PROPOSED RULEMAKING

ENVIRONMENTAL QUALITY BOARD

[25 PA. CODE CHS. 121, 129 AND 145] Clean Air Interstate Rule

The Environmental Quality Board (Board) proposes to amend Chapters 121, 129 and 145 (relating to general provisions; standards for sources; and interstate pollution transport reduction) to read as set forth in Annex A.

The proposed rulemaking incorporates by reference, with some exceptions, the Clean Air Interstate Rule (CAIR) (nitrogen oxides) NOx Annual Trading Program and CAIR NOx Ozone Season Trading Program model rules, as a means of mitigating the interstate transport of fine particulates and NOx. The proposed rulemaking also incorporates by reference the CAIR Sulfur Dioxide (SO₂) Trading Program model rules as a means of mitigating the interstate transport of fine particulates and SO₂. The proposed rulemaking establishes general provisions and the applicability, allowance and supplemental monitoring, recordkeeping and reporting provisions and makes other related amendments. The CAIR NOx trading programs in the proposed rulemaking will supersede the Commonwealth's existing NOx Budget Trading Program.

This proposed rulemaking was adopted by the Board at its meeting on February 20, 2007.

A. Effective Date

This proposed rulemaking will go into effect upon final-form publication in the *Pennsylvania Bulletin*.

B. Contact Persons

For further information, contact James A. Stoner, Chief, Stationary Sources Section, Bureau of Air Quality, P. O. Box 8468, Rachel Carson State Office Building, Harrisburg, PA 17105-8468, (717) 772-3921; or Kristen M. Campfield, Assistant Counsel, Bureau of Regulatory Counsel, P. O. Box 8464, Rachel Carson State Office Building, Harrisburg, PA 17105-8464, (717) 787-7060. Information regarding submitting comments on this proposed rulemaking appears in Section J of this preamble. Persons with a disability may use the AT&T Relay Service, (800) 654-5984 (TDD users) or (800) 654-5988 (voice users). This proposed rulemaking is available on the Department of Environmental Protection's (Department) website at www.depweb.state.pa.us (select Public Participation).

C. Statutory Authority

This proposed rulemaking is authorized under section 5 of the Air Pollution Control Act (APCA) (35 P. S. § 4005). Section 5(a)(1) of the APCA grants the Board the authority to adopt rules and regulations for the prevention, control, reduction and abatement of air pollution in this Commonwealth.

D. Background and Purpose

The purpose of this proposed rulemaking is to establish a program to limit the emission of nitrogen oxides (NOx) and SO_2 from electric generating facilities of 25 megawatts or greater. This proposed rulemaking also extends existing NOx emission permit limits for certain boilers, stationary combustion turbines and stationary internal combustion engines; and provides for the allocation of

NOx allowances to cogeneration units that did not receive SO_2 allowances under the Federal Acid Rain Program and to certain renewable energy and energy efficiency units.

The Clean Air Act (CAA) (42 U.S.C.A. §§ 7401—7642) contains a number of requirements to address fine particles (PM $_{2.5}$) and 8-hour ozone National ambient air quality standards (NAAQS), including requirements that states address interstate transport that contributes to nonattainment. The United States Environmental Protection Agency (EPA) concluded that emissions in certain upwind states result in amounts of transported PM $_{2.5}$ and ozone and emission precursors for both (namely, NOx as a precursor for PM $_{2.5}$ and ozone, and SO $_2$ as a precursor for PM $_{2.5}$) that contribute significantly to nonattainment in downwind states. The EPA determined that this Commonwealth is both an upwind and downwind state.

Section 110(a)(1) of the CAA (42 U.S.C.A. § 7410(a)(1)) requires that states submit state implementation plans (SIPs) to meet the applicable requirements of section 110(a)(2) of the CAA within 3 years after the promulgation of a new or revised NAAQS or within a shorter period as the EPA may provide. Under section 110(a)(1) of the CAA, states are required to submit SIPs that satisfy the requirements of section 110(a)(2)(D)(i) of the CAA, regarding interstate transport of pollution. In 1997, the EPA adopted a NAAQS for fine particulate matter (PM_{2.5}) at 62 FR 38652 (July 18, 1997) and 8-hour ozone at 62 FR 38855 (July 18, 1997). On April 25, 2005, the EPA made National findings that states failed to submit the required SIPs to address interstate transport with respect to the PM_{2.5} and 8-hour ozone NAAQS. 70 FR 21147 (April 25, 2005). Publication of the EPA's findings started a 2-year time clock under section 110(c)(1) of the CAA in which the EPA would promulgate a Federal Implementation Plan (FIP) for a state that failed to submit an SIP approved by the EPA that satisfies the interstate transport requirements in section 110(a)(2)(D)(i) of the CAA within the 2 years.

