

# SECTION-BY-SECTION SUMMARY OF CLEAR SKIES ACT OF 2003

The Clear Skies Act of 2003 extends and reorganizes Title IV of the Clean Air Act to establish new cap-and-trade programs requiring reductions of sulfur dioxide, nitrogen oxides, and mercury emissions from electric generating facilities. The Clear Skies Act retains existing Title IV requirements until the new requirements take effect. Further, the Clear Skies Act amends certain provisions of Title I of the Clean Air Act that currently apply to the combustion units covered by the new Title IV emission caps.

# **Title IV of the Clean Air Act**

As revised by the Clear Skies Act, Title IV has five Parts. Part A contains provisions common to the control of all three pollutants. Part B contains provisions specifically for sulfur dioxide emission reductions. Part C contains provisions specifically for nitrogen oxides emission reductions. Part D contains provisions specifically for mercury emission reductions. Part E contains performance standards for affected units, provisions for research, environmental monitoring, and assessment, an exemption from major source reconstruction review requirements and best available retrofit control technology requirements, and other provisions concerning Title I of the Clean Air Act.

# Part A. General Provisions

SECTION 401. Reserved.

SECTION 402. Definitions

Section 402 is based on the existing Section 402, modified to include new terms used in Parts A through D and to move to Subpart 1 of Part B the defined terms that are unique to the Acid Rain Program.

SECTION 403. Allowance System

Section 403 is the existing Section 403, modified to apply to sulfur dioxide allowances, nitrogen oxides allowances, and mercury allowances under the new trading programs essentially the same allowance system provisions that apply to sulfur dioxide allowances under the existing Acid Rain Program. Certain provisions unique to the Acid Rain Program are moved to Subpart 1 of Part B. Further, for the Acid Rain Program and the new trading programs, the existing Section 403 is revised to provide that only the signature of the party transferring allowances (not the signatures of both parties to the

transfer) is necessary for the transfer to be effective. The Administrator has already issued regulations under the existing Section 403 for sulfur dioxide allowances and must issue regulations within 24 months of enactment governing the issuance, transfer, recording, and tracking of the nitrogen oxides allowances and mercury allowances. The calculation of the allocations of these three types of allowances, and the determination of the data used in making the calculations, will not be subject to judicial review.

Like sulfur dioxide allowances, nitrogen oxides allowances and mercury allowances are limited authorizations to emit and are not property rights. Owners or operators of units or facilities must hold sulfur dioxide allowances, nitrogen oxides allowances, or mercury allowances at least equal to the emissions of sulfur dioxide, nitrogen oxides, or mercury respectively. Under the Acid Rain Program and the NOx SIP call, the owner or operator of each affected unit must hold allowances at least equal to annual or ozone season emissions from the unit. Section 403 revises the existing Section 403 to provide for facility-level, rather than unit-level compliance: beginning in 2008 for the sulfur dioxide and nitrogen oxides and beginning in 2010 for mercury, the owner or operator of each facility with affected units must hold allowances at least equal to the total annual emissions of those units.

In order to meet the allowance holding requirements for nitrogen oxides starting 2008 or for sulfur dioxide or mercury starting 2010, the owner or operator of a facility may use allowances purchased in a direct sale from the Administrator at a fixed price, i.e., \$4,000 for a sulfur dioxide or nitrogen oxides allowance (covering one ton) and \$2,187.50 for a mercury allowance (covering one ounce). These prices will be annually adjusted for inflation. For the direct sales, the Administrator will use allowances from future auctions. If this results in the removal of all allowances from the relevant auction for three consecutive years, the Administrator must conduct and submit to the Congress a study to determine whether revisions to the relevant trading program are necessary.

### SECTION 404. Permits and Compliance Plans

Section 404 is the existing Section 408, modified to apply to the new sulfur dioxide, nitrogen oxides, and mercury trading programs essentially the same permit provisions that apply to the existing Acid Rain Program. Certain permitting provisions unique to the Acid Rain Program are moved to Subpart 1 of Part B or, if expired, are deleted. The requirements of all the trading programs must be reflected in permits issued to the affected facilities under this section and Title V of the Clean Air Act. The permits must prohibit (i) emissions in excess of the allowances held and (ii) use of allowances before the period for which the allowances were allocated. Each permit application must include a statement that the owner or operator will meet the applicable allowance holding requirements, and such statement serves as the compliance plan under Title V for these trading programs. The existing Section 408 is revised to provide that a permit application covering a unit in a particular trading program must be submitted to the permitting authority in accordance with the deadlines established under Title V, rather than the deadlines (e.g., twenty-four months before a new unit commences operation) under existing Section 408.

### SECTION 405. Monitoring, Reporting, and Recordkeeping Requirements

Section 405 is the existing Section 412, modified to apply to the new sulfur dioxide, nitrogen oxides, and mercury trading programs essentially the same monitoring, reporting and recordkeeping requirements that apply to the existing Acid Rain Program. Continuous emissions monitoring systems (CEMS) must be installed and operated to monitor emissions from each affected unit. All units under the new trading programs must monitor the parameters required under the Acid Rain Program (i.e., sulfur dioxide, nitrogen oxides, opacity, and volumetric flow), and those units subject to the mercury trading program must monitor mercury as well. The Administrator must specify requirements for any alternative monitoring system shown to provide information with the same precision, reliability, accessibility, and timeliness as that provided by CEMS. Further, the Administrator may specify an alternative monitoring system for determining mercury emissions to the extent that the Administrator determines that CEMS for mercury with appropriate vendor guarantees are not commercially available. Existing Section 412 is revised to provide that, consistent with the requirement of facility-level compliance in Section 403, the Administrator will not require a separate CEMS for each unit where two or more units utilize a single stack, unless data for individual units are required under another provision of the Clean Air Act.

