Made available to an industrial or commercial process (not a power production process), excluding any heat contained in condensate return or makeup water;

(2) Used in a heating application (e.g., space heating or domestic hot water heating); or

(3) Used in a space cooling application (i.e., in an absorption chiller).

*Utility power distribution system* means the portion of an electricity grid owned or operated by a utility and dedicated to delivering electricity to customers.

### § 97.703 Measurements, abbreviations, and acronyms.

Measurements, abbreviations, and acronyms used in this subpart are defined as follows:

Btu—British thermal unit  
CO<sub>2</sub>—carbon dioxide  
H<sub>2</sub>O—water  
hr—hour  
kW—kilowatt electrical  
kWh—kilowatt hour  
lb—pound  
mmBtu—million Btu  
MWe—megawatt electrical  
MWh—megawatt hour  
NO<sub>x</sub>—nitrogen oxides  
O<sub>2</sub>—oxygen  
ppm—parts per million  
scfh—standard cubic feet per hour  
SO<sub>2</sub>—sulfur dioxide  
yr—year

### § 97.704 Applicability.

(a) Except as provided in paragraph (b) of this section:

(1) The following units in a State (and Indian country within the borders of such State) shall be TR SO<sub>2</sub> Group 2 units, and any source that includes one or more such units shall be a TR SO<sub>2</sub>

Group 2 source, subject to the requirements of this subpart: Any stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time, on or after January 1, 2005, a generator with nameplate capacity of more than 25 MWe producing electricity for sale.

(2) If a stationary boiler or stationary combustion turbine that, under paragraph (a)(1) of this section, is not a TR SO<sub>2</sub> Group 2 unit begins to combust fossil fuel or to serve a generator with nameplate capacity of more than 25 MWe producing electricity for sale, the unit shall become a TR SO<sub>2</sub> Group 2 unit as provided in paragraph (a)(1) of this section on the first date on which it both combusts fossil fuel and serves such generator.

(b) Any unit in a State (and Indian country within the borders of such State) that otherwise is a TR SO<sub>2</sub> Group 2 unit under paragraph (a) of this section and that meets the requirements set forth in paragraph (b)(1)(i) or (2)(i) of this section shall not be a TR SO<sub>2</sub> Group 2 unit:

(1)(i) Any unit:

(A) Qualifying as a cogeneration unit throughout the later of 2005 or the 12-month period starting on the date the unit first produces electricity and continuing to qualify as a cogeneration unit throughout each calendar year ending after the later of 2005 or such 12-month period; and

(B) Not supplying in 2005 or any calendar year thereafter more than one-third of the unit's potential electric output capacity or 219,000 MWh, whichever is greater, to any utility power distribution system for sale.

(ii) If, after qualifying under paragraph (b)(1)(i) of this section as not being a TR SO<sub>2</sub> Group 2 unit, a unit subsequently no longer meets all the requirements of paragraph (b)(1)(i) of this section, the unit shall become a TR SO<sub>2</sub> Group 2 unit starting on the earlier of January 1 after the first calendar year during which the unit first no longer qualifies as a cogeneration unit or January 1 after the first calendar year during which the unit no longer meets the requirements of paragraph (b)(1)(i)(B) of this section. The unit shall thereafter continue to be a TR SO<sub>2</sub> Group 2 unit.

(2)(i) Any unit:

(A) Qualifying as a solid waste incineration unit throughout the later of 2005 or the 12-month period starting on the date the unit first produces electricity and continuing to qualify as a solid waste incineration unit throughout each calendar year ending after the later of 2005 or such 12-month period; and

(B) With an average annual fuel consumption of fossil fuel for the first 3 consecutive calendar years of operation starting no earlier than 2005 of less than 20 percent (on a Btu basis) and an average annual fuel consumption of fossil fuel for any 3 consecutive calendar years thereafter of less than 20 percent (on a Btu basis).

(i) If, after qualifying under paragraph (b)(2)(i) of this section as not being a TR SO<sub>2</sub> Group 2 unit, a unit subsequently no longer meets all the requirements of paragraph (b)(1)(i) of this section, the unit shall become a TR SO<sub>2</sub> Group 2 unit starting on the earlier of January 1 after the first calendar year during which the unit first no longer qualifies as a solid waste incineration unit or January 1 after the first 3 consecutive calendar years after 2005 for which the unit has an average annual fuel consumption of fossil fuel of 20 percent or more. The unit shall thereafter continue to be a TR SO<sub>2</sub> Group 2 unit.

(c) A certifying official of an owner or operator of any unit or other equipment may submit a petition (including any supporting documents) to the Administrator at any time for a determination concerning the applicability, under paragraphs (a) and (b) of this section or a SIP revision approved under § 52.39(h) or (i) of this chapter, of the TR SO<sub>2</sub> Group 2 Trading Program to the unit or other equipment.

(1) Petition content. The petition shall be in writing and include the identification of the unit or other equipment and the relevant facts about the unit or other equipment. The petition and any other documents provided to the Administrator in connection with the petition shall include the following certification statement, signed by the certifying official: "I am authorized to make this submission on behalf of the owners and operators of the unit or other equipment for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

(2) Response. The Administrator will issue a written response to the petition

and may request supplemental information determined by the Administrator to be relevant to such petition. The Administrator's determination concerning the applicability, under paragraphs (a) and (b) of this section, of the TR SO<sub>2</sub> Group 2 Trading Program to the unit or other equipment shall be binding on any State or permitting authority unless the Administrator determines that the petition or other documents or information provided in connection with the petition contained significant, relevant errors or omissions.

#### § 97.705 Retired unit exemption.

(a)(1) Any TR SO<sub>2</sub> Group 2 unit that is permanently retired shall be exempt from § 97.706(b) and (c)(1), § 97.724, and §§ 97.730 through 97.735.

(2) The exemption under paragraph (a)(1) of this section shall become effective the day on which the TR SO<sub>2</sub> Group 2 unit is permanently retired. Within 30 days of the unit's permanent retirement, the designated representative shall submit a statement to the Administrator. The statement shall state, in a format prescribed by the Administrator, that the unit was permanently retired on a specified date and will comply with the requirements of paragraph (b) of this section.

(b) Special provisions. (1) A unit exempt under paragraph (a) of this section shall not emit any SO<sub>2</sub>, starting on the date that the exemption takes effect.

(2) For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under paragraph (a) of this section shall retain, at the source that includes the unit, records demonstrating that the unit is permanently retired. The 5-year period for keeping records may be extended for cause, at any time before the end of the period, in writing by the Administrator. The owners and operators bear the burden of proof that the unit is permanently retired.

(3) The owners and operators and, to the extent applicable, the designated representative of a unit exempt under paragraph (a) of this section shall comply with the requirements of the TR SO<sub>2</sub> Group 2 Trading Program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.

(4) A unit exempt under paragraph (a) of this section shall lose its exemption on the first date on which the unit resumes operation. Such unit shall be treated, for purposes of applying allocation, monitoring, reporting, and recordkeeping requirements under this

subpart, as a unit that commences commercial operation on the first date on which the unit resumes operation.

#### § 97.706 Standard requirements.

(a) *Designated representative requirements.* The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with §§ 97.713 through 97.718.

(b) *Emissions monitoring, reporting, and recordkeeping requirements.* (1) The owners and operators, and the designated representative, of each TR SO<sub>2</sub> Group 2 source and each TR SO<sub>2</sub> Group 2 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of §§ 97.730 through 97.735.

(2) The emissions data determined in accordance with §§ 97.730 through 97.735 shall be used to calculate allocations of TR SO<sub>2</sub> Group 2 allowances under §§ 97.711(a)(2) and (b) and 97.712 and to determine compliance with the TR SO<sub>2</sub> Group 2 emissions limitation and assurance provisions under paragraph (c) of this section, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with §§ 97.730 through 97.735 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) *SO<sub>2</sub> emissions requirements.* (1) TR SO<sub>2</sub> Group 2 emissions limitation. (i) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR SO<sub>2</sub> Group 2 source and each TR SO<sub>2</sub> Group 2 unit at the source shall hold, in the source's compliance account, TR SO<sub>2</sub> Group 2 allowances available for deduction for such control period under § 97.724(a) in an amount not less than the tons of total SO<sub>2</sub> emissions for such control period from all TR SO<sub>2</sub> Group 2 units at the source.

(ii) If total SO<sub>2</sub> emissions during a control period in a given year from the TR SO<sub>2</sub> Group 2 units at a TR SO<sub>2</sub> Group 2 source are in excess of the TR SO<sub>2</sub> Group 2 emissions limitation set forth in paragraph (c)(1)(i) of this section, then:

(A) The owners and operators of the source and each TR SO<sub>2</sub> Group 2 unit at the source shall hold the TR SO<sub>2</sub> Group 2 allowances required for deduction under § 97.724(d); and

(B) The owners and operators of the source and each TR SO<sub>2</sub> Group 2 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart and the Clean Air Act.

(2) TR SO<sub>2</sub> Group 2 assurance provisions. (i) If total SO<sub>2</sub> emissions during a control period in a given year from all TR SO<sub>2</sub> Group 2 units at TR SO<sub>2</sub> Group 2 sources in a State (and Indian country within the borders of such State) exceed the State assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such SO<sub>2</sub> emissions during such control period exceeds the common designated representative's assurance level for the State and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR SO<sub>2</sub> Group 2 allowances available for deduction for such control period under § 97.725(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with § 97.725(b), of multiplying—

(A) The quotient of the amount by which the common designated representative's share of such SO<sub>2</sub> emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the State (and Indian country within the borders of such State) for such control period, by which each common designated representative's share of such SO<sub>2</sub> emissions exceeds the respective common designated representative's assurance level; and

(B) The amount by which total SO<sub>2</sub> emissions from all TR SO<sub>2</sub> Group 2 units at TR SO<sub>2</sub> Group 2 sources in the State (and Indian country within the borders of such State) for such control period exceed the State assurance level.

(ii) The owners and operators shall hold the TR SO<sub>2</sub> Group 2 allowances required under paragraph (c)(2)(i) of this section, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.

(iii) Total SO<sub>2</sub> emissions from all TR SO<sub>2</sub> Group 2 units at TR SO<sub>2</sub> Group 2

sources in a State (and Indian country within the borders of such State) during a control period in a given year exceed the State assurance level if such total SO<sub>2</sub> emissions exceed the sum, for such control period, of the State SO<sub>2</sub> Group 2 trading budget under § 97.710(a) and the State's variability limit under § 97.710(b).

(iv) It shall not be a violation of this subpart or of the Clean Air Act if total SO<sub>2</sub> emissions from all TR SO<sub>2</sub> Group 2 units at TR SO<sub>2</sub> Group 2 sources in a State (and Indian country within the borders of such State) during a control period exceed the State assurance level or if a common designated representative's share of total SO<sub>2</sub> emissions from the TR SO<sub>2</sub> Group 2 units at TR SO<sub>2</sub> Group 2 sources in a State (and Indian country within the borders of such State) during a control period exceeds the common designated representative's assurance level.

(v) To the extent the owners and operators fail to hold TR SO<sub>2</sub> Group 2 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) of this section,

(A) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and

(B) Each TR SO<sub>2</sub> Group 2 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) of this section and each day of such control period shall constitute a separate violation of this subpart and the Clean Air Act.

(3) Compliance periods. A TR SO<sub>2</sub> Group 2 unit shall be subject to the requirements under paragraphs (c)(1) and (c)(2) of this section for the control period starting on the later of January 1, 2012 or the deadline for meeting the unit's monitor certification requirements under § 97.730(b) and for each control period thereafter.

(4) Vintage of allowances held for compliance. (i) A TR SO<sub>2</sub> Group 2 allowance held for compliance with the requirements under paragraph (c)(1)(i) of this section for a control period in a given year must be a TR SO<sub>2</sub> Group 2 allowance that was allocated for such control period or a control period in a prior year.

(ii) A TR SO<sub>2</sub> Group 2 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) of this section for a control period in a given year must be a TR SO<sub>2</sub> Group 2 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

(5) Allowance Management System requirements. Each TR SO<sub>2</sub> Group 2 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with this subpart.

(6) Limited authorization. A TR SO<sub>2</sub> Group 2 allowance is a limited authorization to emit one ton of SO<sub>2</sub> during the control period in one year. Such authorization is limited in its use and duration as follows:

(i) Such authorization shall only be used in accordance with the TR SO<sub>2</sub> Group 2 Trading Program; and

(ii) Notwithstanding any other provision of this subpart, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

(7) Property right. A TR SO<sub>2</sub> Group 2 allowance does not constitute a property right.

(d) *Title V permit requirements.* (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR SO<sub>2</sub> Group 2 allowances in accordance with this subpart.

(2) A description of whether a unit is required to monitor and report SO<sub>2</sub> emissions using a continuous emission monitoring system (under subpart H of part 75 of this chapter), an excepted monitoring system (under appendices D and E to part 75 of this chapter), a low mass emissions excepted monitoring methodology (under § 75.19 of this chapter), or an alternative monitoring system (under subpart E of part 75 of this chapter) in accordance with §§ 97.730 through 97.735 may be added to, or changed in, a title V permit using minor permit modification procedures in accordance with §§ 70.7(e)(2) and 71.7(e)(1) of this chapter, provided that the requirements applicable to the described monitoring and reporting (as added or changed, respectively) are already incorporated in such permit. This paragraph explicitly provides that the addition of, or change to, a unit's description as described in the prior sentence is eligible for minor permit modification procedures in accordance with §§ 70.7(e)(2)(i)(B) and 71.7(e)(1)(i)(B) of this chapter.

(e) *Additional recordkeeping and reporting requirements.* (1) Unless otherwise provided, the owners and operators of each TR SO<sub>2</sub> Group 2 source and each TR SO<sub>2</sub> Group 2 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a

period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.

(i) The certificate of representation under § 97.716 for the designated representative for the source and each TR SO<sub>2</sub> Group 2 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under § 97.716 changing the designated representative.

(ii) All emissions monitoring information, in accordance with this subpart.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR SO<sub>2</sub> Group 2 Trading Program.

(2) The designated representative of a TR SO<sub>2</sub> Group 2 source and each TR SO<sub>2</sub> Group 2 unit at the source shall make all submissions required under the TR SO<sub>2</sub> Group 2 Trading Program, except as provided in § 97.718. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in parts 70 and 71 of this chapter.

(f) *Liability.* (1) Any provision of the TR SO<sub>2</sub> Group 2 Trading Program that applies to a TR SO<sub>2</sub> Group 2 source or the designated representative of a TR SO<sub>2</sub> Group 2 source shall also apply to the owners and operators of such source and of the TR SO<sub>2</sub> Group 2 units at the source.