On May 12, 2005, the EPA published the final CAIR rule in which the EPA issued findings that 28 states and the District of Columbia contribute significantly to nonattainment of the $PM_{2.5}$ or 8-hour ozone NAAQS, or both, in downwind states. 70 FR 25162 (May 12, 2005) as amended at 71 FR 25328 (April 28, 2006). The EPA required these states and the District of Columbia to submit revised SIPs that include control measures to reduce emissions of SO₂ or NOx, or both, that significantly contribute to nonattainment of the $PM_{2.5}$ and 8-hour ozone NAAQS in downwind states. A state subject to the CAIR may independently determine which emissions sources to subject to controls and which control measures to adopt. The EPA included statewide emission reduction levels in the final rulemaking, as well as model rules for multistate cap and trade programs for annual SO₂ and NOx emissions for PM_{2.5} and for seasonal NOx emissions for ozone. In the rulemaking, the EPA also revised the Acid Rain Program regulations, particularly the regulatory provisions governing the SO₂ cap and trade program, to streamline that program and facilitate its interaction with the CAIR model SO₂ cap and trade program. The EPA also specified that the NOx SIP Call cap and trade program, known as the NOx Budget Trading Program, will be replaced by the CAIR NOx Ozone Season Trading Program.

By way of background, the NOx SIP Call was promulgated in 1998 as the EPA's principal effort to reduce

interstate transport of precursors for both the 1-hour and 8-hour ozone NAAQS. 63 FR 57356 (October 27, 1998). The NOx SIP Call followed on the heels of the Ozone Transport Commission's (OTC) NOx Budget Trading Program, which was developed and adopted by the OTC member states, including the Commonwealth, as a regional approach to reducing NOx from large fossil-fuel-fired combustion units. The Commonwealth adopted the OTC NOx Budget Trading Program in §§ 123.101—123.121 (relating to NOx allowance requirements). In the EPA's NOx SIP Call, the EPA imposed seasonal NOx reduction requirements on 22 states in the eastern part of the country (including the Commonwealth) and the District of Columbia. States subject to the NOx SIP Call submitted SIPs incorporating the NOx SIP Call requirements. The Commonwealth adopted the NOx Budget Trading Program in Chapter 145, Subchapter A (relating to NOx budget trading program) in response to the EPA's NOx SIP Call.

When ground-level ozone is present in concentrations in excess of the Federal health-based standard, public health is adversely affected. The EPA concluded that there is an association between ambient ozone concentrations and increased hospital admissions for respiratory ailments, such as asthma. Further, although children, the elderly and those with respiratory problems are most at risk, even healthy individuals may experience increased respiratory ailments and other symptoms when they are exposed to ambient ozone while engaged in activities that involve physical exertion. Though the symptoms are often temporary, repeated exposure could result in permanent lung damage. The implementation of measures to address ozone air quality nonattainment in this Commonwealth is necessary to protect the public health.

In addition to causing adverse health effects, the EPA concluded that 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, such as 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 parks and recreation areas. The economic value of some welfare losses due to ozone can be calculated, such as crop yield loss from both reduced seed production and visible injury to some leaf crops, such as lettuce, spinach, tobacco, as well as visible injury to ornamental plants, such as grass, flowers, shrubs. Other types of welfare loss may not be quantifiable, such as reduced aesthetic value of trees growing in heavily visited parks.

Fine particles, or $PM_{2.5}$, 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, absences from school or work and restricted activity days), lung disease, decreased lung function, asthma attacks and certain cardiovascular problems such as heart attacks and cardiac arrhythmia. The EPA estimated that attainment of the $PM_{2.5}$ standards would prolong tens of thousands of lives and would prevent, each year, tens of thousands of hospital admissions as well as hundreds of thousands of doctor visits, absences from work and school and respiratory illnesses in chil-

dren. Individuals particularly sensitive to fine particle exposure include older adults, people with heart and lung disease and children.