Section 405 also sets deadlines for owners or operators of units to install and operate CEMS to monitor specified emissions or parameters under the new trading programs. The deadlines are the later of one year before the unit becomes subject to the relevant trading program or the date on which the unit commences operation. The existing deadlines for a unit under the Acid Rain Program are retained. This section also retains the requirements in the existing Section 412 concerning the use of substitute data when emission data from a CEMS or an approved alternative monitoring system are not available during any period and the owner or operator cannot provide information, satisfactory to the Administrator, on emissions during that period. The Administrator already issued regulations implementing the existing Section 412 and must issue new regulations by January 1, 2008 for monitoring of mercury.

# SECTION 406. Excess Emissions Penalty; General Compliance With Other Provisions; Enforcement

Section 406 is the existing Section 411, modified to address excess emissions penalties with regard to emissions of sulfur dioxide, nitrogen oxides, and mercury. The excess emissions penalties reflect changes from the allowance holding requirements from unit-level to facility-level compliance in Section 403. For example, under the Acid Rain Program during 1995-2007, the owner or operator of a unit that fails to hold allowances covering the unit's annual sulfur dioxide emissions is treated as having excess emissions. Starting in 2008 for sulfur dioxide and nitrogen oxides and in 2010 for mercury, the owner or operator of a facility that fails to hold allowances covering the sum of the annual emissions of the facility's affected units is treated as having excess emissions.

The owner or operator of a facility with excess emissions must both offset the excess emissions with an equal amount of allowances and pay a financial penalty. In contrast with the existing Section 411, which imposes a full financial penalty starting immediately after the deadline for holding allowances covering emissions, Section 406 imposes a financial penalty that is graduated, with the penalty increasing the longer the period before the excess emissions are offset and the financial penalty is paid. If the offset and penalty payment are made within 30 days after the deadline for holding allowances, the penalty per ton or, for mercury, per ounce of excess emissions equals the clearing price of an allowance in the most recent auction. If the offset and penalty payment are made 31 or more days after the deadline, the penalty is three times the auction clearing price. For all the trading programs and consistent with the existing Section 411, the excess emissions penalty does not preclude imposition, in addition, of civil penalties for violations.

Section 406 also includes the existing Section 413. As under the existing provision, compliance with Title IV does not affect, except as expressly provided, the application of other requirements of the Clean Air Act. Section 406 also provides that no State or political subdivision thereof shall restrict or interfere with the transfer, sale, or purchase of allowances under this title.

Section 406 also includes the existing Section 414 and applies to the new sulfur dioxide, nitrogen oxides, and mercury trading programs essentially the same enforcement provisions that apply to the Acid Rain Program. Like each excess ton of sulfur dioxide, each ton of excess nitrogen oxides or each excess ounce of mercury is a separate violation.

### SECTION 407. Election For Additional Units

Section 407 provides the option for units that are not otherwise subject to the new sulfur dioxide, nitrogen oxides, and mercury trading programs to opt into the programs if certain conditions are met. The units must vent all their sulfur dioxide, nitrogen oxides, and mercury emissions only through a stack or duct and must meet the monitoring and reporting requirements for those trading programs, except that each unit must be separately monitored to provide certain unit-specific data. Each unit, to establish its baseline, must monitor and report its emissions in accordance with the monitoring and reporting requirements under Section 405 for one year before entering the programs.

The Administrator will allocate to an opt-in unit an amount of allowances equal to fifty percent of: the lesser of the unit's baseline heat input or the unit's heat input for the year before the year for which the Administrator is determining the allocation; multiplied by the lesser of the unit's baseline emission rate, the unit's 2002 emissions rate, or the unit's most stringent State or federal emission limitation applicable to the year on which the unit's baseline heat input is based. Moreover, the allocation is subject to an increasing reduction each year (a 1 percent increase each year for twenty years and a 2.5 percent reduction each year thereafter), with a corresponding increase in the amounts of allowances auctioned for each year. This is analogous to how allowances and auctions are handled for affected electricity generating units (EGUs) under the trading programs.

Once a unit opts into the trading programs, the unit will remain an affected unit. The only circumstance under which a unit will be withdrawn from the opt-in provisions is where the unit qualifies as an affected EGU independently of the opt-in provisions. In that circumstance, the unit remains subject to the trading programs but is covered by the non-opt-in requirements that cover all affected EGUs.

#### SECTION 408. Clean Coal Technology Regulatory Incentives

Section 408 is the existing Section 415, which addresses the Department of Energy's Clean Coal Technology Program.

#### SECTION 409. Auctions

Section 409 requires the Administrator to issue regulations within 24 months of enactment concerning auctions of sulfur dioxide allowances, nitrogen oxide allowances, and mercury allowances. The regulations must promote an efficient auction outcome and a competitive market for allowances. The regulations must specify the procedures, frequency, and timing of auctions. Allowances may be auctioned before or during the year for which the allowances are issued, and auctions may be conducted one or more times during a year. The auctions must be open to any person. The Administrator may, by delegation or contract, provide for conduct of an auction by another government agency or non-governmental agency, group, or organization. The proceeds from all auctions will be deposited in the U.S. Treasury.

This section also establishes detailed default procedures for auctions. The procedures will apply if the Administrator is required to conduct an auction but has not yet issued regulations establishing procedures. The default procedures provide for a multi-round auction where sulfur dioxide allowances, nitrogen oxides allowances, and mercury allowances are simultaneously offered for sale, participants submit quantity bids at reserve prices set by the Administrator for each type of allowance for the round involved, and all sales for each type of allowance are at a single, clearing price. This contrasts with the auction provisions in the existing Section 416 providing for a single round, declining price auction where winning bidders purchase their bid quantities of allowances at their bid prices.