(2) Any provision of the TR SO<sub>2</sub> Group 2 Trading Program that applies to a TR SO<sub>2</sub> Group 2 unit or the designated representative of a TR SO<sub>2</sub> Group 2 unit shall also apply to the owners and operators of such unit.

(g) *Effect on other authorities.* No provision of the TR SO<sub>2</sub> Group 2 Trading Program or exemption under § 97.705 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR SO<sub>2</sub> Group 2 source or TR SO<sub>2</sub> Group 2 unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

**§ 97.707 Computation of time.**

(a) Unless otherwise stated, any time period scheduled, under the TR SO<sub>2</sub> Group 2 Trading Program, to begin on the occurrence of an act or event shall begin on the day the act or event occurs.

(b) Unless otherwise stated, any time period scheduled, under the TR SO<sub>2</sub> Group 2 Trading Program, to begin before the occurrence of an act or event shall be computed so that the period ends the day before the act or event occurs.

(c) Unless otherwise stated, if the final day of any time period, under the TR SO<sub>2</sub> Group 2 Trading Program, is not a business day, the time period shall be extended to the next business day.

**§ 97.708 Administrative appeal procedures.**

The administrative appeal procedures for decisions of the Administrator under the TR SO<sub>2</sub> Group 2 Trading Program are set forth in part 78 of this chapter.

**§ 97.709 [Reserved]**

**§ 97.710 State SO<sub>2</sub> Group 2 trading budgets, new unit set-asides, Indian country new unit set-aside, and variability limits.**

(a) The State SO<sub>2</sub> Group 2 trading budgets, new unit set-asides, and Indian country new unit set-asides for allocations of TR SO<sub>2</sub> Group 2 allowances for the control periods in 2012 and thereafter are as follows:

State	SO <sub>2</sub> Group 2 trading budget (tons) * for 2012 and 2013	New unit set-aside (tons) for 2012 and 2013	Indian country new unit set-aside (tons) for 2012 and 2013
Alabama .....	216,033	4,321	.....
Georgia .....	158,527	3,171	.....
Kansas .....	41,528	789	42
Minnesota .....	41,981	798	42
Nebraska .....	65,052	2,537	65
South Carolina .....	88,620	1,683	89
Texas .....	243,954	11,954	244

State	SO <sub>2</sub> Group 2 trading budget (tons) * for 2014 and thereafter	New unit set-aside (tons) for 2014 and thereafter	Indian country new unit set-aside (tons) for 2014 and thereafter
Alabama .....	213,258	4,265	.....
Georgia .....	95,231	1,905	.....
Kansas .....	41,528	789	42
Minnesota .....	41,981	798	42
Nebraska .....	65,052	2,537	65
South Carolina .....	88,620	1,683	89
Texas .....	243,954	11,954	244

\* Each trading budget includes the new unit set-aside and, where applicable, the Indian country new unit set-aside and does not include the variability limit.

(b) The States' variability limits for the State SO<sub>2</sub> Group 2 trading budgets

for the control periods in 2012 and thereafter are as follows:

State	Variability limits for 2012 and 2013	Variability limits for 2014 and thereafter
Alabama .....	38,886	38,386
Georgia .....	28,535	17,142
Kansas .....	7,475	7,475
Minnesota .....	7,557	7,557
Nebraska .....	11,709	11,709
South Carolina .....	15,952	15,952
Texas .....	43,912	43,912

**§ 97.711 Timing requirements for TR SO<sub>2</sub> Group 2 allowance allocations.**

(a) Existing units. (1) TR SO<sub>2</sub> Group 2 allowances are allocated, for the control periods in 2012 and each year thereafter, as provided in a notice of data availability issued by the Administrator. Providing an allocation to a unit in such notice does not constitute a determination that the unit is a TR SO<sub>2</sub> Group 2 unit, and not providing an allocation to a unit in such notice does not constitute a

determination that the unit is not a TR SO<sub>2</sub> Group 2 unit.

(2) Notwithstanding paragraph (a)(1) of this section, if a unit provided an allocation in the notice of data availability issued under paragraph (a)(1) of this section does not operate, starting after 2011, during the control period in two consecutive years, such unit will not be allocated the TR SO<sub>2</sub> Group 2 allowances provided in such notice for the unit for the control periods in the fifth year after the first

such year and in each year after that fifth year. All TR SO<sub>2</sub> Group 2 allowances that would otherwise have been allocated to such unit will be allocated to the new unit set-aside for the State where such unit is located and for the respective years involved. If such unit resumes operation, the Administrator will allocate TR SO<sub>2</sub> Group 2 allowances to the unit in accordance with paragraph (b) of this section.

(b) *New units.* (1) New unit set-asides. (i) By June 1, 2012 and June 1 of each year thereafter, the Administrator will calculate the TR SO<sub>2</sub> Group 2 allowance allocation to each TR SO<sub>2</sub> Group 2 unit in a State, in accordance with § 97.712(a)(2) through (7) and (12), for the control period in the year of the applicable calculation deadline under this paragraph and will promulgate a notice of data availability of the results of the calculations.

(ii) For each notice of data availability required in paragraph (b)(1)(i) of this section, the Administrator will provide an opportunity for submission of objections to the calculations referenced in such notice.

(A) Objections shall be submitted by the deadline specified in each notice of data availability required in paragraph (b)(1)(i) of this section and shall be limited to addressing whether the calculations (including the identification of the TR SO<sub>2</sub> Group 2 units) are in accordance with § 97.712(a)(2) through (7) and (12) and §§ 97.706(b)(2) and 97.730 through 97.735.

(B) The Administrator will adjust the calculations to the extent necessary to ensure that they are in accordance with the provisions referenced in paragraph (b)(1)(ii)(A) of this section. By August 1 immediately after the promulgation of each notice of data availability required in paragraph (b)(1)(i) of this section, the Administrator will promulgate a notice of data availability of any adjustments that the Administrator determines to be necessary with regard to allocations under § 97.712(a)(2) through (7) and (12) and the reasons for accepting or rejecting any objections submitted in accordance with paragraph (b)(1)(ii)(A) of this section.

(iii) If the new unit set-aside for such control period contains any TR SO<sub>2</sub> Group 2 allowances that have not been allocated in the applicable notice of data availability required in paragraph (b)(1)(ii) of this section, the Administrator will promulgate, by December 15 immediately after such notice, a notice of data availability that identifies any TR SO<sub>2</sub> Group 2 units that commenced commercial operation during the period starting January 1 of the year before the year of such control period and ending November 30 of year of such control period.

(iv) For each notice of data availability required in paragraph (b)(1)(iii) of this section, the Administrator will provide an opportunity for submission of objections to the identification of TR SO<sub>2</sub> annual units in such notice.

(A) Objections shall be submitted by the deadline specified in each notice of data availability required in paragraph (b)(1)(iii) of this section and shall be limited to addressing whether the identification of TR SO<sub>2</sub> annual units in such notice is in accordance with paragraph (b)(1)(iii) of this section.

(B) The Administrator will adjust the identification of TR SO<sub>2</sub> Group 2 units in the each notice of data availability required in paragraph (b)(1)(iii) of this section to the extent necessary to ensure that it is in accordance with paragraph (b)(1)(iii) of this section and will calculate the TR SO<sub>2</sub> Group 2 allowance allocation to each TR SO<sub>2</sub> Group 2 unit in accordance with § 97.712(a)(9), (10), and (12) and §§ 97.706(b)(2) and 97.730 through 97.735. By February 15 immediately after the promulgation of each notice of data availability required in paragraph (b)(1)(iii) of this section, the Administrator will promulgate a notice of data availability of any adjustments of the identification of TR SO<sub>2</sub> Group 2 units that the Administrator determines to be necessary, the reasons for accepting or rejecting any objections submitted in accordance with paragraph (b)(1)(iv)(A) of this section, and the results of such calculations.

(v) To the extent any TR SO<sub>2</sub> Group 2 allowances are added to the new unit set-aside after promulgation of each notice of data availability required in paragraph (b)(1)(iv) of this section, the Administrator will promulgate additional notices of data availability, as deemed appropriate, of the allocation of such TR SO<sub>2</sub> Group 2 allowances in accordance with § 97.712(a)(10).

(2) Indian country new unit set-asides. (i) By June 1, 2012 and June 1 of each year thereafter, the Administrator will calculate the TR SO<sub>2</sub> Group 2 allowance allocation to each TR SO<sub>2</sub> Group 2 unit in Indian country within the borders of a State, in accordance with § 97.712(b)(2) through (7) and (12), for the control period in the year of the applicable calculation deadline under this paragraph and will promulgate a notice of data availability of the results of the calculations.

(ii) For each notice of data availability required in paragraph (b)(2)(i) of this section, the Administrator will provide an opportunity for submission of objections to the calculations referenced in such notice.

(A) Objections shall be submitted by the deadline specified in each notice of data availability required in paragraph (b)(2)(i) of this section and shall be limited to addressing whether the calculations (including the identification of the TR SO<sub>2</sub> Group 2

units) are in accordance with § 97.712(b)(2) through (7) and (12) and §§ 97.706(b)(2) and 97.730 through 97.735.

(B) The Administrator will adjust the calculations to the extent necessary to ensure that they are in accordance with the provisions referenced in paragraph (b)(2)(ii)(A) of this section. By August 1 immediately after the promulgation of each notice of data availability required in paragraph (b)(2)(i) of this section, the Administrator will promulgate a notice of data availability of any adjustments that the Administrator determines to be necessary with regard to allocations under § 97.712(b)(2) through (7) and (12) and the reasons for accepting or rejecting any objections submitted in accordance with paragraph (b)(2)(ii)(A) of this section.

(iii) If the Indian country new unit set-aside for such control period contains any TR SO<sub>2</sub> Group 2 allowances that have not been allocated in the applicable notice of data availability required in paragraph (b)(2)(ii) of this section, the Administrator will promulgate, by December 15 immediately after such notice, a notice of data availability that identifies any TR SO<sub>2</sub> Group 2 units that commenced commercial operation during the period starting January 1 of the year before the year of such control period and ending November 30 of year of such control period.

(iv) For each notice of data availability required in paragraph (b)(2)(iii) of this section, the Administrator will provide an opportunity for submission of objections to the identification of TR SO<sub>2</sub> annual units in such notice.

(A) Objections shall be submitted by the deadline specified in each notice of data availability required in paragraph (b)(2)(iii) of this section and shall be limited to addressing whether the identification of TR SO<sub>2</sub> annual units in such notice is in accordance with paragraph (b)(2)(iii) of this section.

(B) The Administrator will adjust the identification of TR SO<sub>2</sub> Group 2 units in the each notice of data availability required in paragraph (b)(2)(iii) of this section to the extent necessary to ensure that it is in accordance with paragraph (b)(2)(iii) of this section and will calculate the TR SO<sub>2</sub> Group 2 allowance allocation to each TR SO<sub>2</sub> Group 2 unit in accordance with § 97.712(b)(9), (10), and (12) and §§ 97.706(b)(2) and 97.730 through 97.735. By February 15 immediately after the promulgation of each notice of data availability required in paragraph (b)(2)(iii) of this section, the Administrator will promulgate a notice of data availability of any

adjustments of the identification of TR SO<sub>2</sub> Group 2 units that the Administrator determines to be necessary, the reasons for accepting or rejecting any objections submitted in accordance with paragraph (b)(2)(iv)(A) of this section, and the results of such calculations.

(v) To the extent any TR SO<sub>2</sub> Group 2 allowances are added to the Indian country new unit set-aside after promulgation of each notice of data availability required in paragraph (b)(2)(iv) of this section, the Administrator will promulgate additional notices of data availability, as deemed appropriate, of the allocation of such TR SO<sub>2</sub> Group 2 allowances in accordance with § 97.712(b)(10).

(c) *Units incorrectly allocated TR SO<sub>2</sub> Group 2 allowances.* (1) For each control period in 2012 and thereafter, if the Administrator determines that TR SO<sub>2</sub> Group 2 allowances were allocated under paragraph (a) of this section, or under a provision of a SIP revision approved § 52.39(g), (h), or (i) of this chapter, where such control period and the recipient are covered by the provisions of paragraph (c)(1)(i) of this section or were allocated under § 97.712(a)(2) through (7), (9), and (12) and (b)(2) through (7), (9), and (12), or under a provision of a SIP revision approved § 52.39(h) or (i) of this chapter, where such control period and the recipient are covered by the provisions of paragraph (c)(1)(ii) of this section, then the Administrator will notify the designated representative of the recipient and will act in accordance with the procedures set forth in paragraphs (c)(2) through (5) of this section:

(i)(A) The recipient is not actually a TR SO<sub>2</sub> Group 2 unit under § 97.704 as of January 1, 2012 and is allocated TR SO<sub>2</sub> Group 2 allowances for such control period or, in the case of an allocation under a provision of a SIP revision approved under § 52.39(g), (h), or (i) of this chapter, the recipient is not actually a TR SO<sub>2</sub> Group 2 unit as of January 1, 2012 and is allocated TR SO<sub>2</sub> Group 2 allowances for such control period that the SIP revision provides should be allocated only to recipients that are TR SO<sub>2</sub> Group 2 units as of January 1, 2012; or

(B) The recipient is not located as of January 1 of the control period in the State from whose SO<sub>2</sub> Group 2 trading budget the TR SO<sub>2</sub> Group 2 allowances allocated under paragraph (a) of this section, or under a provision of a SIP revision approved under § 52.39(g), (h), or (i) of this chapter, were allocated for such control period.

(ii) The recipient is not actually a TR SO<sub>2</sub> Group 2 unit under § 97.704 as of January 1 of such control period and is allocated TR SO<sub>2</sub> Group 2 allowances for such control period or, in the case of an allocation under a provision of a SIP revision approved under § 52.39(g), (h), or (i) of this chapter, the recipient is not actually a TR SO<sub>2</sub> Group 2 unit as of January 1 of such control period and is allocated TR SO<sub>2</sub> Group 2 allowances for such control period that the SIP revision provides should be allocated only to recipients that are TR SO<sub>2</sub> Group 2 units as of January 1 of such control period.

(2) Except as provided in paragraph (c)(3) or (4) of this section, the Administrator will not record such TR SO<sub>2</sub> Group 2 allowances under § 97.721.

(3) If the Administrator already recorded such TR SO<sub>2</sub> Group 2 allowances under § 97.721 and if the Administrator makes the determination under paragraph (c)(1) of this section before making deductions for the source that includes such recipient under § 97.724(b) for such control period, then the Administrator will deduct from the account in which such TR SO<sub>2</sub> Group 2 allowances were recorded an amount of TR SO<sub>2</sub> Group 2 allowances allocated for the same or a prior control period equal to the amount of such already recorded TR SO<sub>2</sub> Group 2 allowances. The authorized account representative shall ensure that there are sufficient TR SO<sub>2</sub> Group 2 allowances in such account for completion of the deduction.