A number of petitions for review have been filed in the Federal Court of Appeals for the District of Columbia Circuit challenging various aspects of the CAIR. The cases have been consolidated into *State of North Carolina v. EPA*, Case No. 05-1244, which addresses CAIR-specific issues, and *Sierra Club v. EPA*, Case No. 06-1221, which addresses the EPA's response to North Carolina's petition to reduce interstate transport of fine particulate matter and ozone. It is possible that a ruling by the Court will lead to revisions to the CAIR by the EPA.

The EPA set two phases of NOx and SO_2 reductions in the CAIR, which are addressed in this proposed rule-making. The first phase of NOx reductions begins in 2009 (covering 2009-2014) and the first phase of SO_2 reductions starts in 2010 (covering 2010-2014). The second phase of reductions for both NOx and SO_2 starts in 2015 (covering 2015 and thereafter). The EPA's emissions reduction requirements are based on controls that the EPA identified as being highly cost effective for electric generating units (EGUs).

Under the CAIR, states' SIP revisions were due by September 11, 2006. The Commonwealth proposes to submit the proposed rulemaking, once adopted, to the EPA as an SIP revision to satisfy the EPA's CAIR SIP requirements.

In the event that a state does not submit its SIP revision on time, the EPA issued a FIP for each state covered by the CAIR on April 28, 2006 (71 FR 25328). The FIPs are designed to regulate EGUs in affected states and to achieve emission reduction requirements established by the CAIR until states have approved SIPs to achieve the reductions. As the control requirement for FIPs, the EPA adopted the model trading rules provided in the CAIR, with minor changes to account for Federal rather than state implementation. The EPA stated that there are no sanctions associated with being subject to a CAIR FIP.

The EPA designed the model rules in the CAIR to parallel the NOx SIP Call model trading rules in 40 CFR Part 96 (relating to NOx budget trading program and CAIR NOx and SO_2 trading programs for state implementation plans) and to coordinate with the Acid Rain Program. To have the EPA administer the trading programs and for sources to be able to trade allowances with sources in other states, the EPA requires states to adopt the model rules, with flexibility to modify sections regarding NOx allowance allocations and determine whether to include individual unit opt-in provisions. Once the CAIR NOx Ozone Season Trading Program is operating, the EPA will no longer administer the NOx SIP Call trading program.

Under the model rules, states will allocate the CAIR NOx annual allowances and the CAIR NOx Ozone Season allowances. The Department's proposed rulemaking specifies how allowances will be calculated. The NOx Budget Trading Program allowances and CAIR NOx Ozone Season allowances cannot be used for compliance with the annual CAIR NOx emission reduction requirement. Pre-2009 NOx Budget Trading Program allowances can be banked into the program and used by CAIR sources for compliance with the CAIR NOx Ozone Season program. NOx Budget Trading Program allowances of vintages (namely, the year for which the allowance is issued) 2009 and later cannot be used for compliance with CAIR or the CAIR FIP and will be superseded.

The CAIR SO_2 cap and trade program will rely upon Title IV SO_2 allowances that have already been issued, although a state may provide CAIR SO_2 allowances to an opt-in source. Pre-2010 Title IV SO_2 allowances can be used for compliance with the CAIR. SO_2 reductions are achieved under the model rules by requiring sources to retire more than one allowance for each ton of SO_2 emissions. The emission value of an SO_2 allowance is independent of the year in which it is used, but is based upon its vintage. SO_2 allowances of vintage 2009 and earlier will offset one ton of SO_2 emissions. Vintages 2010-2014 will offset 0.5 ton of emissions and vintages 2015 and beyond will offset 0.35 ton of emissions.

The CAIR provides each state with a share of the compliance supplement pool, which is comprised of 200,000 CAIR NOx annual allowances of vintage 2009. For the Commonwealth, the compliance supplement pool will be allocated by the EPA under the FIP in 2009.

Sources will monitor and report their emissions using 40 CFR Part 75 (relating to continuous emission monitoring). Compliance for the annual and ozone season NOx cap and trade programs, as well as the ${\rm SO_2}$ program, will be determined separately. A source found to have excess emissions must surrender allowances sufficient to offset the excess emissions and surrender allowances from the next control period equal to three times the excess emissions.