SECTION 410. Evaluation of Limitations on Total Sulfur Dioxide, Nitrogen Oxides, And Mercury Emissions That Start in 2018.

Section 410 establishes criteria and the process by which the Administrator reviews and makes recommendations to Congress as to whether the limitations on the total amounts of allowances available starting in 2018 for sulfur dioxide, nitrogen oxides, and mercury (whether through allocation or auction) should be adjusted. The Administrator, in consultation with the Secretary of Energy, must conduct a study that addresses, among other things: the need for further reductions of these pollutants from affected EGUs and other sources to attain or maintain the national ambient air quality standards; a benefit-cost analysis of the 2018 limitations on allowances and of whether adjusting any of these

limitations would have benefits that would justify the costs of such adjustment; marginal cost effectiveness of emission reductions; the relative marginal cost effectiveness of the reductions from affected EGUs and from other sources; and the feasibility of attaining the limitations and any alternative limitations. In addition, the study must address the most current research and development on emission reduction technologies and strategies and the most current scientific information on emissions, transformation, and deposition of these pollutants.

Any documents considered in such a study must be independently peer-reviewed no later than July 1, 2008. The draft results of the study itself must be independently peer-reviewed no later than January 1, 2009. The Administrator must make any recommendations to Congress no later than July 1, 2009 and may submit separate recommendations addressing sulfur oxides, nitrogen oxides, or mercury at any time after the study and the peer review have been completed.

## Part B. Sulfur Dioxide Emission Reductions

Subpart 1 of Part B retains the requirements of the existing Acid Rain Program, with a few relatively minor changes, through December 31, 2009. Subpart 2 establishes a new trading program with a requirement to hold allowances covering emissions beginning January 1, 2010. Subpart 3 establishes a back-stop trading program for States in the Western Regional Air Partnership.

### Subpart 1. Acid Rain Sulfur Dioxide Program

SECTION 411. Definitions

Section 411 contains the definitions unique to the Acid Rain Program.

### SECTION 412. Allowance Allocation

Section 412 includes, with no substantive changes, certain provisions from existing Sections 403 and 408 that apply only to the Acid Rain Program. The remaining provisions from existing Sections 403 and 408, which apply, as modified, to Parts B, C, and D, have been retained in Part A, Sections 403 and 404.

### SECTION 413. Phase I Sulfur Dioxide Requirements

Section 413 is existing Section 404, containing without change the Phase I sulfur dioxide allocations and modified to set a new deadline for new applications for allowances from the Conservation and Renewable Energy Reserve for actions completed by December 31, 1999. The existing deadline for entities to submit new applications based on those actions is moved up from January 1, 2010 to one year after enactment. Any remaining allowances in the Reserve at that time will be allocated to existing units subject to the Acid Rain Program.

SECTION 414. Phase II Sulfur Dioxide Requirements

Section 414 is existing Section 405, which contains the Phase II sulfur dioxide allocation formulas with no substantive changes, except to take account of the fact that compliance starting in 2008 will be at the facility (not the unit) level.

SECTION 415. Allowances for States with Emissions Rates at or Below 0.80 lbs/mmBtu

Section 415 is existing Section 406, which provides additional formulas for Phase II allocations with no substantive changes.

SECTION 416. Election for Additional Sources

Section 416 is existing Section 410, modified to reduce the allocations for opt-in units in the Acid Rain Program to 50 percent for applications submitted to EPA after January 1, 2002. In addition, the provisions requiring issuance of rules to allow process sources to opt in and establishing the small diesel refinery allowance allocation program (which ended in 1999) are removed.

SECTION 417. Auctions, Reserve

Section 417 is existing Section 416, modified to remove direct sales of allowances (which have already been terminated by rule) and to terminate the private sales of allowances through the annual sulfur dioxide allowance auction. Section 417 also reduces the amount of allowances in the annual auction, and ends the annual auction in 2009, to account for the fact that sulfur dioxide allowances for 2010 and beyond will no longer be auctioned under this Subpart.

SECTION 418. Industrial SO<sub>2</sub> Emissions

Section 418 is existing Section 406 of the Clean Air Act Amendments of 1990, which was not previously incorporated into the Clean Air Act and sets a cap on sulfur dioxide emissions from certain industrial sources. There are no substantive changes to the existing Section 406.

SECTION 419. Termination

Section 419 provides that owners or operators, starting January 1, 2010, are no longer subject to Sections 412 through 417 of this part. Beginning January 1, 2010, the requirements of Subpart 2 of this Part will apply.

#### Subpart 2. Clear Skies Sulfur Dioxide Allowance Program

#### SECTION 421. Definitions

Section 421 contains the definitions unique to the new sulfur dioxide trading program. The definition of the term "affected EGU" establishes which electricity generating units are covered by the new trading program. The program covers units in the U.S. and its territories. The program includes existing fossil fuel-fired electricity generating boilers, combustion turbines, and integrated gasification combined cycle plants with generators having a nameplate capacity of greater than 25 MW. The program also includes new fossil fuel-fired electricity generating boilers, combustion turbines, and integrated gasification turbines, and integrated gasification combined cycle plants regardless of size, except for gas-fired units serving one or more generators with total nameplate capacity of 25 MW or less. In addition, certain existing and new cogeneration units are exempt, as well as solid waste incineration units and units for treatment, storage, or disposal of hazardous waste.