(4) If the Administrator already recorded such TR SO<sub>2</sub> Group 2 allowances under § 97.721 and if the Administrator makes the determination under paragraph (c)(1) of this section after making deductions for the source that includes such recipient under § 97.724(b) for such control period, then the Administrator will not make any deduction to take account of such already recorded TR SO<sub>2</sub> Group 2 allowances.

(5)(i) With regard to the TR SO<sub>2</sub> Group 2 allowances that are not recorded, or that are deducted as an incorrect allocation, in accordance with paragraphs (c)(2) and (3) of this section for a recipient under paragraph (c)(1)(i) of this section, the Administrator will:

(A) Transfer such TR SO<sub>2</sub> Group 2 allowances to the new unit set-aside for such control period for the State from whose SO<sub>2</sub> Group 2 trading budget the TR SO<sub>2</sub> Group 2 allowances were allocated; or

(B) If the State has a SIP revision approved under § 52.39(h) or (i) covering such control period, include such TR SO<sub>2</sub> Group 2 allowances in the

portion of the State SO<sub>2</sub> Group 2 trading budget that may be allocated for such control period in accordance with such SIP revision.

(ii) With regard to the TR SO<sub>2</sub> Group 2 allowances that were not allocated from the Indian country new unit set-aside for such control period and that are not recorded, or that are deducted as an incorrect allocation, in accordance with paragraphs (c)(2) and (3) of this section for a recipient under paragraph (c)(1)(ii) of this paragraph, the Administrator will:

(A) Transfer such TR SO<sub>2</sub> Group 2 allowances to the new unit set-aside for such control period; or

(B) If the State has a SIP revision approved under § 52.39(h) or (i) covering such control period, include such TR SO<sub>2</sub> Group 2 allowances in the portion of the State SO<sub>2</sub> Group 2 trading budget that may be allocated for such control period in accordance with such SIP revision.

(iii) With regard to the TR SO<sub>2</sub> Group 2 allowances that were allocated from the Indian country new unit set-aside for such control period and that are not recorded, or that are deducted as an incorrect allocation, in accordance with paragraphs (c)(2) and (3) of this section for a recipient under paragraph (c)(1)(ii) of this paragraph, the Administrator will transfer such TR SO<sub>2</sub> Group 2 allowances to the Indian country new unit set-aside for such control period.

**§ 97.712 TR SO<sub>2</sub> Group 2 allowance allocations to new units.**

(a) For each control period in 2012 and thereafter and for the TR SO<sub>2</sub> Group 2 units in each State, the Administrator will allocate TR SO<sub>2</sub> Group 2 allowances to the TR SO<sub>2</sub> Group 2 units as follows:

(1) The TR SO<sub>2</sub> Group 2 allowances will be allocated to the following TR SO<sub>2</sub> Group 2 units, except as provided in paragraph (a)(10) of this section:

(i) TR SO<sub>2</sub> Group 2 units that are not allocated an amount of TR SO<sub>2</sub> Group 2 allowances in the notice of data availability issued under § 97.711(a)(1);

(ii) TR SO<sub>2</sub> Group 2 units whose allocation of an amount of TR SO<sub>2</sub> Group 2 allowances for such control period in the notice of data availability issued under § 97.711(a)(1) is covered by § 97.711(c)(2) or (3);

(iii) TR SO<sub>2</sub> Group 2 units that are allocated an amount of TR SO<sub>2</sub> Group 2 allowances for such control period in the notice of data availability issued under § 97.711(a)(1), which allocation is terminated for such control period pursuant to § 97.711(a)(2), and that operate during the control period

immediately preceding such control period; or

(iv) For purposes of paragraph (a)(9) of this section, TR SO<sub>2</sub> Group 2 units under § 97.711(c)(1)(ii) whose allocation of an amount of TR SO<sub>2</sub> Group 2 allowances for such control period in the notice of data availability issued under § 97.711(b)(1)(ii)(B) is covered by § 97.711(c)(2) or (3).

(2) The Administrator will establish a separate new unit set-aside for the State for each such control period. Each such new unit set-aside will be allocated TR SO<sub>2</sub> Group 2 allowances in an amount equal to the applicable amount of tons of SO<sub>2</sub> emissions as set forth in § 97.710(a) and will be allocated additional TR SO<sub>2</sub> Group 2 allowances (if any) in accordance with §§ 97.711(a)(2) and (c)(5) and paragraph (b)(10) of this section.

(3) The Administrator will determine, for each TR SO<sub>2</sub> Group 2 unit described in paragraph (a)(1) of this section, an allocation of TR SO<sub>2</sub> Group 2 allowances for the later of the following control periods and for each subsequent control period:

(i) The control period in 2012;

(ii) The first control period after the control period in which the TR SO<sub>2</sub> Group 2 unit commences commercial operation;

(iii) For a unit described in paragraph (a)(1)(ii) of this section, the first control period in which the TR SO<sub>2</sub> Group 2 unit operates in the State after operating in another jurisdiction and for which the unit is not already allocated one or more TR SO<sub>2</sub> Group 2 allowances; and

(iv) For a unit described in paragraph (a)(1)(iii) of this section, the first control period after the control period in which the unit resumes operation.

(4)(i) The allocation to each TR SO<sub>2</sub> annual unit described in paragraph (a)(1)(i) through (iii) of this section and for each control period described in paragraph (a)(3) of this section will be an amount equal to the unit's total tons of SO<sub>2</sub> emissions during the immediately preceding control period.

(ii) The Administrator will adjust the allocation amount in paragraph (a)(4)(i) in accordance with paragraphs (a)(5) through (7) and (12) of this section.

(5) The Administrator will calculate the sum of the TR SO<sub>2</sub> Group 2 allowances determined for all such TR SO<sub>2</sub> Group 2 units under paragraph (a)(4)(i) of this section in the State for such control period.

(6) If the amount of TR SO<sub>2</sub> Group 2 allowances in the new unit set-aside for the State for such control period is greater than or equal to the sum under paragraph (a)(5) of this section, then the Administrator will allocate the amount

of TR SO<sub>2</sub> Group 2 allowances determined for each such TR SO<sub>2</sub> Group 2 unit under paragraph (a)(4)(i) of this section.

(7) If the amount of TR SO<sub>2</sub> Group 2 allowances in the new unit set-aside for the State for such control period is less than the sum under paragraph (a)(5) of this section, then the Administrator will allocate to each such TR SO<sub>2</sub> Group 2 unit the amount of the TR SO<sub>2</sub> Group 2 allowances determined under paragraph (a)(4)(i) of this section for the unit, multiplied by the amount of TR SO<sub>2</sub> Group 2 allowances in the new unit set-aside for such control period, divided by the sum under paragraph (a)(5) of this section, and rounded to the nearest allowance.

(8) The Administrator will notify the public, through the promulgation of the notices of data availability described in § 97.711(b)(1)(i) and (ii), of the amount of TR SO<sub>2</sub> Group 2 allowances allocated under paragraphs (a)(2) through (7) and (12) of this section for such control period to each TR SO<sub>2</sub> Group 2 unit eligible for such allocation.

(9) If, after completion of the procedures under paragraphs (a)(5) through (8) of this section for such control period, any unallocated TR SO<sub>2</sub> Group 2 allowances remain in the new unit set-aside for the State for such control period, the Administrator will allocate such TR SO<sub>2</sub> Group 2 allowances as follows—

(i) The Administrator will determine, for each unit described in paragraph (a)(1) of this section that commenced commercial operation during the period starting January 1 of the year before the year of such control period and ending November 30 of year of such control period, the positive difference (if any) between the unit's emissions during such control period and the amount of TR SO<sub>2</sub> Group 2 allowances referenced in the notice of data availability required under § 97.711(b)(1)(ii) for the unit for such control period;

(ii) The Administrator will determine the sum of the positive differences determined under paragraph (a)(9)(i) of this section;

(iii) If the amount of unallocated TR SO<sub>2</sub> Group 2 allowances remaining in the new unit set-aside for the State for such control period is greater than or equal to the sum determined under paragraph (a)(9)(ii) of this section, then the Administrator will allocate the amount of TR SO<sub>2</sub> Group 2 allowances determined for each such TR SO<sub>2</sub> Group 2 unit under paragraph (a)(9)(i) of this section; and

(iv) If the amount of unallocated TR SO<sub>2</sub> Group 2 allowances remaining in the new unit set-aside for the State for

such control period is less than the sum under paragraph (a)(9)(ii) of this section, then the Administrator will allocate to each such TR SO<sub>2</sub> Group 2 unit the amount of the TR SO<sub>2</sub> Group 2 allowances determined under paragraph (a)(9)(i) of this section for the unit, multiplied by the amount of unallocated TR SO<sub>2</sub> Group 2 allowances remaining in the new unit set-aside for such control period, divided by the sum under paragraph (a)(9)(ii) of this section, and rounded to the nearest allowance.

(10) If, after completion of the procedures under paragraphs (a)(9) and (12) of this section for such control period, any unallocated TR SO<sub>2</sub> Group 2 allowances remain in the new unit set-aside for the State for such control period, the Administrator will allocate to each TR SO<sub>2</sub> Group 2 unit that is in the State, is allocated an amount of TR SO<sub>2</sub> Group 2 allowances in the notice of data availability issued under § 97.711(a)(1), and continues to be allocated TR SO<sub>2</sub> Group 2 allowances for such control period in accordance with § 97.711(a)(2), an amount of TR SO<sub>2</sub> Group 2 allowances equal to the following: The total amount of such remaining unallocated TR SO<sub>2</sub> Group 2 allowances in such new unit set-aside, multiplied by the unit's allocation under § 97.711(a) for such control period, divided by the remainder of the amount of tons in the applicable State SO<sub>2</sub> Group 2 trading budget minus the sum of the amounts of tons in such new unit set-aside and the Indian country new unit set-aside for the State for such control period, and rounded to the nearest allowance.

(11) The Administrator will notify the public, through the promulgation of the notices of data availability described in § 97.711(b)(1)(iii), (iv), and (v), of the amount of TR SO<sub>2</sub> Group 2 allowances allocated under paragraphs (a)(9), (10), and (12) of this section for such control period to each TR SO<sub>2</sub> Group 2 unit eligible for such allocation.

(12)(i) Notwithstanding the requirements of paragraphs (a)(2) through (11) of this section, if the calculations of allocations of a new unit set-aside for a control period in a given year under paragraph (a)(7) of this section, paragraphs (a)(6) and (9)(iv) of this section, or paragraphs (a)(6), (9)(iii), and (10) of this section would otherwise result in total allocations of such new unit set-aside exceeding the total amount of such new unit set-aside, then the Administrator will adjust the results of the calculations under paragraph (a)(7), (9)(iv), or (10) of this section, as applicable, as follows. The Administrator will list the TR SO<sub>2</sub> Group 2 units in descending order based

on the amount of such units' allocations under paragraph (a)(7), (9)(iv), or (10) of this section, as applicable, and, in cases of equal allocation amounts, in alphabetical order of the relevant source's name and numerical order of the relevant unit's identification number, and will reduce each unit's allocation under paragraph (a)(7), (9)(iv), or (10) of this section, as applicable, by one TR SO<sub>2</sub> Group 2 allowance (but not below zero) in the order in which the units are listed and will repeat this reduction process as necessary, until the total allocations of such new unit set-aside equal the total amount of such new unit set-aside.

(ii) Notwithstanding the requirements of paragraphs (a)(10) and (11) of this section, if the calculations of allocations of a new unit set-aside for a control period in a given year under paragraphs (a)(6), (9)(iii), and (10) of this section would otherwise result in a total allocations of such new unit set-aside less than the total amount of such new unit set-aside, then the Administrator will adjust the results of the calculations under paragraph (a)(10) of this section, as follows. The Administrator will list the TR SO<sub>2</sub> Group 2 units in descending order based on the amount of such units' allocations under paragraph (a)(10) of this section and, in cases of equal allocation amounts, in alphabetical order of the relevant source's name and numerical order of the relevant unit's identification number, and will increase each unit's allocation under paragraph (a)(10) of this section by one TR SO<sub>2</sub> Group 2 allowance in the order in which the units are listed and will repeat this increase process as necessary, until the total allocations of such new unit set-aside equal the total amount of such new unit set-aside.

(b) For each control period in 2012 and thereafter and for the TR SO<sub>2</sub> Group 2 units located in Indian country within the borders of each State, the Administrator will allocate TR SO<sub>2</sub> Group 2 allowances to the TR SO<sub>2</sub> Group 2 units as follows:

(1) The TR SO<sub>2</sub> Group 2 allowances will be allocated to the following TR SO<sub>2</sub> Group 2 units, except as provided in paragraph (b)(10) of this section:

(i) TR SO<sub>2</sub> Group 2 units that are not allocated an amount of TR SO<sub>2</sub> Group 2 allowances in the notice of data availability issued under § 97.711(a)(1); or

(ii) For purposes of paragraph (b)(9) of this section, TR SO<sub>2</sub> Group 2 units under § 97.711(c)(1)(ii) whose allocation of an amount of TR SO<sub>2</sub> Group 2 allowances for such control period in the notice of data availability issued

under § 97.711(b)(2)(ii)(B) is covered by § 97.711(c)(2) or (3).

(2) The Administrator will establish a separate Indian country new unit set-aside for the State for each such control period. Each such Indian country new unit set-aside will be allocated TR SO<sub>2</sub> Group 2 allowances in an amount equal to the applicable amount of tons of SO<sub>2</sub> emissions as set forth in § 97.710(a) and will be allocated additional TR SO<sub>2</sub> Group 2 allowances (if any) in accordance with § 97.711(c)(5).

(3) The Administrator will determine, for each TR SO<sub>2</sub> Group 2 unit described in paragraph (b)(1) of this section, an allocation of TR SO<sub>2</sub> Group 2 allowances for the later of the following control periods and for each subsequent control period:

(i) The control period in 2012; and

(ii) The first control period after the control period in which the TR SO<sub>2</sub> Group 2 unit commences commercial operation.

(4)(i) The allocation to each TR SO<sub>2</sub> annual unit described in paragraph (b)(1)(i) of this section and for each control period described in paragraph (b)(3) of this section will be an amount equal to the unit's total tons of SO<sub>2</sub> emissions during the immediately preceding control period.

(ii) The Administrator will adjust the allocation amount in paragraph (b)(4)(i) in accordance with paragraphs (b)(5) through (7) and (12) of this section.

(5) The Administrator will calculate the sum of the TR SO<sub>2</sub> Group 2 allowances determined for all such TR SO<sub>2</sub> Group 2 units under paragraph (b)(4)(i) of this section in Indian country within the borders of the State for such control period.