If a state chooses to control EGUs in its CAIR program, as the Commonwealth is proposing to do, then the state must establish a budget for EGUs. The EPA established Statewide budgets for the Commonwealth's CAIR trading programs that include only EGUs as follows: (1) an annual EGU NOx budget of 99,049 tons per year for 2009-2014 and 82,541 tons per year for 2015 and thereafter; (2) a compliance supplement pool of 16,009 tons of CAIR NOx annual allowances; (3) an Ozone Season EGU NOx budget of 42,171 tons per year for 2009-2014 and 35,143 tons per year for 2015 and thereafter; and (4) an annual EGU SO₂ budget of 275,990 tons per year for 2010-2014 and 193,193 tons per year for 2015 and thereafter. The EPA calculated the amount of each state's EGU emissions cap, or budget, based on reductions that the EPA determined to be highly cost effective.

 SO_2 allowances are allocated to sources by the EPA under the Acid Rain Program. Certain independent power production (IPP) facilities that are subject to the SO_2 emission control requirements of the CAIR, however, were exempted from the Acid Rain Program. Most of these IPP facilities are waste coal-fired facilities in this Commonwealth that combust coal mining refuse. Since states cannot allocate CAIR SO_2 allowances to these facilities, the facilities will have to purchase or otherwise obtain the necessary allowances. To make up for the absence of SO_2 allowances, the Department is proposing to allocate additional CAIR NOx allowances to these facilities may use to purchase the needed CAIR SO_2 allowances.

The proposed rulemaking establishes general provisions to achieve reductions from EGUs currently covered by the NOx Budget program in Chapter 145, Subchapter A. The proposed NOx reduction requirements are similar to the existing requirements of the NOx Budget Trading Program, and contain provisions regarding designated representatives of covered units, permitting, allowances, monitoring and opting-in. This proposed rulemaking establishes three CAIR trading programs which cover annual NOx emissions, ozone season NOx emissions and

annual SO_2 emissions, respectively. Each of the three proposed CAIR trading programs contains similar provisions.

The proposed rulemaking makes minor changes to the requirements that already apply to small sources of NOx in the five-county Philadelphia area. The proposed rulemaking requires these sources to surrender CAIR NOx Ozone Season allowances rather than NOx Budget program allowances if the sources' NOx emissions exceed its NOx emission limits, beginning in 2009. A similar change is proposed for NOx emissions from large stationary internal combustion engines that are not subject to the NOx Budget Trading Program, and for NOx emissions from Portland cement kilns. The proposed rulemaking also addresses the transitioning of $\stackrel{\circ}{NOx}$ allowance allocations, $\stackrel{\circ}{NOx}$ emission limitations and $\stackrel{\circ}{NOx}$ monitoring requirements from the NOx Budget Program and address certain compliance issues. The proposed rulemaking establishes requirements for non-EGUs that are currently subject to the NOx Budget Trading Program.

EGUs will likely be governed by the NOx allowances already allocated by the Department for 2007 and 2008. As the Department stated in its 2005 allocation of NOx allowances, action at the Federal or State level could affect the Department's allocations, and "...it is possible that NOx allowances allocated for 2008—2012 would be terminated, limited or otherwise affected." 35 Pa.B. 1714 (March 12, 2005).

An NOx allowance allocated by the Department under the NOx Budget Trading Program does not constitute a property right. See § 145.6(b)(7) (relating to standard requirements). A "NOx allowance" is defined in § 145.2 (relating to definitions) as:

An authorization by the Department under the NOx Budget Trading Program to emit up to 1 ton of NOx during the control period of the specified year or of any year thereafter, except as provided under § 145.54(f) (relating to compliance). No provision of the NOx Budget Trading Program, any permit, or an exemption under § 145.4(b) or § 145.5 and no provision of law will be construed to limit the authority of the Department or the Administrator to terminate or limit the authorization, which does not constitute a property right. For purposes of all sections of this subchapter except §§ 145.41—145.43 and 145.88, NOx allowance also includes an authorization to emit up to 1 ton of NOx during the control period of the specified year or of any year thereafter by the Department or the Administrator.

The CAIR NOx allowances expected to be allocated by the EPA under the FIP will replace the NOx allowances already allocated to EGUs by the Department under the NOx Budget Trading Program for 2009 and subsequent years until the FIP is replaced by an approved SIP revision. In administering the FIP, the EPA will record annual and ozone season CAIR NOx allowance allocations for 2009 by September 30, 2007, and for 2010 by September 30, 2008.