### SECTION 422. Applicability

Section 422 provides that the owner or operator must hold allowances for all the affected EGUs at a facility at least equal to the total sulfur dioxide emissions for those units during the year. Compliance with the requirement to hold allowances covering sulfur dioxide emissions will thus be determined on a facility-wide basis. This is reflected in the monitoring and reporting requirements, which provide that units sharing a common stack do not need to be separately monitored and must collect sufficient information to determine compliance. Except as provided in Section 425 with regard to certain Acid Rain program allowances, only sulfur dioxide allowances allocated or auctioned under the new nationwide sulfur dioxide trading program may be used for compliance.

### SECTION 423. Limitations on Total Emissions

Section 423 establishes the annual caps on sulfur dioxide emissions for affected EGUs: 4,500,000 tons starting in 2010 and 3,000,000 tons starting in 2018. During the first year of the new trading program, 99% of the allowances will be allocated to affected EGUs with an auction for the remaining 1%. Each subsequent year, an additional 1% of the allowances for twenty years, and then an additional 2.5% thereafter, will be auctioned until eventually all the allowances are auctioned. Auction proceeds will go into the U.S. Treasury.

#### SECTION 424. EGU Allocations

Section 424 requires the Administrator to determine individual EGU allocations, which will set on a one-time basis and therefore will remain the same each year. Ninety-five percent of the total amount of sulfur dioxide allowances allocated each year under Section 423 will be allocated based on the amount of sulfur dioxide allowances allocated under the Acid Rain Program for 2010 and thereafter and that are held in allowance accounts (i.e., unit accounts and general accounts) in the Allowance Tracking System on the date 180

days after enactment. In determining the amount of allowances in each unit account and general account as of that deadline, the Administrator will discount those allowances in the account that were allocated for 2011 or later at a rate of seven percent per year to reflect the time value of allowances.

The remaining allowances are allocated to units that do not receive allowances under the Acid Rain Program, whether because they are subject to the program and have a zero allocation or because they are simply not subject to the program. Three and one-half percent of the total amount of sulfur dioxide allowances allocated each year will be allocated to such units that are affected EGUs under the new trading program as of December 31, 2004 and commenced operation before January 1, 2001. One and one-half percent of the total amount of sulfur dioxide allowances will be allocated to units that are affected EGUs as of December 31, 2004 and commence operation during January 1, 2001- December 31, 2004. Allowances will be allocated based on the units' baseline heat input multiplied by standard emission rates that vary depending on the fuel combusted by the units. Standard emission rates are established for three categories of units: coal-fired units; oil-fired units; and other units. For each of the above three allowances allocated does not exceed the applicable total of allowances available for allocation for the year.

The Allowance Tracking System for sulfur dioxide allowances was already established for the Acid Rain Program, and essentially the same system will be used for the new sulfur dioxide trading program. However, the Administrator must still promulgate regulations determining the individual unit allocations for a given year. In the event that the Administrator is unable, for any reason, to promulgate allocation regulations on a timely basis, Section 424 provides two default methods for distributing the allowances, without promulgation of regulations, in advance of the year for which the allowances are necessary so that owners and operators can plan for compliance. Under the first default method, if the Administrator signs proposed regulations, but does not promulgate final regulations, on a timely basis, the Administrator will allocate allowances in accordance with the proposed regulations. Under the second default, if the Administrator does not sign proposed regulations, and does not promulgate final regulations, on a timely basis, then ninety-five percent of the total amount of sulfur dioxide allowances available for allocation each year will be allocated to Acid Rain Program units with coal as their primary or secondary fuel or residual oil as their primary fuel, listed in the Administrator's Emissions Scorecard 2001, Appendix B (2001 Data for SO<sub>2</sub>, NOx, CO<sub>2</sub>, Heat Input, and Other Parameters), Table B1 (All 2001 Data for All Units). The allocations will be based on the heat input of those units as set forth in the Emissions Scorecard 2001, which summarizes the emissions data received by EPA for those units for 2001. In addition, five percent of the total amount of sulfur dioxide allowances available for allocation each year will be auctioned.

### SECTION 425. Disposition of SO<sub>2</sub> Allowances Allocated Under Subpart 1

Under Section 425, after the Administrator allocates allowances under the new trading program, the Administrator will remove from the Allowance Tracking System accounts all sulfur dioxide allowances for the year 2010 and later that were allocated under Subpart 1

of this Part. The Administrator will promulgate regulations to allow use of any banked pre-2009 sulfur dioxide allowances in the new nationwide sulfur dioxide program.

# SECTION 426. Incentives For Sulfur Dioxide Emission Control Technology

Section 426 establishes a reserve of 250,000 allowances for affected EGUs that combusted Eastern bituminous and that, before 2008, install and operate sulfur dioxide control technology and continue to combust such coal. A procedure is established for submission of applications by owners and operators and approval of applications and award of allowances by the Administrator. The procedure is designed to ensure that the Administrator will approve those qualified projects that will result in the largest amount of sulfur dioxide emission reductions achieved per allowance awarded.

# Subpart 3. Western Regional Air Partnership (WRAP)

This Subpart establishes a back-stop trading program that will go into effect if the States in the WRAP (i.e., Arizona, California, Colorado, Idaho, Nevada, New Mexico, Oregon, Utah, and Wyoming) are unable to meet the sulfur dioxide emission level (271,000 tons) that they established for 2018 for EGUs emitting over 100 tons of sulfur dioxide per year. In general, if that emission level is exceeded in 2018 or later, the trading program, which reflects the back-stop trading program already developed by the WRAP and is modeled after the new nationwide sulfur dioxide trading program, will require a separate set of allowances for affected EGUs in the WRAP and nationwide programs are separate: sulfur dioxide allowances in the WRAP program may not be used in the WRAP program.

# SECTION 431. Definitions

Section 431 contains the definitions unique to the new WRAP trading program. The definition of the term "affected EGU" establishes which EGUs are covered by the new WRAP trading program. The program covers those units covered by the new nationwide sulfur dioxide trading program that are located in the States in the WRAP and that, in any year starting in 2000, emit more than 100 tons of sulfur dioxide and are used to produce electricity for sale.