(6) If the amount of TR SO<sub>2</sub> Group 2 allowances in the Indian country new unit set-aside for the State for such control period is greater than or equal to the sum under paragraph (b)(5) of this section, then the Administrator will allocate the amount of TR SO<sub>2</sub> Group 2 allowances determined for each such TR SO<sub>2</sub> Group 2 unit under paragraph (b)(4)(i) of this section.

(7) If the amount of TR SO<sub>2</sub> Group 2 allowances in the Indian country new unit set-aside for the State for such control period is less than the sum under paragraph (b)(5) of this section, then the Administrator will allocate to each such TR SO<sub>2</sub> Group 2 unit the amount of the TR SO<sub>2</sub> Group 2 allowances determined under paragraph (b)(4)(i) of this section for the unit, multiplied by the amount of TR SO<sub>2</sub> Group 2 allowances in the Indian country new unit set-aside for such control period, divided by the sum

under paragraph (b)(5) of this section, and rounded to the nearest allowance.

(8) The Administrator will notify the public, through the promulgation of the notices of data availability described in § 97.711(b)(2)(i) and (ii), of the amount of TR SO<sub>2</sub> Group 2 allowances allocated under paragraphs (b)(2) through (7) and (12) of this section for such control period to each TR SO<sub>2</sub> Group 2 unit eligible for such allocation.

(9) If, after completion of the procedures under paragraphs (b)(5) through (8) of this section for such control period, any unallocated TR SO<sub>2</sub> Group 2 allowances remain in the Indian country new unit set-aside for the State for such control period, the Administrator will allocate such TR SO<sub>2</sub> Group 2 allowances as follows—

(i) The Administrator will determine, for each unit described in paragraph (b)(1) of this section that commenced commercial operation during the period starting January 1 of the year before the year of such control period and ending November 30 of year of such control period, the positive difference (if any) between the unit's emissions during such control period and the amount of TR SO<sub>2</sub> Group 2 allowances referenced in the notice of data availability required under § 97.711(b)(2)(ii) for the unit for such control period;

(ii) The Administrator will determine the sum of the positive differences determined under paragraph (b)(9)(i) of this section;

(iii) If the amount of unallocated TR SO<sub>2</sub> Group 2 allowances remaining in the Indian country new unit set-aside for the State for such control period is greater than or equal to the sum determined under paragraph (b)(9)(ii) of this section, then the Administrator will allocate the amount of TR SO<sub>2</sub> Group 2 allowances determined for each such TR SO<sub>2</sub> Group 2 unit under paragraph (b)(9)(i) of this section; and

(iv) If the amount of unallocated TR SO<sub>2</sub> Group 2 allowances remaining in the Indian country new unit set-aside for the State for such control period is less than the sum under paragraph (b)(9)(ii) of this section, then the Administrator will allocate to each such TR SO<sub>2</sub> Group 2 unit the amount of the TR SO<sub>2</sub> Group 2 allowances determined under paragraph (b)(9)(i) of this section for the unit, multiplied by the amount of unallocated TR SO<sub>2</sub> Group 2 allowances remaining in the Indian country new unit set-aside for such control period, divided by the sum under paragraph (b)(9)(ii) of this section, and rounded to the nearest allowance.

(10) If, after completion of the procedures under paragraphs (b)(9) and (12) of this section for such control



period, any unallocated TR SO<sub>2</sub> Group 2 allowances remain in the Indian country new unit set-aside for the State for such control period, the Administrator will:

(i) Transfer such unallocated TR SO<sub>2</sub> Group 2 allowances to the new unit set-aside for the State for such control period; or

(ii) If the State has a SIP revision approved under § 52.39(g), (h), or (i) of this chapter covering such control period, include such unallocated TR SO<sub>2</sub> Group 2 allowances in the portion of the State SO<sub>2</sub> Group 2 trading budget that may be allocated for such control period in accordance with such SIP revision.

(11) The Administrator will notify the public, through the promulgation of the notices of data availability described in § 97.711(b)(2)(iii), (iv), and (v), of the amount of TR SO<sub>2</sub> Group 2 allowances allocated under paragraphs (b)(9), (10), and (12) of this section for such control period to each TR SO<sub>2</sub> Group 2 unit eligible for such allocation.

(12)(i) Notwithstanding the requirements of paragraphs (b)(2) through (11) of this section, if the calculations of allocations of an Indian country new unit set-aside for a control period in a given year under paragraph (b)(7) of this section, paragraphs (b)(6) and (9)(iv) of this section, or paragraphs (b)(6), (9)(iii), and (10) of this section would otherwise result in total allocations of such Indian country new unit set-aside exceeding the total amount of such Indian country new unit set-aside, then the Administrator will adjust the results of the calculations under paragraph (b)(7), (9)(iv), or (10) of this section, as applicable, as follows. The Administrator will list the TR SO<sub>2</sub> Group 2 units in descending order based on the amount of such units' allocations under paragraph (b)(7), (9)(iv), or (10) of this section, as applicable, and, in cases of equal allocation amounts, in alphabetical order of the relevant source's name and numerical order of the relevant unit's identification number, and will reduce each unit's allocation under paragraph (b)(7), (9)(iv), or (10) of this section, as applicable, by one TR SO<sub>2</sub> Group 2 allowance (but not below zero) in the order in which the units are listed and will repeat this reduction process as necessary, until the total allocations of such Indian country new unit set-aside equal the total amount of such Indian country new unit set-aside.

(ii) Notwithstanding the requirements of paragraphs (b)(10) and (11) of this section, if the calculations of allocations of an Indian country new unit set-aside for a control period in a given year

under paragraphs (b)(6), (9)(iii), and (10) of this section would otherwise result in a total allocations of such Indian country new unit set-aside less than the total amount of such Indian country new unit set-aside, then the Administrator will adjust the results of the calculations under paragraph (b)(10) of this section, as follows. The Administrator will list the TR SO<sub>2</sub> Group 2 units in descending order based on the amount of such units' allocations under paragraph (b)(10) of this section and, in cases of equal allocation amounts, in alphabetical order of the relevant source's name and numerical order of the relevant unit's identification number, and will increase each unit's allocation under paragraph (b)(10) of this section by one TR SO<sub>2</sub> Group 2 allowance in the order in which the units are listed and will repeat this increase process as necessary, until the total allocations of such Indian country new unit set-aside equal the total amount of such Indian country new unit set-aside.

**§ 97.713 Authorization of designated representative and alternate designated representative.**

(a) Except as provided under § 97.715, each TR SO<sub>2</sub> Group 2 source, including all TR SO<sub>2</sub> Group 2 units at the source, shall have one and only one designated representative, with regard to all matters under the TR SO<sub>2</sub> Group 2 Trading Program.

(1) The designated representative shall be selected by an agreement binding on the owners and operators of the source and all TR SO<sub>2</sub> Group 2 units at the source and shall act in accordance with the certification statement in § 97.716(a)(4)(iii).

(2) Upon and after receipt by the Administrator of a complete certificate of representation under § 97.716:

(i) The designated representative shall be authorized and shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each owner and operator of the source and each TR SO<sub>2</sub> Group 2 unit at the source in all matters pertaining to the TR SO<sub>2</sub> Group 2 Trading Program, notwithstanding any agreement between the designated representative and such owners and operators; and

(ii) The owners and operators of the source and each TR SO<sub>2</sub> Group 2 unit at the source shall be bound by any decision or order issued to the designated representative by the Administrator regarding the source or any such unit.

(b) Except as provided under § 97.715, each TR SO<sub>2</sub> Group 2 source may have one and only one alternate designated

representative, who may act on behalf of the designated representative. The agreement by which the alternate designated representative is selected shall include a procedure for authorizing the alternate designated representative to act in lieu of the designated representative.

(1) The alternate designated representative shall be selected by an agreement binding on the owners and operators of the source and all TR SO<sub>2</sub> Group 2 units at the source and shall act in accordance with the certification statement in § 97.716(a)(4)(iii).

(2) Upon and after receipt by the Administrator of a complete certificate of representation under § 97.716,

(i) The alternate designated representative shall be authorized;

(ii) Any representation, action, inaction, or submission by the alternate designated representative shall be deemed to be a representation, action, inaction, or submission by the designated representative; and

(iii) The owners and operators of the source and each TR SO<sub>2</sub> Group 2 unit at the source shall be bound by any decision or order issued to the alternate designated representative by the Administrator regarding the source or any such unit.

(c) Except in this section, § 97.702, and §§ 97.714 through 97.718, whenever the term "designated representative" (as distinguished from the term "common designated representative") is used in this subpart, the term shall be construed to include the designated representative or any alternate designated representative.

**§ 97.714 Responsibilities of designated representative and alternate designated representative.**

(a) Except as provided under § 97.718 concerning delegation of authority to make submissions, each submission under the TR SO<sub>2</sub> Group 2 Trading Program shall be made, signed, and certified by the designated representative or alternate designated representative for each TR SO<sub>2</sub> Group 2 source and TR SO<sub>2</sub> Group 2 unit for which the submission is made. Each such submission shall include the following certification statement by the designated representative or alternate designated representative: "I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of

those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.”

(b) The Administrator will accept or act on a submission made for a TR SO<sub>2</sub> Group 2 source or a TR SO<sub>2</sub> Group 2 unit only if the submission has been made, signed, and certified in accordance with paragraph (a) of this section and § 97.718.

**§ 97.715 Changing designated representative and alternate designated representative; changes in owners and operators; changes in units at the source.**

(a) *Changing designated representative.* The designated representative may be changed at any time upon receipt by the Administrator of a superseding complete certificate of representation under § 97.716. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous designated representative before the time and date when the Administrator receives the superseding certificate of representation shall be binding on the new designated representative and the owners and operators of the TR SO<sub>2</sub> Group 2 source and the TR SO<sub>2</sub> Group 2 units at the source.

(b) *Changing alternate designated representative.* The alternate designated representative may be changed at any time upon receipt by the Administrator of a superseding complete certificate of representation under § 97.716. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous alternate designated representative before the time and date when the Administrator receives the superseding certificate of representation shall be binding on the new alternate designated representative, the designated representative, and the owners and operators of the TR SO<sub>2</sub> Group 2 source and the TR SO<sub>2</sub> Group 2 units at the source.

(c) *Changes in owners and operators.* (1) In the event an owner or operator of a TR SO<sub>2</sub> Group 2 source or a TR SO<sub>2</sub> Group 2 unit at the source is not included in the list of owners and operators in the certificate of representation under § 97.716, such owner or operator shall be deemed to be subject to and bound by the certificate of representation, the representations, actions, inactions, and submissions of

the designated representative and any alternate designated representative of the source or unit, and the decisions and orders of the Administrator, as if the owner or operator were included in such list.

(2) Within 30 days after any change in the owners and operators of a TR SO<sub>2</sub> Group 2 source or a TR SO<sub>2</sub> Group 2 unit at the source, including the addition or removal of an owner or operator, the designated representative or any alternate designated representative shall submit a revision to the certificate of representation under § 97.716 amending the list of owners and operators to reflect the change.

(d) *Changes in units at the source.* Within 30 days of any change in which units are located at a TR SO<sub>2</sub> Group 2 source (including the addition or removal of a unit), the designated representative or any alternate designated representative shall submit a certificate of representation under § 97.716 amending the list of units to reflect the change.

(1) If the change is the addition of a unit that operated (other than for purposes of testing by the manufacturer before initial installation) before being located at the source, then the certificate of representation shall identify, in a format prescribed by the Administrator, the entity from whom the unit was purchased or otherwise obtained (including name, address, telephone number, and facsimile number (if any)), the date on which the unit was purchased or otherwise obtained, and the date on which the unit became located at the source.

(2) If the change is the removal of a unit, then the certificate of representation shall identify, in a format prescribed by the Administrator, the entity to which the unit was sold or that otherwise obtained the unit (including name, address, telephone number, and facsimile number (if any)), the date on which the unit was sold or otherwise obtained, and the date on which the unit became no longer located at the source.

**§ 97.716 Certificate of representation.**

(a) A complete certificate of representation for a designated representative or an alternate designated representative shall include the following elements in a format prescribed by the Administrator:

(1) Identification of the TR SO<sub>2</sub> Group 2 source, and each TR SO<sub>2</sub> Group 2 unit at the source, for which the certificate of representation is submitted, including source name, source category and NAICS code (or, in the absence of a NAICS code, an equivalent code),

State, plant code, county, latitude and longitude, unit identification number and type, identification number and nameplate capacity (in MWe, rounded to the nearest tenth) of each generator served by each such unit, actual or projected date of commencement of commercial operation, and a statement of whether such source is located in Indian Country. If a projected date of commencement of commercial operation is provided, the actual date of commencement of commercial operation shall be provided when such information becomes available.

(2) The name, address, e-mail address (if any), telephone number, and facsimile transmission number (if any) of the designated representative and any alternate designated representative.

(3) A list of the owners and operators of the TR SO<sub>2</sub> Group 2 source and of each TR SO<sub>2</sub> Group 2 unit at the source.

(4) The following certification statements by the designated representative and any alternate designated representative—

(i) “I certify that I was selected as the designated representative or alternate designated representative, as applicable, by an agreement binding on the owners and operators of the source and each TR SO<sub>2</sub> Group 2 unit at the source.”

(ii) “I certify that I have all the necessary authority to carry out my duties and responsibilities under the TR SO<sub>2</sub> Group 2 Trading Program on behalf of the owners and operators of the source and of each TR SO<sub>2</sub> Group 2 unit at the source and that each such owner and operator shall be fully bound by my representations, actions, inactions, or submissions and by any decision or order issued to me by the Administrator regarding the source or unit.”

(iii) “Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, a TR SO<sub>2</sub> Group 2 unit, or where a utility or industrial customer purchases power from a TR SO<sub>2</sub> Group 2 unit under a life-of-the-unit, firm power contractual arrangement, I certify that: I have given a written notice of my selection as the ‘designated representative’ or ‘alternate designated representative’, as applicable, and of the agreement by which I was selected to each owner and operator of the source and of each TR SO<sub>2</sub> Group 2 unit at the source; and TR SO<sub>2</sub> Group 2 allowances and proceeds of transactions involving TR SO<sub>2</sub> Group 2 allowances will be deemed to be held or distributed in proportion to each holder’s legal, equitable, leasehold, or contractual reservation or entitlement, except that, if such multiple holders have expressly provided for a different distribution of TR SO<sub>2</sub> Group 2

allowances by contract, TR SO<sub>2</sub> Group 2 allowances and proceeds of transactions involving TR SO<sub>2</sub> Group 2 allowances will be deemed to be held or distributed in accordance with the contract.”

(5) The signature of the designated representative and any alternate designated representative and the dates signed.

(b) Unless otherwise required by the Administrator, documents of agreement referred to in the certificate of representation shall not be submitted to the Administrator. The Administrator shall not be under any obligation to review or evaluate the sufficiency of such documents, if submitted.