Non-EGUs will continue to be covered by the NOx allowances already allocated by the Department until this proposed rulemaking is adopted. Once this proposed rulemaking is adopted, the NOx allowances already allocated by the Department to non-EGUs will be replaced by the NOx permit limits described in the proposed rulemaking, as explained more fully in Section E of this preamble.

Both the EPA's CAIR NOx model rules and CAIR FIP state that CAIR NOx annual allowances and CAIR NOx

Ozone Season allowances do not constitute property rights. 40 CFR 96.106(c)(6), 96.306(c)(6), 97.106(c)(6) and 97.306(c)(6) (relating to standard requirements). The same is true of CAIR $\rm SO_2$ allowances. 40 CFR 96.206(c)(6) and 97.206(c)(6) (relating to standard requirements). These provisions also provide that no provision of the CAIR programs, a CAIR permit application, a CAIR permit or the retired unit exemption and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit authorization. The proposed rulemaking incorporates by reference these Federal provisions.

The Department consulted with the Air Quality Technical Advisory Committee (AQTAC) on the proposed rule-making on December 14, 2006, and January 4, 2007. On January 4, 2007, the AQTAC concurred with the Department's recommendation that the Board approve the proposed rulemaking for publication and comment. The Department also consulted with the Citizen Advisory Council on January 17, 2007, and the Small Business Compliance Advisory Committee on January 24, 2007.

The proposed rulemaking is necessary to achieve and maintain the NAAQS and to satisfy related CAA requirements. The proposed rulemaking, when adopted, will be submitted to the EPA as a revision to the Commonwealth's SIP.

E. Summary of Regulatory Requirements

The proposed rulemaking amends § 121.1 (relating to definitions) to add a definition of "vintage or vintage year." The term is defined to refer to the calendar year assigned to an allowance by the issuing authority that designates the first year in which the allowance is valid for use in meeting an emission limit.

The proposed rulemaking amends § 129.204 (relating to emission accountability) by changing "NOx allowance" to "CAIR NOx Ozone Season allowance." This amendment will require the small sources of NOx in the five-county Philadelphia area to surrender CAIR NOx Ozone Season allowances rather than NOx Budget Program allowances if the sources' NOx emissions exceed their NOx emission limits, beginning in 2009.

A similar change is proposed for NOx emissions from large stationary internal combustion engines that are not subject to the NOx Budget Program and for NOx emissions from Portland cement kilns in §§ 145.113 and 145.143 (relating to standard requirements), respectively.

The proposed rulemaking also clarifies the existing provisions in § 129.204 regarding alternative calculation and recordkeeping procedures for the calculation of actual emissions from small sources of NOx in the five-county Philadelphia area.

The proposed rulemaking addresses the transition from the NOx Budget Trading Program to the CAIR NOx trading programs. New § 145.8 (relating to transition to CAIR NOx trading programs) provides that the final year for NOx allowance allocations to be made under the NOx Budget Trading Program will be 2008. Allocations in 2009 will be made in accordance with the FIP. CAIR NOx Ozone Season allowance allocations for the control period starting May 1, 2010, and for each control period thereafter, will be distributed in accordance with the CAIR NOx trading programs. New § 145.8 provides that the emission limitations and monitoring requirements established in the NOx Budget Trading Program are replaced by the requirements in Chapter 145, Subchapter D (relating to CAIR NOx and SO₂ trading programs) pertaining to the

CAIR NOx Ozone Season Trading Program beginning with the May 1, 2010, control period. This section also addresses compliance.

Section 145.101 (relating to transition requirements for nonelectric generating units) addresses the transition for non-EGUs from the NOx Budget Trading Program to the CAIR NOx Ozone Season Trading Program. The EPA requires that states continue to meet their NOx SIP Call obligations. The EPA explains that if a state achieves all of its required CAIR emissions reductions by capping EGUs, then the state must modify its existing NOx SIP Call program to require that non-EGUs in the state that are currently participating in the NOx Budget Trading Program conform to the requirements of the CAIR Ozone Season NOx Trading Program with a trading budget that is the same as or more stringent than the budget in the state's currently approved SIP. 70 FR 25256 (May 12, 2005). The Department is proposing to meet this requirement in the following manner in § 145.101: the non-EGUs units will be subject to an ozone season permit limit beginning in 2009 based on their most recent NOx Budget Trading Program allocation unless the Department approves a timely application for the unit to participate in the CAIR NOx Ozone Season Trading Program. Section 145.101 also addresses monitoring, compliance and opting-in for the non-EGUs. The Board is specifically seeking comment on how the proposed rulemaking addresses non-EGUs.