The definition of "covered year" establishes when the new WRAP trading program will begin. Generally, the trading program and the requirement to hold allowances will begin the third year after the first year (starting 2018) in which the total emissions of affected EGUs exceed 271,000 tons. However, the WRAP States may unanimously petition the Administrator to determine that the total emissions of affected EGUs are reasonably projected to exceed 271,000 tons in 2018 or a later year and to make affected EGUs subject to the requirements of the new WRAP trading program. Based on such a petition, the Administrator may by regulation make affected EGUs subject to the requirement to hold allowances starting the third year after the first year (starting 2013) when the Administrator makes such a determination. The term "covered year" also includes each

year after the year in which the requirement to hold allowances begins.

### SECTION 432. Applicability

Section 432 provides that the owner or operator must hold allowances for all the affected EGUs at a facility at least equal to the total sulfur dioxide emissions for those units during each covered year. As in the new nationwide sulfur dioxide trading program, compliance with the requirement to hold allowances will thus be determined on a facility-wide basis. Only sulfur dioxide allowances allocated or auctioned under the WRAP program ( not sulfur dioxide allowances in the nationwide sulfur dioxide trading program) may be used in the WRAP program.

### SECTION 433. Limitations on Total Emissions

Section 433 establishes the annual cap on sulfur dioxide emissions for affected EGUs of 271,000 tons in each covered year.

### SECTION 434. EGU Allocations

Section 434 establishes the procedures for determining allocations for individual units that are affected EGUs as of December 31 of the fourth year before the covered year. The allocations will be set on a one-time basis and therefore will remain the same each year. Allowances will be allocated based on the units' baseline heat input multiplied by standard emission rates that vary depending on the fuel combusted by the units. Standard emission rates are set forth for three categories of units: coal-fired units; oil-fired units; and other units. Each facility's allocation will be adjusted to ensure that the total amount of allowances allocated does not exceed 271,000 tons per year.

The Allowance Tracking System for sulfur dioxide allowances was already established for the Acid Rain Program, and essentially the same system will be used for the new WRAP trading program. However, the Administrator must still promulgate regulations determining the individual unit allocations for a given year. In the event that the Administrator is unable, for any reason, to promulgate allocation regulations on a timely basis, Section 434 provides two default methods analogous to those for the new nationwide sulfur dioxide trading program for distributing the allowances, without promulgation of regulations, in advance of the year for which the allowances are necessary. Under the first default method, if the Administrator signs proposed regulations, but does not promulgate final regulations, on a timely basis, the Administrator will allocate allowances in accordance with the proposed regulations. Under the second default, if the Administrator does not sign proposed regulations, and does not promulgate final regulations, on a timely basis, then ninety-five percent of the total amount of allowances available for allocation for the year will be allocated based on heat input in 2000 to affected EGUs that are Acid Rain Program units with coal as their primary or secondary fuel or residual oil as their primary fuel, listed in the Administrator's Emissions Scorecard 2001. Five percent of the allowances available for allocation will be auctioned.

### Part C. Nitrogen Oxides Allowance Program

Subpart 1 of Part C retains the requirements, until 2008, of the existing Acid Rain Program for nitrogen oxides reduction. Subpart 2 establishes, beginning January 1, 2008, a new nitrogen oxides trading program. Two trading zones (Zone 1 and Zone 2) are established, and, only allowances allocated or auctioned for a given zone may be used by facilities within that zone to meet the requirement to hold allowances covering emissions. Subpart 3 addresses EPA's existing rulemaking (known as the NOx SIP Call) which concerns ozone transport in the Eastern U.S. and which requires that certain Eastern States revise their state implementation plans to reduce NOx emissions. Starting January 1, 2008, units that are subject to the new nationwide sulfur dioxide, nitrogen oxides, or mercury trading programs are no longer subject to state implementation plan requirements approved under the NOx SIP Call.

### Subpart 1. Nitrogen Oxides Emission Reduction Program

SECTION 441. Nitrogen Oxides Emission Rate Reduction Program

Section 441 is the existing Section 407, which includes the emission rate limitations and other requirements for nitrogen oxides under the Acid Rain Program. The existing emission rate limitations for individual boilers, which are based on boiler type, are not changed.

### SECTION 442. Termination

Section 442 terminates the existing Acid Rain Program nitrogen oxides provisions in Section 441 on January 1, 2008 when the new nitrogen oxides trading program begins.

### Subpart 2. Clear Skies Nitrogen Oxides Allowance Program

### SECTION 451. Definitions

Section 451 contains the definitions unique to the new nitrogen oxides trading program. The definition of the term "affected EGU" establishes which electricity generating units are covered by the new nitrogen oxides trading program, which are the same electricity generating units as are covered in the U.S. and territories by the new nationwide sulfur dioxide trading program. The definitions of the terms "Zone 1" (largely the Eastern and part of the central portions of the U.S.) and "Zone 2" (the remainder of the U.S. and territories) establish two separate zones, each of which is covered by a separate nitrogen cap-and-trade system as described in sections 452-454.

SECTION 452. Applicability

Section 452 provides that the owner or operator must hold allowances for all the EGUs units at a facility at least equal to the total nitrogen oxides emissions for those units during the year. As in the new nationwide sulfur dioxide trading program, compliance with the requirement to hold allowances will thus be determined on a facility-wide basis. Except as provided in Section 465 with regard to certain NOx SIP Call allowances, only nitrogen oxides allowances allocated or auctioned for Zone 1 under the nationwide nitrogen oxides trading program may be used for compliance by Zone 1 units in that program. Similarly, only nitrogen oxides allowances allocated or auctioned for zone 2 under the nationwide nitrogen oxide nitrogen oxides trading program may be used for compliance by Zone 2 units in that program.