**§ 97.717 Objections concerning designated representative and alternate designated representative.**

(a) Once a complete certificate of representation under § 97.716 has been submitted and received, the Administrator will rely on the certificate of representation unless and until a superseding complete certificate of representation under § 97.716 is received by the Administrator.

(b) Except as provided in paragraph (a) of this section, no objection or other communication submitted to the Administrator concerning the authorization, or any representation, action, inaction, or submission, of a designated representative or alternate designated representative shall affect any representation, action, inaction, or submission of the designated representative or alternate designated representative or the finality of any decision or order by the Administrator under the TR SO<sub>2</sub> Group 2 Trading Program.

(c) The Administrator will not adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of any designated representative or alternate designated representative, including private legal disputes concerning the proceeds of TR SO<sub>2</sub> Group 2 allowance transfers.

**§ 97.718 Delegation by designated representative and alternate designated representative.**

(a) A designated representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator provided for or required under this subpart.

(b) An alternate designated representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator

provided for or required under this subpart.

(c) In order to delegate authority to a natural person to make an electronic submission to the Administrator in accordance with paragraph (a) or (b) of this section, the designated representative or alternate designated representative, as appropriate, must submit to the Administrator a notice of delegation, in a format prescribed by the Administrator, that includes the following elements:

(1) The name, address, e-mail address, telephone number, and facsimile transmission number (if any) of such designated representative or alternate designated representative;

(2) The name, address, e-mail address, telephone number, and facsimile transmission number (if any) of each such natural person (referred to in this section as an “agent”);

(3) For each such natural person, a list of the type or types of electronic submissions under paragraph (a) or (b) of this section for which authority is delegated to him or her; and

(4) The following certification statements by such designated representative or alternate designated representative:

(i) “I agree that any electronic submission to the Administrator that is made by an agent identified in this notice of delegation and of a type listed for such agent in this notice of delegation and that is made when I am a designated representative or alternate designated representative, as appropriate, and before this notice of delegation is superseded by another notice of delegation under 40 CFR 97.718(d) shall be deemed to be an electronic submission by me.”

(ii) “Until this notice of delegation is superseded by another notice of delegation under 40 CFR 97.718(d), I agree to maintain an e-mail account and to notify the Administrator immediately of any change in my e-mail address unless all delegation of authority by me under 40 CFR 97.718 is terminated.”

(d) A notice of delegation submitted under paragraph (c) of this section shall be effective, with regard to the designated representative or alternate designated representative identified in such notice, upon receipt of such notice by the Administrator and until receipt by the Administrator of a superseding notice of delegation submitted by such designated representative or alternate designated representative, as appropriate. The superseding notice of delegation may replace any previously identified agent, add a new agent, or eliminate entirely any delegation of authority.

(e) Any electronic submission covered by the certification in paragraph (c)(4)(i) of this section and made in accordance with a notice of delegation effective under paragraph (d) of this section shall be deemed to be an electronic submission by the designated representative or alternate designated representative submitting such notice of delegation.

**§ 97.719 [Reserved]**

**§ 97.720 Establishment of compliance accounts, assurance accounts, and general accounts.**

(a) *Compliance accounts.* Upon receipt of a complete certificate of representation under § 97.716, the Administrator will establish a compliance account for the TR SO<sub>2</sub> Group 2 source for which the certificate of representation was submitted, unless the source already has a compliance account. The designated representative and any alternate designated representative of the source shall be the authorized account representative and the alternate authorized account representative respectively of the compliance account.

(b) *Assurance accounts.* The Administrator will establish assurance accounts for certain owners and operators and States in accordance with § 97.725(b)(3).

(c) *General accounts.* (1) Application for general account. (i) Any person may apply to open a general account, for the purpose of holding and transferring TR SO<sub>2</sub> Group 2 allowances, by submitting to the Administrator a complete application shall designate one and only one authorized account representative and may designate one and only one alternate authorized account representative who may act on behalf of the authorized account representative.

(A) The authorized account representative and alternate authorized account representative shall be selected by an agreement binding on the persons who have an ownership interest with respect to TR SO<sub>2</sub> Group 2 allowances held in the general account.

(B) The agreement by which the alternate authorized account representative is selected shall include a procedure for authorizing the alternate authorized account representative to act in lieu of the authorized account representative.

(ii) A complete application for a general account shall include the following elements in a format prescribed by the Administrator:

(A) Name, mailing address, e-mail address (if any), telephone number, and

facsimile transmission number (if any) of the authorized account representative and any alternate authorized account representative;

(B) An identifying name for the general account;

(C) A list of all persons subject to a binding agreement for the authorized account representative and any alternate authorized account representative to represent their ownership interest with respect to the TR SO<sub>2</sub> Group 2 allowances held in the general account;

(D) The following certification statement by the authorized account representative and any alternate authorized account representative: "I certify that I was selected as the authorized account representative or the alternate authorized account representative, as applicable, by an agreement that is binding on all persons who have an ownership interest with respect to TR SO<sub>2</sub> Group 2 allowances held in the general account. I certify that I have all the necessary authority to carry out my duties and responsibilities under the TR SO<sub>2</sub> Group 2 Trading Program on behalf of such persons and that each such person shall be fully bound by my representations, actions, inactions, or submissions and by any decision or order issued to me by the Administrator regarding the general account."

(E) The signature of the authorized account representative and any alternate authorized account representative and the dates signed.

(iii) Unless otherwise required by the Administrator, documents of agreement referred to in the application for a general account shall not be submitted to the Administrator. The Administrator shall not be under any obligation to review or evaluate the sufficiency of such documents, if submitted.

(2) Authorization of authorized account representative and alternate authorized account representative. (i) Upon receipt by the Administrator of a complete application for a general account under paragraph (b)(1) of this section, the Administrator will establish a general account for the person or persons for whom the application is submitted, and upon and after such receipt by the Administrator:

(A) The authorized account representative of the general account shall be authorized and shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each person who has an ownership interest with respect to TR SO<sub>2</sub> Group 2 allowances held in the general account in all matters pertaining to the TR SO<sub>2</sub> Group 2 Trading Program, notwithstanding any agreement between

the authorized account representative and such person.

(B) Any alternate authorized account representative shall be authorized, and any representation, action, inaction, or submission by any alternate authorized account representative shall be deemed to be a representation, action, inaction, or submission by the authorized account representative.

(C) Each person who has an ownership interest with respect to TR SO<sub>2</sub> Group 2 allowances held in the general account shall be bound by any decision or order issued to the authorized account representative or alternate authorized account representative by the Administrator regarding the general account.

(ii) Except as provided in paragraph (c)(5) of this section concerning delegation of authority to make submissions, each submission concerning the general account shall be made, signed, and certified by the authorized account representative or any alternate authorized account representative for the persons having an ownership interest with respect to TR SO<sub>2</sub> Group 2 allowances held in the general account. Each such submission shall include the following certification statement by the authorized account representative or any alternate authorized account representative: "I am authorized to make this submission on behalf of the persons having an ownership interest with respect to the TR SO<sub>2</sub> Group 2 allowances held in the general account. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

(iii) Except in this section, whenever the term "authorized account representative" is used in this subpart, the term shall be construed to include the authorized account representative or any alternate authorized account representative.

(3) Changing authorized account representative and alternate authorized account representative; changes in persons with ownership interest. (i) The authorized account representative of a general account may be changed at any time upon receipt by the Administrator

of a superseding complete application for a general account under paragraph (c)(1) of this section. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous authorized account representative before the time and date when the Administrator receives the superseding application for a general account shall be binding on the new authorized account representative and the persons with an ownership interest with respect to the TR SO<sub>2</sub> Group 2 allowances in the general account.

(ii) The alternate authorized account representative of a general account may be changed at any time upon receipt by the Administrator of a superseding complete application for a general account under paragraph (c)(1) of this section. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous alternate authorized account representative before the time and date when the Administrator receives the superseding application for a general account shall be binding on the new alternate authorized account representative, the authorized account representative, and the persons with an ownership interest with respect to the TR SO<sub>2</sub> Group 2 allowances in the general account.

(iii)(A) In the event a person having an ownership interest with respect to TR SO<sub>2</sub> Group 2 allowances in the general account is not included in the list of such persons in the application for a general account, such person shall be deemed to be subject to and bound by the application for a general account, the representation, actions, inactions, and submissions of the authorized account representative and any alternate authorized account representative of the account, and the decisions and orders of the Administrator, as if the person were included in such list.

(B) Within 30 days after any change in the persons having an ownership interest with respect to SO<sub>2</sub> Group 2 allowances in the general account, including the addition or removal of a person, the authorized account representative or any alternate authorized account representative shall submit a revision to the application for a general account amending the list of persons having an ownership interest with respect to the TR SO<sub>2</sub> Group 2 allowances in the general account to include the change.

(4) Objections concerning authorized account representative and alternate authorized account representative. (i) Once a complete application for a general account under paragraph (c)(1) of this section has been submitted and

received, the Administrator will rely on the application unless and until a superseding complete application for a general account under paragraph (b)(1) of this section is received by the Administrator.

(ii) Except as provided in paragraph (c)(4)(i) of this section, no objection or other communication submitted to the Administrator concerning the authorization, or any representation, action, inaction, or submission of the authorized account representative or any alternate authorized account representative of a general account shall affect any representation, action, inaction, or submission of the authorized account representative or any alternate authorized account representative or the finality of any decision or order by the Administrator under the TR SO<sub>2</sub> Group 2 Trading Program.

(iii) The Administrator will not adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of the authorized account representative or any alternate authorized account representative of a general account, including private legal disputes concerning the proceeds of TR SO<sub>2</sub> Group 2 allowance transfers.

(5) Delegation by authorized account representative and alternate authorized account representative. (i) An authorized account representative of a general account may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator provided for or required under this subpart.

(ii) An alternate authorized account representative of a general account may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator provided for or required under this subpart.

(iii) In order to delegate authority to a natural person to make an electronic submission to the Administrator in accordance with paragraph (c)(5)(i) or (ii) of this section, the authorized account representative or alternate authorized account representative, as appropriate, must submit to the Administrator a notice of delegation, in a format prescribed by the Administrator, that includes the following elements:

(A) The name, address, e-mail address, telephone number, and facsimile transmission number (if any) of such authorized account representative or alternate authorized account representative;

(B) The name, address, e-mail address, telephone number, and facsimile transmission number (if any) of each such natural person (referred to in this section as an "agent");

(C) For each such natural person, a list of the type or types of electronic submissions under paragraph (c)(5)(i) or (ii) of this section for which authority is delegated to him or her;

(D) The following certification statement by such authorized account representative or alternate authorized account representative: "I agree that any electronic submission to the Administrator that is made by an agent identified in this notice of delegation and of a type listed for such agent in this notice of delegation and that is made when I am an authorized account representative or alternate authorized representative, as appropriate, and before this notice of delegation is superseded by another notice of delegation under 40 CFR 97.720(c)(5)(iv) shall be deemed to be an electronic submission by me."; and

(E) The following certification statement by such authorized account representative or alternate authorized account representative: "Until this notice of delegation is superseded by another notice of delegation under 40 CFR 97.720(c)(5)(iv), I agree to maintain an e-mail account and to notify the Administrator immediately of any change in my e-mail address unless all delegation of authority by me under 40 CFR 97.720(c)(5) is terminated.".

(iv) A notice of delegation submitted under paragraph (c)(5)(iii) of this section shall be effective, with regard to the authorized account representative or alternate authorized account representative identified in such notice, upon receipt of such notice by the Administrator and until receipt by the Administrator of a superseding notice of delegation submitted by such authorized account representative or alternate authorized account representative, as appropriate. The superseding notice of delegation may replace any previously identified agent, add a new agent, or eliminate entirely any delegation of authority.

(v) Any electronic submission covered by the certification in paragraph (c)(5)(iii)(D) of this section and made in accordance with a notice of delegation effective under paragraph (c)(5)(iv) of this section shall be deemed to be an electronic submission by the designated representative or alternate designated representative submitting such notice of delegation.

(6) Closing a general account. (i) The authorized account representative or alternate authorized account

representative of a general account may submit to the Administrator a request to close the account. Such request shall include a correctly submitted TR SO<sub>2</sub> Group 2 allowance transfer under § 97.722 for any TR SO<sub>2</sub> Group 2 allowances in the account to one or more other Allowance Management System accounts.

(ii) If a general account has no TR SO<sub>2</sub> Group 2 allowance transfers to or from the account for a 12-month period or longer and does not contain any TR SO<sub>2</sub> Group 2 allowances, the Administrator may notify the authorized account representative for the account that the account will be closed after 30 days after the notice is sent. The account will be closed after the 30-day period unless, before the end of the 30-day period, the Administrator receives a correctly submitted TR SO<sub>2</sub> Group 2 allowance transfer under § 97.722 to the account or a statement submitted by the authorized account representative or alternate authorized account representative demonstrating to the Administrator good cause as to why the account should not be closed.

(d) *Account identification.* The Administrator will assign a unique identifying number to each account established under paragraph (a), (b), or (c) of this section.

(e) *Responsibilities of authorized account representative and alternate authorized account representative.* After the establishment of a compliance account or general account, the Administrator will accept or act on a submission pertaining to the account, including, but not limited to, submissions concerning the deduction or transfer of TR SO<sub>2</sub> Group 2 allowances in the account, only if the submission has been made, signed, and certified in accordance with §§ 97.714(a) and 97.718 or paragraphs (c)(2)(i) and (c)(5) of this section.

#### **§ 97.721 Recordation of TR SO<sub>2</sub> Group 2 allowance allocations and auction results.**

(a) By November 7, 2011, the Administrator will record in each TR SO<sub>2</sub> Group 2 source's compliance account the TR SO<sub>2</sub> Group 2 allowances allocated to the TR SO<sub>2</sub> Group 2 units at the source in accordance with § 97.711(a) for the control period in 2012.

(b) By November 7, 2011, the Administrator will record in each TR SO<sub>2</sub> Group 2 source's compliance account the TR SO<sub>2</sub> Group 2 allowances allocated to the TR SO<sub>2</sub> Group 2 units at the source in accordance with § 97.711(a) for the control period in 2013, unless the State in which the source is located notifies the

Administrator in writing by October 17, 2011 of the State's intent to submit to the Administrator a complete SIP revision by April 1, 2012 meeting the requirements of § 52.39(g)(1) through (4) of this chapter.

(1) If, by April 1, 2012, the State does not submit to the Administrator such complete SIP revision, the Administrator will record by April 15, 2012 in each TR SO<sub>2</sub> Group 2 source's compliance account the TR SO<sub>2</sub> Group 2 allowances allocated to the TR SO<sub>2</sub> Group 2 units at the source in accordance with § 97.711(a) for the control period in 2013.