Proposed Chapter 145, Subchapter D incorporates by reference the EPA's CAIR NOx Annual Trading Program, CAIR NOx Ozone Season Trading Program and CAIR $\rm SO_2$ Trading Program, with modifications.

Section 145.201 (relating to purpose) describes the purpose of Chapter 145, Subchapter D. This section explains that Chapter 145, Subchapter D incorporates by reference the CAIR NOx Annual Trading Program and CAIR NOx Ozone Season Trading Program as a means of mitigating the interstate transport of fine particulates and NOx, and incorporates the CAIR SO $_2$ Trading Program as a means of mitigating the interstate transport of fine particulates and SO $_2$. The section also explains that Chapter 145, Subchapter D establishes general provisions and applicability, allowance and supplemental monitoring, recordkeeping, and reporting provisions.

Section 145.202 (relating to definitions) contains new and amended definitions. The section includes Federal definitions from the EPA's CAIR programs for the following terms, modified to accommodate the Commonwealth's formatting policies. In some instances, definitions for the CAIR NOx Annual Trading Program, CAIR NOx Ozone Season Trading Program and FIP are consolidated. The defined terms are: "Acid Rain Program," "Administrator," "bottoming-cycle cogeneration unit," "CAIR NOx allowance," "CAIR NOx Annual Trading Program," "CAIR NOx Ozone Season Trading Program," "CAIR NOx Ozone Season Unit," "CAIR NOx Unit," "CAIR NOx Unit," "CAIR NOx Unit," "CAIR NOx Unit," "CAIR SO2 Unit," "cogeneration unit," "combustion turbine," "commence commercial operation," "control period," "operator," "owner," "ozone season," "topping-cycle cogeneration unit," "unit," "useful power" and "useful thermal energy." The definitions of "CAIR NOx Annual Trading Program" also specify that those terms refer to the respective programs adopted in Chapter 145, Subchapter D.

Several definitions in § 145.202 are derived from or relate to the Alternative Energy Portfolio Standards Act (AEPS Act) (73 P. S. §§ 1648.1—1648.8), including the

term "Pennsylvania Alternative Energy Portfolio Standard." The term "tier I renewable energy qualifying source" is derived from the definition of "Tier I alternative energy source" in the AEPS Act, but includes only those sources included in the definition of "renewable energy" in this proposed rulemaking. The term "tier II demand side management energy efficiency qualifying source" is derived from the definition of "Tier II alternative energy source" in the AEPS Act, but is limited by the definition of "demand side management" in this proposed rulemaking. The term "demand side management," which is also derived from the AEPS Act, does not include industrial by-product technologies, to prevent double allocation of allowances under the CAIR NOx trading programs.

Section 145.202 also includes a definition of "EIA," "gross electrical output," "MWh—Megawatt-hour," "renewable energy" and "renewable energy certificate."

Section 145.203 (relating to applicability) describes the applicability of Chapter 145, Subchapter D. Section 145.203 states that this subchapter will apply to CAIR NOx units, CAIR NOx Ozone Season units and CAIR $\rm SO_2$ units, as well as tier I renewable energy qualifying sources and tier II demand side management energy efficiency qualifying sources.

Section 145.204 (relating to incorporation of Federal regulations by reference) establishes the incorporation by reference of the Federal CAIR regulations. This section specifies that the incorporation by reference includes appendices, future amendments and supplements to the Federal regulations. This is consistent with the existing Commonwealth law on incorporation by reference set forth in 1 Pa.C.S. § 1937(a) (relating to references to statutes and regulations).

Section 145.205 (relating to emission reduction credit provisions) requires that the Department permanently reduce the Commonwealth's CAIR NOx trading budget and that the owner or operator of a unit subject to Chapter 145, Subchapter D surrender NOx allowances if NOx emission reduction credits or creditable emission reductions are considered in an applicability determination under Chapter 127, Subchapter E (relating to new source review) for a unit not subject to Chapter 145, Subchapter D, or if an emission trade under Chapter 127 (relating to construction, modification, reactivation and operation of sources) is authorized for a unit not subject to Chapter 145, Subchapter D, whenever the emission reduction credits, creditable emission reductions or emission trade are from a unit subject to Chapter 145, Subchapter D. An example of an emission trade under Chapter 127 is a trade at a facility under a plantwide applicability limit from a CAIR NOx unit to a non-CAIR NOx unit at the same facility. Section 145.205 carries over the requirements of §§ 145.40(b) and 145.90 (relating to State Trading Program budget; and emission reduction credit provisions).