#### SECTION 453. Limitations on total emissions

Section 453 establishes the annual caps on nitrogen oxides emissions affected EGUs: 1.562 million tons starting in 2008 and 1.162 million tons starting in 2018 for Zone 1; and 538,000 tons starting in 2008 for Zone 2. During the first year of the new trading program, 99% of the allowances will be allocated to affected units with an auction for the remaining 1%. Each subsequent year, an additional 1% of the allowances for twenty years, and then an additional 2.5% thereafter, will be auctioned until eventually all the allowances are auctioned. Auction proceeds will go into the U.S. Treasury.

### SECTION 454. EGU Allocations

Section 454 establishes the procedures for determining allocations for individual units that commence operation by and are affected EGUs as of December 31, 2004. The allocations will be set on a one-time basis and therefore will remain the same each year. Allowances will be allocated to a facility in a given zone in proportion to the sum of the baseline heat input values of affected EGUs at the facility as compared to the total baseline heat input of all affected EGUs in the respective zone. Thus, the two separate allowances pools for the two zones are separately allocated. Each facility's allocation will be adjusted to ensure that the total amount of allowances allocated does not exceed the applicable total amount of allowances available for allocation for the zone for the year involved.

While the Allowance Tracking System for sulfur dioxide allowances was already established for the Acid Rain Program, the Administrator must, under Section 403, establish by regulation the Allowance Tracking System for nitrogen oxides allowances. Further, the Administrator must also promulgate regulations determining the individual unit allocations for a given year. In the event that the Administrator is unable, for any reason, to promulgate regulations on a timely basis, Section 454 provides three default methods for compliance, which are implemented separately for the two zones. Under the first default method, if the Administrator signs proposed allocation regulations and promulgates allowance system regulations, on a timely basis, but does not timely promulgate final allocation regulations, the Administrator will allocate allowances in accordance with the proposed regulations. The second default method (which is analogous to the second default under the new sulfur dioxide trading program) applies if the Administrator does not sign proposed allocation regulations, and does not promulgate final allocation and allowance system regulations, on a timely basis. Ninety-five percent of the total amount of nitrogen oxides allowances available for allocation each year will be allocated to Acid Rain Program units listed in the Administrator's Emissions Scorecard 2001. Five percent of the total amount of allowances available for allocation will be auctioned. However, if allocation regulations are not timely signed or promulgated and allowance system regulations are not timely promulgated, then the third default applies under which each affected EGU is required for the year involved to meet an emission rate limit of 0.14 lb/mmBtu for units in Zone 1 or 0.25 lb/mmBtu for units in Zone 2.

### Subpart 3. Ozone Season NOx Budget Program

SECTION 461. Definitions

Section 461 contains definitions unique to the NOx SIP Call.

#### SECTION 462. General Provisions

Section 462 provides that the general provisions in Sections 402 through 406 and Section 409 of Part A do not apply to this Subpart. This is because the NOx SIP Call itself, and the state implementation plans approved under the NOx SIP Call, already include provisions concerning the matters addressed in these general provisions in Part A, such as tracking and transferring of allowances, permitting, monitoring and reporting, and compliance.

### SECTION 463. Applicable Implementation Plan

Section 463 codifies the budgets and other requirements in NOx SIP Call. This section requires implementation of the requirements of the NOx SIP Call beginning in 2004 including requirements contained in a proposed rulemaking by EPA concerning: the amounts of the State trading budgets; the criteria for classifying cogeneration units as EGUs and non-EGUs; and the treatment of States that are only partially in the NOx SIP Call area. In addition, starting January 1, 2008 (when the new nitrogen oxides trading program begins), units that are subject to the new sulfur dioxide, nitrogen oxides, or mercury trading programs are no longer subject to state implementation plan requirements approved under the NOx SIP Call. States retain the authority thereafter to impose more stringent requirements on such units. Further, this section establishes procedures under which the owner or operator of a unit subject to the NOx SIP Call may petition the Administrator to use, for compliance for 2004, nitrogen oxides allowances allocated for 2005. The petition must demonstrate that the owner or operator made reasonable efforts to install appropriate control technology and that there is an undue risk for electric supply reliability.

SECTION 464. Termination of Federal Administration of NOx Trading Program for EGUs

Section 464 terminates on January 1, 2008 the obligation of the Administrator to administer -- for units that are subject to the new sulfur dioxide, nitrogen oxides, or mercury trading programs -- the ozone season NOx budget trading program under the NOx SIP Call.

## SECTION 465. Carryforward of Pre-2008 Nitrogen Oxides Allowances

Section 465 requires the Administrator to promulgate regulations allowing owners and operators to carry over, into the new nitrogen oxides trading program under Subpart 2, any banked pre-2008 allowances under the NOx budget trading program administered by the Administrator under the NOx SIP Call.

## Part D. Mercury Emissions Reductions

Part D establishes a new trading program for mercury, with a requirement to hold allowances covering emissions beginning January 1, 2010.

## SECTION 471. Definitions

Section 471 contains the definitions unique to the new mercury trading program. The definition of the term "affected EGU" establishes which electricity generating units are covered by the new trading program. The new mercury trading program covers coal-fired units that are covered by the new sulfur dioxide and nitrogen oxides trading programs. The definition for "adjusted baseline heat input" establishes a modified baseline heat input value, which, for units with an operating history, is adjusted by a standard factor to reflect the types of coal that were combusted. Standard factors are set forth for several categories of coal: 3.0 for lignite; 1.25 for subbituminous; and 1.0 for bituminous or other fuel.