(2) If the State submits to the Administrator by April 1, 2012, and the Administrator approves by October 1, 2012, such complete SIP revision, the Administrator will record by October 1, 2012 in each TR SO<sub>2</sub> Group 2 source's compliance account the TR SO<sub>2</sub> Group 2 allowances allocated to the TR SO<sub>2</sub> Group 2 units at the source as provided in such approved, complete SIP revision for the control period in 2013.

(3) If the State submits to the Administrator by April 1, 2012, and the Administrator does not approve by October 1, 2012, such complete SIP revision, the Administrator will record by October 1, 2012 in each TR SO<sub>2</sub> Group 2 source's compliance account the TR SO<sub>2</sub> Group 2 allowances allocated to the TR SO<sub>2</sub> Group 2 units at the source in accordance with § 97.711(a) for the control period in 2013.

(c) By July 1, 2013, the Administrator will record in each TR SO<sub>2</sub> Group 2 source's compliance account the TR SO<sub>2</sub> Group 2 allowances allocated to the TR SO<sub>2</sub> Group 2 units at the source, or in each appropriate Allowance Management System account the TR SO<sub>2</sub> Group 2 allowances auctioned to TR SO<sub>2</sub> Group 2 units, in accordance with § 97.711(a), or with a SIP revision approved under § 52.39(h) or (i) of this chapter, for the control period in 2014 and 2015.

(d) By July 1, 2014, the Administrator will record in each TR SO<sub>2</sub> Group 2 source's compliance account the TR SO<sub>2</sub> Group 2 allowances allocated to the TR SO<sub>2</sub> Group 2 units at the source, or in each appropriate Allowance Management System account the TR SO<sub>2</sub> Group 2 allowances auctioned to TR SO<sub>2</sub> Group 2 units, in accordance with § 97.711(a), or with a SIP revision approved under § 52.39(h) or (i) of this chapter, for the control period in 2016 and 2017.

(e) By July 1, 2015, the Administrator will record in each TR SO<sub>2</sub> Group 2 source's compliance account the TR SO<sub>2</sub> Group 2 allowances allocated to the TR

SO<sub>2</sub> Group 2 units at the source, or in each appropriate Allowance Management System account the TR SO<sub>2</sub> Group 2 allowances auctioned to TR SO<sub>2</sub> Group 2 units, in accordance with § 97.711(a), or with a SIP revision approved under § 52.39(h) or (i) of this chapter, for the control period in 2018 and 2019.

(f) By July 1, 2016 and July 1 of each year thereafter, the Administrator will record in each TR SO<sub>2</sub> Group 2 source's compliance account the TR SO<sub>2</sub> Group 2 allowances allocated to the TR SO<sub>2</sub> Group 2 units at the source, or in each appropriate Allowance Management System account the TR SO<sub>2</sub> Group 2 allowances auctioned to TR SO<sub>2</sub> Group 2 units, in accordance with § 97.711(a), or with a SIP revision approved under § 52.39(h) and (i) of this chapter, for the control period in the fourth year after the year of the applicable recordation deadline under this paragraph.

(g) By August 1, 2012 and August 1 of each year thereafter, the Administrator will record in each TR SO<sub>2</sub> Group 2 source's compliance account the TR SO<sub>2</sub> Group 2 allowances allocated to the TR SO<sub>2</sub> Group 2 units at the source, or in each appropriate Allowance Management System account the TR SO<sub>2</sub> Group 2 allowances auctioned to TR SO<sub>2</sub> Group 2 units, in accordance with § 97.712(a)(2) through (8) and (12), or with a SIP revision approved under § 52.39(h) and (i) of this chapter, for the control period in the year of the applicable recordation deadline under this paragraph.

(h) By August 1, 2012 and August 1 of each year thereafter, the Administrator will record in each TR SO<sub>2</sub> Group 2 source's compliance account the TR SO<sub>2</sub> Group 2 allowances allocated to the TR SO<sub>2</sub> Group 2 units at the source in accordance with § 97.712(b)(2) through (8) and (12) for the control period in the year of the applicable recordation deadline under this paragraph.

(i) By February 15, 2013 and February 15 of each year thereafter, the Administrator will record in each TR SO<sub>2</sub> Group 2 source's compliance account the TR SO<sub>2</sub> Group 2 allowances allocated to the TR SO<sub>2</sub> Group 2 units at the source in accordance with § 97.712(a)(9) through (12), for the control period in the year before the year of the applicable recordation deadline under this paragraph.

(j) By the date on which any allocation or auction results, other than an allocation or auction results, described in paragraphs (a) through (i) of this section, of TR SO<sub>2</sub> Group 2 allowances to a recipient is made by or are submitted to the Administrator in

accordance with § 97.711 or § 97.712 or with a SIP revision approved under § 52.39(h) or (i) of this chapter, the Administrator will record such allocation or auction results in the appropriate Allowance Management System account.

(k) When recording the allocation or auction of TR SO<sub>2</sub> Group 2 allowances to a TR SO<sub>2</sub> Group 2 unit or other entity in an Allowance Management System account, the Administrator will assign each TR SO<sub>2</sub> Group 2 allowance a unique identification number that will include digits identifying the year of the control period for which the TR SO<sub>2</sub> Group 2 allowance is allocated or auctioned.

#### **§ 97.722 Submission of TR SO<sub>2</sub> Group 2 allowance transfers.**

(a) An authorized account representative seeking recordation of a TR SO<sub>2</sub> Group 2 allowance transfer shall submit the transfer to the Administrator.

(b) A TR SO<sub>2</sub> Group 2 allowance transfer shall be correctly submitted if:

(1) The transfer includes the following elements, in a format prescribed by the Administrator:

(i) The account numbers established by the Administrator for both the transferor and transferee accounts;

(ii) The serial number of each TR SO<sub>2</sub> Group 2 allowance that is in the transferor account and is to be transferred; and

(iii) The name and signature of the authorized account representative of the transferor account and the date signed; and

(2) When the Administrator attempts to record the transfer, the transferor account includes each TR SO<sub>2</sub> Group 2 allowance identified by serial number in the transfer.

#### **§ 97.723 Recordation of TR SO<sub>2</sub> Group 2 allowance transfers.**

(a) Within 5 business days (except as provided in paragraph (b) of this section) of receiving a TR SO<sub>2</sub> Group 2 allowance transfer that is correctly submitted under § 97.722, the Administrator will record a TR SO<sub>2</sub> Group 2 allowance transfer by moving each TR SO<sub>2</sub> Group 2 allowance from the transferor account to the transferee account as specified in the transfer.

(b) A TR SO<sub>2</sub> Group 2 allowance transfer to or from a compliance account that is submitted for recordation after the allowance transfer deadline for a control period and that includes any TR SO<sub>2</sub> Group 2 allowances allocated for any control period before such allowance transfer deadline will not be recorded until after the Administrator completes the deductions from such

compliance account under § 97.724 for the control period immediately before such allowance transfer deadline.

(c) Where a TR SO<sub>2</sub> Group 2 allowance transfer is not correctly submitted under § 97.722, the Administrator will not record such transfer.

(d) Within 5 business days of recordation of a TR SO<sub>2</sub> Group 2 allowance transfer under paragraphs (a) and (b) of the section, the Administrator will notify the authorized account representatives of both the transferor and transferee accounts.

(e) Within 10 business days of receipt of a TR SO<sub>2</sub> Group 2 allowance transfer that is not correctly submitted under § 97.722, the Administrator will notify the authorized account representatives of both accounts subject to the transfer of:

(1) A decision not to record the transfer, and

(2) The reasons for such non-recordation.

**§ 97.724 Compliance with TR SO<sub>2</sub> Group 2 emissions limitation.**

(a) *Availability for deduction for compliance.* TR SO<sub>2</sub> Group 2 allowances are available to be deducted for compliance with a source's TR SO<sub>2</sub> Group 2 emissions limitation for a control period in a given year only if the TR SO<sub>2</sub> Group 2 allowances:

(1) Were allocated for such control period or a control period in a prior year; and

(2) Are held in the source's compliance account as of the allowance transfer deadline for such control period.

(b) *Deductions for compliance.* After the recordation, in accordance with § 97.723, of TR SO<sub>2</sub> Group 2 allowance transfers submitted by the allowance transfer deadline for a control period in a given year, the Administrator will deduct from each source's compliance account TR SO<sub>2</sub> Group 2 allowances available under paragraph (a) of this section in order to determine whether the source meets the TR SO<sub>2</sub> Group 2 emissions limitation for such control period, as follows:

(1) Until the amount of TR SO<sub>2</sub> Group 2 allowances deducted equals the number of tons of total SO<sub>2</sub> emissions from all TR SO<sub>2</sub> Group 2 units at the source for such control period; or

(2) If there are insufficient TR SO<sub>2</sub> Group 2 allowances to complete the deductions in paragraph (b)(1) of this section, until no more TR SO<sub>2</sub> Group 2 allowances available under paragraph (a) of this section remain in the compliance account.

(c)(1) *Identification of TR SO<sub>2</sub> Group 2 allowances by serial number.* The

authorized account representative for a source's compliance account may request that specific TR SO<sub>2</sub> Group 2 allowances, identified by serial number, in the compliance account be deducted for emissions or excess emissions for a control period in a given year in accordance with paragraph (b) or (d) of this section. In order to be complete, such request shall be submitted to the Administrator by the allowance transfer deadline for such control period and include, in a format prescribed by the Administrator, the identification of the TR SO<sub>2</sub> Group 2 source and the appropriate serial numbers.

(2) *First-in, first-out.* The Administrator will deduct TR SO<sub>2</sub> Group 2 allowances under paragraph (b) or (d) of this section from the source's compliance account in accordance with a complete request under paragraph (c)(1) of this section or, in the absence of such request or in the case of identification of an insufficient amount of TR SO<sub>2</sub> Group 2 allowances in such request, on a first-in, first-out accounting basis in the following order:

(i) Any TR SO<sub>2</sub> Group 2 allowances that were allocated to the units at the source and not transferred out of the compliance account, in the order of recordation; and then

(ii) Any TR SO<sub>2</sub> Group 2 allowances that were allocated to any unit and transferred to and recorded in the compliance account pursuant to this subpart, in the order of recordation.

(d) *Deductions for excess emissions.* After making the deductions for compliance under paragraph (b) of this section for a control period in a year in which the TR SO<sub>2</sub> Group 2 source has excess emissions, the Administrator will deduct from the source's compliance account an amount of TR SO<sub>2</sub> Group 2 allowances, allocated for a control period in a prior year or the control period in the year of the excess emissions or in the immediately following year, equal to two times the number of tons of the source's excess emissions.

(e) *Recordation of deductions.* The Administrator will record in the appropriate compliance account all deductions from such an account under paragraphs (b) and (d) of this section.

**§ 97.725 Compliance with TR SO<sub>2</sub> Group 2 assurance provisions.**

(a) *Availability for deduction.* TR SO<sub>2</sub> Group 2 allowances are available to be deducted for compliance with the TR SO<sub>2</sub> Group 2 assurance provisions for a control period in a given year by the owners and operators of a group of one or more TR SO<sub>2</sub> Group 2 sources and units in a State (and Indian country

within the borders of such State) only if the TR SO<sub>2</sub> Group 2 allowances:

(1) Were allocated for a control period in a prior year or the control period in the given year or in the immediately following year; and

(2) Are held in the assurance account, established by the Administrator for such owners and operators of such group of TR SO<sub>2</sub> Group 2 sources and units in such State (and Indian country within the borders of such State) under paragraph (b)(3) of this section, as of the deadline established in paragraph (b)(4) of this section.

(b) *Deductions for compliance.* The Administrator will deduct TR SO<sub>2</sub> Group 2 allowances available under paragraph (a) of this section for compliance with the TR SO<sub>2</sub> Group 2 assurance provisions for a State for a control period in a given year in accordance with the following procedures:

(1) By June 1, 2013 and June 1 of each year thereafter, the Administrator will:

(i) Calculate, for each State (and Indian country within the borders of such State), the total SO<sub>2</sub> emissions from all TR SO<sub>2</sub> Group 2 units at TR SO<sub>2</sub> Group 2 sources in the State (and Indian country within the borders of such State) during the control period in the year before the year of this calculation deadline and the amount, if any, by which such total SO<sub>2</sub> emissions exceed the State assurance level as described in § 97.706(c)(2)(iii); and

(ii) Promulgate a notice of data availability of the results of the calculations required in paragraph (b)(1)(i) of this section, including separate calculations of the SO<sub>2</sub> emissions from each TR SO<sub>2</sub> Group 2 source.

(2) For each notice of data availability required in paragraph (b)(1)(ii) of this section and for any State (and Indian country within the borders of such State) identified in such notice as having TR SO<sub>2</sub> Group 2 units with total SO<sub>2</sub> emissions exceeding the State assurance level for a control period in a given year, as described in § 97.706(c)(2)(iii):

(i) By July 1 immediately after the promulgation of such notice, the designated representative of each TR SO<sub>2</sub> Group 2 source in each such State (and Indian country within the borders of such State) shall submit a statement, in a format prescribed by the Administrator, providing for each TR SO<sub>2</sub> Group 2 unit (if any) at the source that operates during, but is not allocated an amount of TR SO<sub>2</sub> Group 2 allowances for, such control period, the unit's allowable SO<sub>2</sub> emission rate for such control period and, if such rate is

expressed in lb per mmBtu, the unit's heat rate.

(ii) By August 1 immediately after the promulgation of such notice, the Administrator will calculate, for each such State (and Indian country within the borders of such State) and such control period and each common designated representative for such control period for a group of one or more TR SO<sub>2</sub> Group 2 sources and units in the State (and Indian country within the borders of such State), the common designated representative's share of the total SO<sub>2</sub> emissions from all TR SO<sub>2</sub> Group 2 units at TR SO<sub>2</sub> Group 2 sources in the State (and Indian country within the borders of such State), the common designated representative's assurance level, and the amount (if any) of TR SO<sub>2</sub> Group 2 allowances that the owners and operators of such group of sources and units must hold in accordance with the calculation formula in § 97.706(c)(2)(i) and will promulgate a notice of data availability of the results of these calculations.

(iii) The Administrator will provide an opportunity for submission of objections to the calculations referenced by the notice of data availability required in paragraph (b)(2)(ii) of this section and the calculations referenced by the relevant notice of data availability required in paragraph (b)(1)(i) of this section.

(A) Objections shall be submitted by the deadline specified in such notice and shall be limited to addressing whether the calculations referenced in the relevant notice required under paragraph (b)(1)(ii) of this section and referenced in the notice required under paragraph (b)(2)(ii) of this section are in accordance with § 97.706(c)(2)(iii), §§ 97.706(b) and 97.730 through 97.735, the definitions of "common designated representative", "common designated representative's assurance level", and "common designated representative's share" in § 97.702, and the calculation formula in § 97.706(c)(2)(i).