Section 145.211 (relating to timing requirements for CAIR NOx allowance allocations) addresses timing requirements for CAIR NOx allowance allocations under the CAIR NOx Annual Trading Program. The timing requirements replace the timing requirements in the EPA's CAIR NOx Annual Trading Program.

Under the EPA's model rule in 40 CFR 96.141(a) and (b) (relating to timing requirements for CAIR NOx allowance allocations), the Department would have been allocating CAIR NOx allowances for the CAIR NOx Annual Trading Program every year for the control period 6 years after the year of the allocation (except that the first

allocation would have been in 2006 and would have covered 6 control periods beginning in 2009). The EPA explains in the CAIR NOx Annual Trading Program SIP submission requirements in 40 CFR 51.123(o)(2)(ii)(B) (relating to findings and requirements for submission of State implementation plan revisions relating to emissions of oxides of nitrogen pursuant to the Clean Air Interstate Rule), that a state may adopt provisions that differ substantively from the EPA's allowance allocation provisions and still receive SIP approval as long as the state's methodology provides, among other things, that the state will make CAIR NOx allowance allocations each year for the fourth year after the year of the allocation. The Department's approach differs in that it requires the Department to make allocations every 2 years for the third and fourth years after the allocation.

The Department is proposing this process to foster competition and enable new units to transition to existing units sooner. Under the EPA's CAIR model rules, new units do not get regular allocations for 9 years, and the allowances allocated throughout the life of the program are based on baseline heat input data that is older than that used under the proposed rulemaking. The Department's proposed methodology will achieve regular allocations for new units in 5 or 6 years and will use more recent baseline data to make allocations. It also ensures that allocations to new units, which collect NOx allowance allocations based upon emissions, are minimized so as not to build up to significant levels in the program. The Department will consider shortening the time span between issuance of the allocations and the years to which they apply, or, if required by the EPA, lengthening the time span. The Board is specifically seeking comment on its proposed approach to allocating allowances to new units.

Under § 145.211(b), the Department will make CAIR NOx allowance allocations to existing units in 2008 for the control periods in 2010 and 2011. Beginning in 2009, and every 2 years thereafter, the Department will make CAIR NOx allowance allocations to existing units for the two control periods that begin 3 and 4 years after the calendar year of the allocation. These allocations are referred to as "regular allocations." This is illustrated in the example provided with the description of § 145.212(e) (relating to CAIR NOx allowance allocations).

Under § 145.211(c), the Department will submit to the Administrator CAIR NOx allowance allocations to new units by April 30 each year, beginning with 2011. Section 145.211(c) cross-references § 145.212(e), which states that the allocations to new units will be made for the fifth year after the year of the NOx emissions. Section 145.211(c) states that the Department will base the allocations to new units on actual emissions in the calendar year preceding the year of the submission.

Under the EPA's model rule in 40 CFR 96.141(c), the Department would make CAIR NOx allowance allocations for the CAIR NOx Annual Trading Program to new units out of a new unit set-aside every year for the year of the allocation. The EPA explains in the CAIR NOx Annual Trading Program SIP submission requirements in 40 CFR 51.123(o)(2)(ii)(C) that a state may adopt provisions that differ substantively from the EPA's allowance allocation provisions and still receive SIP approval as long as the state's methodology provides, among other things, that the state notifies the EPA regarding the amount of allowances to be allocated to new units by October 31 of the year of the allocation. The proposed rulemaking meets this requirement and provides new units with more

advance notice of their allocations than does the EPA's model rule. Under the proposed rulemaking, new units will receive future year allowances as compensation to cover their compliance obligations. Unit operators will be able to make an inter-company swap, or external trade or sale of the future vintage year allowances for current vintage year allowances that the operators will require for the new unit's compliance obligations. The Board is specifically seeking comment on the proposed approach.

Under § 145.211(d), the Department will publish notice of the proposed CAIR NOx allowance allocations in the *Pennsylvania Bulletin* and will publish the final allocations after a 15-day public comment period.

Section 145.212 addresses allocation procedures for CAIR NOx allowance allocations under the CAIR NOx Annual Trading Program. Subsection (a) explains that the allocation requirements in the proposed rulemaking replace the allocation requirements in the EPA's CAIR NOx Annual Trading Program.