### SECTION 472. Applicability

Section 472 provides that the owner or operator must hold allowances for all the affected EGUs at a facility at least equal to the total mercury emissions for those units during the year. As in the new sulfur dioxide and nitrogen oxides trading programs, compliance with the requirement to hold allowances will thus be determined on a facility-wide basis.

### SECTION 473. Limitations on Total Emissions

Section 463 establishes the annual caps on mercury emissions for affected EGUs: 26 tons starting in 2010 and 15 tons starting in 2018. During the first year of the new trading program, 99% of the allowances will be allocated to affected units with an auction for the

remaining 1%. Each subsequent year, an additional 1% of the allowances for twenty years, and then an additional 2.5% thereafter, will be auctioned until eventually all the allowances are auctioned. Auction proceeds will go into the U.S. Treasury.

### SECTION 474. EGU Allocations

Section 434 establishes the procedures for determining allocations for individual units that are affected EGUs as of December 31, 2004. The allocations will be set on a one-time basis and therefore will remain the same each year. Allowances will be allocated based on the units' baseline heat input, which, for units with an operating history, is adjusted by a standard factor to reflect the types of coal that were combusted. Each facility's allocation will be adjusted to ensure that the total amount of allowances allocated does not exceed the applicable amount of allowances available for allocation for the year.

While the Allowance Tracking System for sulfur dioxide allowances was already established for the Acid Rain Program, the Administrator must, under section 403, establish by regulation the Allowance Tracking System for mercury allowances. Further, the Administrator must also promulgate regulations determining the individual unit allocations for a given year. In the event that the Administrator is unable, for any reason, to promulgate regulations on a timely basis, Section 474 provides three default methods for compliance analogous to those under the new nitrogen oxides trading program. Under the first default method, if the Administrator signs proposed allocation regulations and promulgates allowance system regulations, on a timely basis, but does not timely promulgate final allocation regulations, the Administrator will allocate allowances in accordance with the proposed regulations. The second default method applies if the Administrator does not sign proposed allocation regulations, and does not promulgate final allocation and allowance system regulations, on a timely basis. Ninety-five percent of the total amount of mercury allowances available for allocation each year will be allocated to Acid Rain Program units with coal as their primary or secondary fuel, listed in the Administrator's Emissions Scorecard 2001. Five percent of the total amount of allowances available for allocation will be auctioned. However, if allocation regulations are not timely signed or promulgated and allowance system regulations are not timely promulgated, then the third default applies under which each affected EGU must comply with an emission limit of 30 percent of the mercury content (in ounces per mmBtu) of the coal and coal-derived fuel combusted by the unit.

### Part E. National Emission Standards; Research; Environmental Accountability

### SECTION 481. National Emission Standards for Affected Units

Section 481 establishes performance standards for all new boilers, combustion turbines, and integrated gasification combined cycle plants that are affected units under the new

trading programs. "New" units are those that commence construction or reconstruction after enactment.

These statutory performance standards include emission limits for four air pollutants: nitrogen oxides; sulfur dioxide; mercury; and particulate matter. The mercury emission limits apply only to coal-fired units. A particulate matter emission limit is established for existing oil-fired boilers that will also reduce emissions of nickel from such units. All units subject to a performance standard are required to monitor emissions using CEMS and to use averaging times similar to those under the existing new source performance standards.

Boilers and integrated gasification combined cycle plants are subject to a sulfur dioxide emission limit of 2.0 lb/MWh, a nitrogen oxides emission limit of 1.0 lb/MWh, and a particulate matter emission limit of 0.20 lb/MWh. Coal-fired boilers and integrated gasification combined cycle plants are also subject to a mercury emission limit of 0.015 lb/GWh, but alternative standards apply in some circumstances. Coal-fired combustion turbines are subject to the same emission limits as coal-fired boilers and integrated gasification combined cycle plants. (The term "coal-fired" is defined to include units that burn any coal or coal-derived fuel.) Gas-fired combustion turbines are subject to nitrogen oxides emission limits ranging from 0.084 lb/MWh to 0.56 lb/MWh. Combustion turbines that are not coal- or gas-fired are subject to nitrogen oxides emission limits ranging from 0.289 lb/MWh to 1.01 lb/MWh, a sulfur dioxide emission limit of 2.0 lb/MWh, and a particulate matter emission limit of 0.20 lb/MWh. Existing oil-fired boilers are subject to a particulate matter emission limit of 0.30 lb/MWh.

The Administrator is required, at least every eight years, to review and, if appropriate revise, these performance standards to reflect the degree of emission limitation achievable through application of the best system of emission reduction which the Administrator determines has been adequately demonstrated. However, such review is not required if the Administrator determines that review is not appropriate in light of readily available information on the efficacy of the standard. New affected units subject to the performance standards are not subject to standards under Section 111.

# SECTION 482. Research, Environmental Monitoring, and Assessment

Section 482 contains provisions for evaluating and reporting the efficacy of the new sulfur dioxide, nitrogen oxides, and mercury trading programs and conducting scientific and technical research and development. One of the purposes of these provisions is production of peer-reviewed scientific and technology information in time to inform the review of emissions levels as specified in Section 410.

SECTION 483. Exemption from Major Source Preconstruction Review Requirements and Best Available Retrofit Control Technology Requirements Section 483 exempts affected units under the new sulfur dioxide, nitrogen oxides, and mercury trading programs from the requirements of new source review (NSR) and best available retrofit technology (BART). Affected units under the exemption are no longer considered "major emitting facilities" or "major stationary sources" for purposes of Parts C and D of Title I of the Clean Air Act. Permits issued in the past to comply with the requirements of Part C and D of Title I, however, will remain in effect.