(B) The Administrator will adjust the calculations to the extent necessary to ensure that they are in accordance with the provisions referenced in paragraph (b)(2)(iii)(A) of this section. By October 1 immediately after the promulgation of such notice, the Administrator will promulgate a notice of data availability of any adjustments that the Administrator determines to be necessary and the reasons for accepting or rejecting any objections submitted in accordance with paragraph (b)(2)(iii)(A) of this section.

(3) For any State (and Indian country within the borders of such State) referenced in each notice of data

availability required in paragraph (b)(2)(iii)(B) of this section as having TR SO<sub>2</sub> Group 2 units with total SO<sub>2</sub> emissions exceeding the State assurance level for a control period in a given year, the Administrator will establish one assurance account for each set of owners and operators referenced, in the notice of data availability required under paragraph (b)(2)(iii)(B) of this section, as all of the owners and operators of a group of TR SO<sub>2</sub> Group 2 sources and units in the State (and Indian country within the borders of such State) having a common designated representative for such control period and as being required to hold TR SO<sub>2</sub> Group 2 allowances.

(4)(i) As of midnight of November 1 immediately after the promulgation of each notice of data availability required in paragraph (b)(2)(iii)(B) of this section, the owners and operators described in paragraph (b)(3) of this section shall hold in the assurance account established for them and for the appropriate TR SO<sub>2</sub> Group 2 sources, TR SO<sub>2</sub> Group 2 units, and State (and Indian country within the borders of such State) under paragraph (b)(3) of this section a total amount of TR SO<sub>2</sub> Group 2 allowances, available for deduction under paragraph (a) of this section, equal to the amount such owners and operators are required to hold with regard to such sources, units and State (and Indian country within the borders of such State) as calculated by the Administrator and referenced in such notice.

(ii) Notwithstanding the allowance-holding deadline specified in paragraph (b)(4)(i) of this section, if November 1 is not a business day, then such allowance-holding deadline shall be midnight of the first business day thereafter.

(5) After November 1 (or the date described in paragraph (b)(4)(ii) of this section) immediately after the promulgation of each notice of data availability required in paragraph (b)(2)(iii)(B) of this section and after the recordation, in accordance with § 97.723, of TR SO<sub>2</sub> Group 2 allowance transfers submitted by midnight of such date, the Administrator will determine whether the owners and operators described in paragraph (b)(3) of this section hold, in the assurance account for the appropriate TR SO<sub>2</sub> Group 2 sources, TR SO<sub>2</sub> Group 2 units, and State (and Indian country within the borders of such State) established under paragraph (b)(3) of this section, the amount of TR SO<sub>2</sub> Group 2 allowances available under paragraph (a) of this section that the owners and operators are required to hold with regard to such

sources, units, and State (and Indian country within the borders of such State) as calculated by the Administrator and referenced in the notice required in paragraph (b)(2)(iii)(B) of this section.

(6) Notwithstanding any other provision of this subpart and any revision, made by or submitted to the Administrator after the promulgation of the notice of data availability required in paragraph (b)(2)(iii)(B) of this section for a control period in a given year, of any data used in making the calculations referenced in such notice, the amounts of TR SO<sub>2</sub> Group 2 allowances that the owners and operators are required to hold in accordance with § 97.706(c)(2)(i) for such control period shall continue to be such amounts as calculated by the Administrator and referenced in such notice required in paragraph (b)(2)(iii)(B) of this section, except as follows:

(i) If any such data are revised by the Administrator as a result of a decision in or settlement of litigation concerning such data on appeal under part 78 of this chapter of such notice, or on appeal under section 307 of the Clean Air Act of a decision rendered under part 78 of this chapter on appeal of such notice, then the Administrator will use the data as so revised to recalculate the amounts of TR SO<sub>2</sub> Group 2 allowances that owners and operators are required to hold in accordance with the calculation formula in § 97.706(c)(2)(i) for such control period with regard to the TR SO<sub>2</sub> Group 2 sources, TR SO<sub>2</sub> Group 2 units, and State (and Indian country within the borders of such State) involved, provided that such litigation under part 78 of this chapter, or the proceeding under part 78 of this chapter that resulted in the decision appealed in such litigation under section 307 of the Clean Air Act, was initiated no later than 30 days after promulgation of such notice required in paragraph (b)(2)(iii)(B) of this section.

(ii) If any such data are revised by the owners and operators of a TR SO<sub>2</sub> Group 2 source and TR SO<sub>2</sub> Group 2 unit whose designated representative submitted such data under paragraph (b)(2)(i) of this section, as a result of a decision in or settlement of litigation concerning such submission, then the Administrator will use the data as so revised to recalculate the amounts of TR SO<sub>2</sub> Group 2 allowances that owners and operators are required to hold in accordance with the calculation formula in § 97.706(c)(2)(i) for such control period with regard to the TR SO<sub>2</sub> Group 2 sources, TR SO<sub>2</sub> Group 2 units, and State (and Indian country within the



borders of such State) involved, provided that such litigation was initiated no later than 30 days after promulgation of such notice required in paragraph (b)(2)(iii)(B) of this section.

(iii) If the revised data are used to recalculate, in accordance with paragraphs (b)(6)(i) and (ii) of this section, the amount of TR SO<sub>2</sub> Group 2 allowances that the owners and operators are required to hold for such control period with regard to the TR SO<sub>2</sub> Group 2 sources, TR SO<sub>2</sub> Group 2 units, and State (and Indian country within the borders of such State) involved—

(A) Where the amount of TR SO<sub>2</sub> Group 2 allowances that the owners and operators are required to hold increases as a result of the use of all such revised data, the Administrator will establish a new, reasonable deadline on which the owners and operators shall hold the additional amount of TR SO<sub>2</sub> Group 2 allowances in the assurance account established by the Administrator for the appropriate TR SO<sub>2</sub> Group 2 sources, TR SO<sub>2</sub> Group 2 units, and State (and Indian country within the borders of such State) under paragraph (b)(3) of this section. The owners' and operators' failure to hold such additional amount, as required, before the new deadline shall not be a violation of the Clean Air Act. The owners' and operators' failure to hold such additional amount, as required, as of the new deadline shall be a violation of the Clean Air Act. Each TR SO<sub>2</sub> Group 2 allowance that the owners and operators fail to hold as required as of the new deadline, and each day in such control period, shall be a separate violation of the Clean Air Act.

(B) For the owners and operators for which the amount of TR SO<sub>2</sub> Group 2 allowances required to be held decreases as a result of the use of all such revised data, the Administrator will record, in all accounts from which TR SO<sub>2</sub> Group 2 allowances were transferred by such owners and operators for such control period to the assurance account established by the Administrator for the appropriate at TR SO<sub>2</sub> Group 2 sources, TR SO<sub>2</sub> Group 2 units, and State (and Indian country within the borders of such State) under paragraph (b)(3) of this section, a total amount of the TR SO<sub>2</sub> Group 2 allowances held in such assurance account equal to the amount of the decrease. If TR SO<sub>2</sub> Group 2 allowances were transferred to such assurance account from more than one account, the amount of TR SO<sub>2</sub> Group 2 allowances recorded in each such transferor account will be in proportion to the percentage of the total amount of TR SO<sub>2</sub> Group 2 allowances transferred to such assurance account for such

control period from such transferor account.

(C) Each TR SO<sub>2</sub> Group 2 allowance held under paragraph (b)(6)(iii)(A) of this section as a result of recalculation of requirements under the TR SO<sub>2</sub> Group 2 assurance provisions for such control period must be a TR SO<sub>2</sub> Group 2 allowance allocated for a control period in a year before or the year immediately following, or in the same year as, the year of such control period.

#### **§ 97.726 Banking.**

(a) A TR SO<sub>2</sub> Group 2 allowance may be banked for future use or transfer in a compliance account or a general account in accordance with paragraph (b) of this section.

(b) Any TR SO<sub>2</sub> Group 2 allowance that is held in a compliance account or a general account will remain in such account unless and until the TR SO<sub>2</sub> Group 2 allowance is deducted or transferred under § 97.711(c), § 97.723, § 97.724, § 97.725, § 97.727, or § 97.728.

#### **§ 97.727 Account error.**

The Administrator may, at his or her sole discretion and on his or her own motion, correct any error in any Allowance Management System account. Within 10 business days of making such correction, the Administrator will notify the authorized account representative for the account.

#### **§ 97.728 Administrator's action on submissions.**

(a) The Administrator may review and conduct independent audits concerning any submission under the TR SO<sub>2</sub> Group 2 Trading Program and make appropriate adjustments of the information in the submission.

(b) The Administrator may deduct TR SO<sub>2</sub> Group 2 allowances from or transfer TR SO<sub>2</sub> Group 2 allowances to a compliance account or an assurance account, based on the information in a submission, as adjusted under paragraph (a)(1) of this section, and record such deductions and transfers.

#### **§ 97.729 [Reserved]**

#### **§ 97.730 General monitoring, recordkeeping, and reporting requirements.**

The owners and operators, and to the extent applicable, the designated representative, of a TR SO<sub>2</sub> Group 2 unit, shall comply with the monitoring, recordkeeping, and reporting requirements as provided in this subpart and subparts F and G of part 75 of this chapter. For purposes of applying such requirements, the definitions in § 97.702 and in § 72.2 of this chapter shall apply, the terms "affected unit," "designated representative," and "continuous

emission monitoring system" (or "CEMS") in part 75 of this chapter shall be deemed to refer to the terms "TR SO<sub>2</sub> Group 2 unit," "designated representative," and "continuous emission monitoring system" (or "CEMS") respectively as defined in § 97.702, and the term "newly affected unit" shall be deemed to mean "newly affected TR SO<sub>2</sub> Group 2 unit". The owner or operator of a unit that is not a TR SO<sub>2</sub> Group 2 unit but that is monitored under § 75.16(b)(2) of this chapter shall comply with the same monitoring, recordkeeping, and reporting requirements as a TR SO<sub>2</sub> Group 2 unit.

(a) Requirements for installation, certification, and data accounting. The owner or operator of each TR SO<sub>2</sub> Group 2 unit shall:

(1) Install all monitoring systems required under this subpart for monitoring SO<sub>2</sub> mass emissions and individual unit heat input (including all systems required to monitor SO<sub>2</sub> concentration, stack gas moisture content, stack gas flow rate, CO<sub>2</sub> or O<sub>2</sub> concentration, and fuel flow rate, as applicable, in accordance with §§ 75.11 and 75.16 of this chapter);

(2) Successfully complete all certification tests required under § 97.731 and meet all other requirements of this subpart and part 75 of this chapter applicable to the monitoring systems under paragraph (a)(1) of this section; and

(3) Record, report, and quality-assure the data from the monitoring systems under paragraph (a)(1) of this section.

(b) *Compliance deadlines.* Except as provided in paragraph (e) of this section, the owner or operator shall meet the monitoring system certification and other requirements of paragraphs (a)(1) and (2) of this section on or before the following dates and shall record, report, and quality-assure the data from the monitoring systems under paragraph (a)(1) of this section on and after the following dates.

(1) For the owner or operator of a TR SO<sub>2</sub> Group 2 unit that commences commercial operation before July 1, 2011, January 1, 2012.

(2) For the owner or operator of a TR SO<sub>2</sub> Group 2 unit that commences commercial operation on or after July 1, 2011, by the later of the following:

(i) January 1, 2012; or  
(ii) 180 calendar days after the date on which the unit commences commercial operation.

(3) The owner or operator of a TR SO<sub>2</sub> Group 2 unit for which construction of a new stack or flue or installation of add-on SO<sub>2</sub> emission controls is completed after the applicable deadline

under paragraph (b)(1) or (2) of this section shall meet the requirements of §§ 75.4(e)(1) through (e)(4) of this chapter, except that:

(i) Such requirements shall apply to the monitoring systems required under § 97.730 through § 97.735, rather than the monitoring systems required under part 75 of this chapter;

(ii) SO<sub>2</sub> concentration, stack gas moisture content, stack gas volumetric flow rate, and O<sub>2</sub> or CO<sub>2</sub> concentration data shall be determined and reported, rather than the data listed in § 75.4(e)(2) of this chapter; and

(iii) Any petition for another procedure under § 75.4(e)(2) of this chapter shall be submitted under § 97.735, rather than § 75.66.

(c) *Reporting data.* The owner or operator of a TR SO<sub>2</sub> Group 2 unit that does not meet the applicable compliance date set forth in paragraph (b) of this section for any monitoring system under paragraph (a)(1) of this section shall, for each such monitoring system, determine, record, and report maximum potential (or, as appropriate, minimum potential) values for SO<sub>2</sub> concentration, stack gas flow rate, stack gas moisture content, fuel flow rate, and any other parameters required to determine SO<sub>2</sub> mass emissions and heat input in accordance with § 75.31(b)(2) or (c)(3) of this chapter or section 2.4 of appendix D to part 75 of this chapter, as applicable.

(d) *Prohibitions.* (1) No owner or operator of a TR SO<sub>2</sub> Group 2 unit shall use any alternative monitoring system, alternative reference method, or any other alternative to any requirement of this subpart without having obtained prior written approval in accordance with § 97.735.

(2) No owner or operator of a TR SO<sub>2</sub> Group 2 unit shall operate the unit so as to discharge, or allow to be discharged, SO<sub>2</sub> to the atmosphere without accounting for all such SO<sub>2</sub> in accordance with the applicable provisions of this subpart and part 75 of this chapter.

(3) No owner or operator of a TR SO<sub>2</sub> Group 2 unit shall disrupt the continuous emission monitoring system, any portion thereof, or any other approved emission monitoring method, and thereby avoid monitoring and recording SO<sub>2</sub> mass discharged into the atmosphere or heat input, except for periods of recertification or periods when calibration, quality assurance testing, or maintenance is performed in accordance with the applicable provisions of this subpart and part 75 of this chapter.

(4) No owner or operator of a TR SO<sub>2</sub> Group 2 unit shall retire or permanently

discontinue use of the continuous emission monitoring system, any component thereof, or any other approved monitoring system under this subpart, except under any one of the following circumstances:

(i) During the period that the unit is covered by an exemption under § 97.705 that is in effect;

(ii) The owner or operator is monitoring emissions from the unit with another certified monitoring system approved, in accordance with the applicable provisions of this subpart and part 75 of this chapter, by the Administrator for use at that unit that provides emission data for the same pollutant or parameter as the retired or discontinued monitoring system; or

(iii) The designated representative submits notification of the date of certification testing of a replacement monitoring system for the retired or discontinued monitoring system in accordance with § 97.731(d)(3)(i).

(e) *Long-term cold storage.* The owner or operator of a TR SO<sub>2</sub> Group 2 unit is subject to the applicable provisions of § 75.4(d) of this chapter concerning units in long-term cold storage.

#### **§ 97.731 Initial monitoring system certification and recertification procedures.**

(a) The owner or operator of a TR SO<sub>2</sub> Group 2 unit shall be exempt from the initial certification requirements of this section for a monitoring system under § 97.730(a)(1) if the following conditions are met:

(1) The monitoring system has been previously certified in accordance with part 75 of this chapter; and

(2) The applicable quality-assurance and quality-control requirements of § 75.21 of this chapter and appendices B and D to part 75 of this chapter are fully met for the certified monitoring system described in paragraph (a)(1) of this section.

(b) The recertification provisions of this section shall apply to a monitoring system under § 97.730(a)(1) that is exempt from initial certification requirements under paragraph (a) of this section.

(c) [Reserved]

(d) Except as provided in paragraph (a) of this section, the owner or operator of a TR SO<sub>2</sub> Group 2 unit shall comply with the following initial certification and recertification procedures, for a continuous monitoring system (*i.e.*, a continuous emission monitoring system and an excepted monitoring system under appendix D to part 75 of this chapter) under § 97.730(a)(1). The owner or operator of a unit that qualifies to use the low mass emissions excepted monitoring methodology under § 75.19

of this chapter or that qualifies to use an alternative monitoring system under subpart E of part 75 of this chapter shall comply with the procedures in paragraph (e) or (f) of this section respectively.

(1) Requirements for initial certification. The owner or operator shall ensure that each continuous monitoring system under § 97.730(a)(1) (including the automated data acquisition and handling system) successfully completes all of the initial certification testing required under § 75.20 of this chapter by the applicable deadline in § 97.730(b). In addition, whenever the owner or operator installs a monitoring system to meet the requirements of this subpart in a location where no such monitoring system was previously installed, initial certification in accordance with § 75.20 of this chapter is required.

(2) Requirements for recertification. Whenever the owner or operator makes a replacement, modification, or change in any certified continuous emission monitoring system under § 97.730(a)(1) that may significantly affect the ability of the system to accurately measure or record SO<sub>2</sub> mass emissions or heat input rate or to meet the quality-assurance and quality-control requirements of § 75.21 of this chapter or appendix B to part 75 of this chapter, the owner or operator shall recertify the monitoring system in accordance with § 75.20(b) of this chapter. Furthermore, whenever the owner or operator makes a replacement, modification, or change to the flue gas handling system or the unit's operation that may significantly change the stack flow or concentration profile, the owner or operator shall recertify each continuous emission monitoring system whose accuracy is potentially affected by the change, in accordance with § 75.20(b) of this chapter. Examples of changes to a continuous emission monitoring system that require recertification include: Replacement of the analyzer, complete replacement of an existing continuous emission monitoring system, or change in location or orientation of the sampling probe or site. Any fuel flowmeter system under § 97.730(a)(1) is subject to the recertification requirements in § 75.20(g)(6) of this chapter.

(3) Approval process for initial certification and recertification. For initial certification of a continuous monitoring system under § 97.730(a)(1), paragraphs (d)(3)(i) through (v) of this section apply. For recertifications of such monitoring systems, paragraphs (d)(3)(i) through (iv) of this section and the procedures in §§ 75.20(b)(5) and (g)(7) of this chapter (in lieu of the

procedures in paragraph (d)(3)(v) of this section) apply, provided that in applying paragraphs (d)(3)(i) through (iv) of this section, the words “certification” and “initial certification” are replaced by the word “recertification” and the word “certified” is replaced by with the word “recertified”.

(i) Notification of certification. The designated representative shall submit to the appropriate EPA Regional Office and the Administrator written notice of the dates of certification testing, in accordance with § 97.733.

(ii) Certification application. The designated representative shall submit to the Administrator a certification application for each monitoring system. A complete certification application shall include the information specified in § 75.63 of this chapter.

(iii) Provisional certification date. The provisional certification date for a monitoring system shall be determined in accordance with § 75.20(a)(3) of this chapter. A provisionally certified monitoring system may be used under the TR SO<sub>2</sub> Group 2 Trading Program for a period not to exceed 120 days after receipt by the Administrator of the complete certification application for the monitoring system under paragraph (d)(3)(ii) of this section. Data measured and recorded by the provisionally certified monitoring system, in accordance with the requirements of part 75 of this chapter, will be considered valid quality-assured data (retroactive to the date and time of provisional certification), provided that the Administrator does not invalidate the provisional certification by issuing a notice of disapproval within 120 days of the date of receipt of the complete certification application by the Administrator.

(iv) Certification application approval process. The Administrator will issue a written notice of approval or disapproval of the certification application to the owner or operator within 120 days of receipt of the complete certification application under paragraph (d)(3)(ii) of this section. In the event the Administrator does not issue such a notice within such 120-day period, each monitoring system that meets the applicable performance requirements of part 75 of this chapter and is included in the certification application will be deemed certified for use under the TR SO<sub>2</sub> Group 2 Trading Program.

(A) Approval notice. If the certification application is complete and shows that each monitoring system meets the applicable performance requirements of part 75 of this chapter,

then the Administrator will issue a written notice of approval of the certification application within 120 days of receipt.

(B) Incomplete application notice. If the certification application is not complete, then the Administrator will issue a written notice of incompleteness that sets a reasonable date by which the designated representative must submit the additional information required to complete the certification application. If the designated representative does not comply with the notice of incompleteness by the specified date, then the Administrator may issue a notice of disapproval under paragraph (d)(3)(iv)(C) of this section.

(C) Disapproval notice. If the certification application shows that any monitoring system does not meet the performance requirements of part 75 of this chapter or if the certification application is incomplete and the requirement for disapproval under paragraph (d)(3)(iv)(B) of this section is met, then the Administrator will issue a written notice of disapproval of the certification application. Upon issuance of such notice of disapproval, the provisional certification is invalidated by the Administrator and the data measured and recorded by each uncertified monitoring system shall not be considered valid quality-assured data beginning with the date and hour of provisional certification (as defined under § 75.20(a)(3) of this chapter).

(D) Audit decertification. The Administrator may issue a notice of disapproval of the certification status of a monitor in accordance with § 97.732(b).

(v) Procedures for loss of certification. If the Administrator issues a notice of disapproval of a certification application under paragraph (d)(3)(iv)(C) of this section or a notice of disapproval of certification status under paragraph (d)(3)(iv)(D) of this section, then:

(A) The owner or operator shall substitute the following values, for each disapproved monitoring system, for each hour of unit operation during the period of invalid data specified under § 75.20(a)(4)(iii), § 75.20(g)(7), or § 75.21(e) of this chapter and continuing until the applicable date and hour specified under § 75.20(a)(5)(i) or (g)(7) of this chapter:

(1) For a disapproved SO<sub>2</sub> pollutant concentration monitor and disapproved flow monitor, respectively, the maximum potential concentration of SO<sub>2</sub> and the maximum potential flow rate, as defined in sections 2.1.1.1 and 2.1.4.1 of appendix A to part 75 of this chapter.

(2) For a disapproved moisture monitoring system and disapproved diluent gas monitoring system, respectively, the minimum potential moisture percentage and either the maximum potential CO<sub>2</sub> concentration or the minimum potential O<sub>2</sub> concentration (as applicable), as defined in sections 2.1.5, 2.1.3.1, and 2.1.3.2 of appendix A to part 75 of this chapter.

(3) For a disapproved fuel flowmeter system, the maximum potential fuel flow rate, as defined in section 2.4.2.1 of appendix D to part 75 of this chapter.

(B) The designated representative shall submit a notification of certification retest dates and a new certification application in accordance with paragraphs (d)(3)(i) and (ii) of this section.

(C) The owner or operator shall repeat all certification tests or other requirements that were failed by the monitoring system, as indicated in the Administrator's notice of disapproval, no later than 30 unit operating days after the date of issuance of the notice of disapproval.

(e) The owner or operator of a unit qualified to use the low mass emissions (LME) excepted methodology under § 75.19 of this chapter shall meet the applicable certification and recertification requirements in §§ 75.19(a)(2) and 75.20(h) of this chapter. If the owner or operator of such a unit elects to certify a fuel flowmeter system for heat input determination, the owner or operator shall also meet the certification and recertification requirements in § 75.20(g) of this chapter.

(f) The designated representative of each unit for which the owner or operator intends to use an alternative monitoring system approved by the Administrator under subpart E of part 75 of this chapter shall comply with the applicable notification and application procedures of § 75.20(f) of this chapter.

#### **§ 97.732 Monitoring system out-of-control periods.**

(a) *General provisions.* Whenever any monitoring system fails to meet the quality-assurance and quality-control requirements or data validation requirements of part 75 of this chapter, data shall be substituted using the applicable missing data procedures in subpart D or appendix D to part 75 of this chapter.

(b) *Audit decertification.* Whenever both an audit of a monitoring system and a review of the initial certification or recertification application reveal that any monitoring system should not have been certified or recertified because it did not meet a particular performance

specification or other requirement under § 97.731 or the applicable provisions of part 75 of this chapter, both at the time of the initial certification or recertification application submission and at the time of the audit, the Administrator will issue a notice of disapproval of the certification status of such monitoring system. For the purposes of this paragraph, an audit shall be either a field audit or an audit of any information submitted to the Administrator or any State or permitting authority. By issuing the notice of disapproval, the Administrator revokes prospectively the certification status of the monitoring system. The data measured and recorded by the monitoring system shall not be considered valid quality-assured data from the date of issuance of the notification of the revoked certification status until the date and time that the owner or operator completes subsequently approved initial certification or recertification tests for the monitoring system. The owner or operator shall follow the applicable initial certification or recertification procedures in § 97.731 for each disapproved monitoring system.

**§ 97.733 Notifications concerning monitoring.**

The designated representative of a TR SO<sub>2</sub> Group 2 unit shall submit written notice to the Administrator in accordance with § 75.61 of this chapter.

**§ 97.734 Recordkeeping and reporting.**

(a) *General provisions.* The designated representative shall comply with all recordkeeping and reporting requirements in paragraphs (b) through (e) of this section, the applicable recordkeeping and reporting requirements in subparts F and G of part 75 of this chapter, and the requirements of § 97.714(a).

(b) *Monitoring plans.* The owner or operator of a TR SO<sub>2</sub> Group 2 unit shall comply with requirements of § 75.62 of this chapter.

(c) *Certification applications.* The designated representative shall submit an application to the Administrator within 45 days after completing all initial certification or recertification tests required under § 97.731, including the information required under § 75.63 of this chapter.

(d) *Quarterly reports.* The designated representative shall submit quarterly reports, as follows:

(1) The designated representative shall report the SO<sub>2</sub> mass emissions data and heat input data for the TR SO<sub>2</sub> Group 2 unit, in an electronic quarterly report in a format prescribed by the

Administrator, for each calendar quarter beginning with:

(i) For a unit that commences commercial operation before July 1, 2011, the calendar quarter covering January 1, 2012 through March 31, 2012; or

(ii) For a unit that commences commercial operation on or after July 1, 2011, the calendar quarter corresponding to the earlier of the date of provisional certification or the applicable deadline for initial certification under § 97.730(b), unless that quarter is the third or fourth quarter of 2011, in which case reporting shall commence in the quarter covering January 1, 2012 through March 31, 2012.

(2) The designated representative shall submit each quarterly report to the Administrator within 30 days after the end of the calendar quarter covered by the report. Quarterly reports shall be submitted in the manner specified in § 75.64 of this chapter.

(3) For TR SO<sub>2</sub> Group 2 units that are also subject to the Acid Rain Program, TR NO<sub>x</sub> Annual Trading Program, or TR NO<sub>x</sub> Ozone Season Trading Program, quarterly reports shall include the applicable data and information required by subparts F through H of part 75 of this chapter as applicable, in addition to the SO<sub>2</sub> mass emission data, heat input data, and other information required by this subpart.

(4) The Administrator may review and conduct independent audits of any quarterly report in order to determine whether the quarterly report meets the requirements of this subpart and part 75 of this chapter, including the requirement to use substitute data.

(i) The Administrator will notify the designated representative of any determination that the quarterly report fails to meet any such requirements and specify in such notification any corrections that the Administrator believes are necessary to make through resubmission of the quarterly report and a reasonable time period within which the designated representative must respond. Upon request by the designated representative, the Administrator may specify reasonable extensions of such time period. Within the time period (including any such extensions) specified by the Administrator, the designated representative shall resubmit the quarterly report with the corrections specified by the Administrator, except to the extent the designated representative provides information demonstrating that a specified correction is not necessary because the quarterly report already meets the requirements of this subpart and part 75

of this chapter that are relevant to the specified correction.

(ii) Any resubmission of a quarterly report shall meet the requirements applicable to the submission of a quarterly report under this subpart and part 75 of this chapter, except for the deadline set forth in paragraph (d)(2) of this section.

(e) *Compliance certification.* The designated representative shall submit to the Administrator a compliance certification (in a format prescribed by the Administrator) in support of each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The certification shall state that:

(1) The monitoring data submitted were recorded in accordance with the applicable requirements of this subpart and part 75 of this chapter, including the quality assurance procedures and specifications; and

(2) For a unit with add-on SO<sub>2</sub> emission controls and for all hours where SO<sub>2</sub> data are substituted in accordance with § 75.34(a)(1) of this chapter, the add-on emission controls were operating within the range of parameters listed in the quality assurance/quality control program under appendix B to part 75 of this chapter and the substitute data values do not systematically underestimate SO<sub>2</sub> emissions.

**§ 97.735 Petitions for alternatives to monitoring, recordkeeping, or reporting requirements.**

(a) The designated representative of a TR SO<sub>2</sub> Group 2 unit may submit a petition under § 75.66 of this chapter to the Administrator, requesting approval to apply an alternative to any requirement of §§ 97.730 through 97.734.

(b) A petition submitted under paragraph (a) of this section shall include sufficient information for the evaluation of the petition, including, at a minimum, the following information:

(i) Identification of each unit and source covered by the petition;

(ii) A detailed explanation of why the proposed alternative is being suggested in lieu of the requirement;

(iii) A description and diagram of any equipment and procedures used in the proposed alternative;

(iv) A demonstration that the proposed alternative is consistent with the purposes of the requirement for which the alternative is proposed and with the purposes of this subpart and part 75 of this chapter and that any

adverse effect of approving the alternative will be *de minimis*; and

(v) Any other relevant information that the Administrator may require.

(c) Use of an alternative to any requirement referenced in paragraph (a) of this section is in accordance with this subpart only to the extent that the petition is approved in writing by the

Administrator and that such use is in accordance with such approval.

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