To qualify for the exemption from NSR and BART, an existing affected unit must meet certain requirements concerning particulate matter and carbon monoxide emissions. Where there is a modification of the existing affected unit (which is defined as a change that will result in an increase in the maximum hourly emissions of a pollutant achievable at the unit during the five years prior to the change), the unit must comply with either best available control technology (BACT) for that pollutant or the performance standards for nitrogen oxides, sulfur dioxide, mercury, and particulate matter under Section 481. In addition, new affected units constructed after enactment will be required to meet the performance standards under Section 481, and no additional, case-by-case review of the appropriate control technology, such as BACT or the lowest achievable emission rate (LAER), will be required.

An affected unit located within 50 km of Class I areas will remain subject to the requirements in Part C of Title I for the protection of such areas. For example, emissions resulting from the construction of such a new or modified unit may not cause or contribute to the violation of a Class I increment unless the federal land manager certifies that the emissions from the facility will have no adverse impact on the air quality related values of the Class I area. Further, as provided under Section 110(a)(2)(C), States must still ensure that the construction of a new or modified affected unit will not cause or contribute to a violation of the national ambient air quality standards (NAAQS) or interfere with the programs to assure that the NAAQS are met. States must provide the public with an opportunity to comment on the impact of the new or modified affected unit on the NAAQS or on any Class I areas within 50 km of the unit.

# **Title I of the Clean Air Act**

SECTIONS 107 and 110. Transitional Areas

The Clear Skies Act revises Section 107 of the Clean Air Act to authorize the Administrator to designate as transitional an area for which EPA-performed modeling demonstrates that the area will attain the 8-hour ozone or fine particles NAAQS no later than December 31, 2015 through the controls provided under the Clear Skies Act and any other federal controls that have been promulgated. In addition, an area may be classified as transitional if the State performs EPA-approved modeling demonstrating that the area will attain the 8-hour ozone or fine particles NAAQS by no later than December 31, 2015 through a combination of reductions achieved through controls established through the Clear Skies Act and any other federal controls that have been promulgated, together with

any necessary local controls that the State adopts in its state implementation plan no later than December 31, 2004.

New Section 110(q) would be created to remove areas designated as transitional from being subject to certain local planning obligations that apply to areas designated nonattainment, such as conformity and new source review. These areas are subject to the new source program that applies in attainment and maintenance areas. In addition, these areas need to ensure that growth in emissions following the time of designation does not negatively affect their ability to attain the standard. Finally, if an area fails to attain the standard by December 31, 2015, the Administrator will be required to redesignate the area to nonattainment, and the area will then be subject to the nonattainment planning requirements, including conformity and new source review.

In addition, the time frames for States to recommend, and EPA to promulgate, designations for the 8-hour ozone and fine particles NAAQS are revised to align the deadlines for EPA to designate areas for these standards to December 31, 2004.

### SECTIONS 110, 126. Ozone Transport Provisions

The Clear Skies Act restricts the applicability of petitions under Section 126 of the Clean Air Act, and the requirements of the state implementation plan "good neighbor" provisions of Section 110(a)(2)(D) of the Clean Air Act, with respect to affected units under the new sulfur dioxide, nitrogen oxides, and mercury trading programs.

In general, Section 126 authorizes downwind States or political subdivisions to petition the Administrator to find that certain upwind sources emit air pollutants in amounts that contribute significantly to the petitioner's air pollution problems. If the Administrator grants the finding, the sources must either shut down or implement controls that the Administrator may mandate within a specified period, but no later than three years from the date of the finding. The Clear Skies Act revises Section 126 to provide that if any State submits a Section 126 petition concerning emissions from an affected unit, the Administrator must take final action during January 1, 2009, although the Administrator must take final action during January, 2009 on any petition submitted prior to January 1, 2007. Further, if the Administrator grants a requested finding, then the Administrator must assure that the compliance and implementation deadlines are extended beyond December 31, 2011.

The Clear Skies Act further requires that, in addressing a petition submitted after enactment that requests a finding for any affected unit under the new trading programs, the Administrator must consider, among other factors, any emissions reductions required to occur by any applicable attainment dates for any relevant nonattainment areas. In addition, as conditions for making a finding concerning affected units, the Administrator must determine that the required emissions reductions from the affected units: (i) are at least as cost-effective as emissions reductions from each other principal category of sources in areas upwind of the petitioner, and (ii) will improve air quality in the petitioner's nonattainment areas at least as cost-effectively as other emission reductions, if a methodology is reasonably available to make such determinations. The Administrator must develop an appropriate peer-reviewed methodology for making the necessary determinations by December 31, 2006. Corresponding changes are made in the state implementation plan requirements of Section 110(a)(2)(D). The Clear Skies Act makes clear that these changes do not affect the NOx SIP Call concerning ozone transport in the Eastern U.S., which requires that certain Eastern States revise their state implementation plans to reduce NOx emissions.

Several corrections are also made to Section 126, including correction of an erroneous cross-reference.

## SECTION 112. Maximum Achievable Control Technology

The Clear Skies Act revises Section 112 of the Clean Air Act to preclude regulation through maximum achievable control technology (MACT) standards of the emission of hazardous air pollutants by electric utility steam generating units. The Administrator retains the authority to address any non-mercury hazardous air pollutants from electric utility steam generating units in accordance with the regime set forth under the existing residual risk authority provisions of Section 112(f)(2) through (4).

# **<u>Title VIII of the Clean Air Act Amendments of 1990</u>**

SECTION 821. Monitoring

The Clear Skies Act revises Section 821(a) of the Clean Air Act Amendments of 1990 to retain the existing carbon dioxide monitoring and reporting requirements for units subject to the existing Acid Rain Program.