The procedure for issuing CAIR NOx allowances to new and existing units under the proposed rulemaking is based on the "new unit" allocation methodology in the CAIR model rules and FIP. The EPA's model rules and FIP would provide existing units with a permanent allocation based on historical operations. The EPA's method has several negative aspects. It rewards past inefficiency, does nothing to pay back efficiency improvements, and in states like this Commonwealth with deregulated markets gives existing units an unwarranted and counterproductive competitive advantage. It could also fail to provide more productive units with an equitable share of allowances when market forces change the level of output from particular units. Using the EPA's new unit allocation method with an updating component remedies these deficiencies.

This Commonwealth has a deregulated electric market that seeks to achieve the economic and environmental benefits of competition and that is better served by the allocation method in the proposed rulemaking. This approach will allow for the timely integration of new sources into the general allocation pool, and provide allowances for energy efficiency/renewable energy resources on a regular and equitable basis so that these resources will not be placed at a competitive disadvantage. The Board is specifically seeking comment on the modified heat input approach to allocating CAIR NOx allowances proposed in this rulemaking.

Subsection (b) addresses the determination of baseline heat input for existing units in a manner that is consistent with the EPA's model rule approach for new units. The Board is specifically seeking comment on the Department's proposed allocation methodology, including the routine updating of allocations, calculating converted control period heat input for calculating allocations using the EPA's new unit allocation methodology and including the EPA's methodologies for calculating allowance allocations taking into consideration useful thermal energy for cogeneration units.

Subsection (c) explains that allocations will be made to existing units, qualifying resources and new units using baseline heat input data as determined under subsection (b) from a baseline year that is 5 years before the vintage year of the allowances that are allocated. Subsection (c) also explains that the allocations for each control period beginning with 2010 will equal the number of CAIR NOx allowances remaining in the Commonwealth's trading budget under 40 CFR 96.140 (relating to state trading budgets).

Under the EPA model rule, a state would maintain a set-aside of 5% of the budget of CAIR NOx allowances for allocation to new units. The Department is not proposing a set-aside for new units; instead, the Department proposes under § 145.212(c) that new unit allowances be allocated from the same pool of allowances as those allocated to other units and qualifying resources to prevent the problem of over-subscription of the new source set-aside experienced under the NOx Budget Trading Program. The Board is specifically seeking comment on the proposed approach of allocating future CAIR NOx allowances to new units rather than allocating CAIR NOx allowances to new units under a new unit set-aside.

Subsection (d) further describes the allocation calculation process for existing units and qualifying resources, and states that the Department will make CAIR NOx allowance allocations under this subsection after the Department makes CAIR NOx allowance allocations to new units under subsection (e).

Subsection (e) explains that the Department will allocate CAIR NOx allowances to new units by March 31, 2011, and March 31 each year thereafter. A unit may receive a "new unit" allocation under subsection (e) in the same year it receives an allocation based on qualifying converted baseline heat input for regular sources. These concurrent allocations will continue until the unit has already received allowances of the same vintage year as the year in which the emissions that support the "new unit" allocation were generated. At that point, the unit will have transitioned into regular source status and will no longer be eligible for new unit allocations. NOx allowance allocations to new units will be made for the fifth year after the year of the emissions. For example:

A unit that begins operations in 2010 will be allocated 2015 CAIR NOx allowances in 2011, based on 2010 emissions. This allocation is made under the procedures for new units because the unit will not have received an allocation of 2010 vintage. Since the unit has a converted heat input baseline in 2010, in 2011 it will also be allocated 2015 allowances because it has a qualifying converted baseline heat input for regular source status in 2015.

In 2012, the unit in the example will be allocated, as a new unit, 2016 CAIR NOx allowances based on 2011 emissions.

In 2013, the unit will be allocated, as a new unit, 2017 CAIR NOx allowances based on 2012 emissions. In 2013, the unit will also be allocated 2016 and 2017 allowances because it has a qualifying converted baseline heat input for regular source status in 2011 and 2012.

In 2014, the unit will be allocated, as a new unit, 2018 CAIR NOx allowances based on 2013 emissions.

In 2015, the unit will be allocated, as a new unit, 2019 CAIR NOx allowances based on 2014 emissions. In 2015, the unit will also be allocated 2018 and 2019 allowances because it has a qualifying converted baseline heat input for regular source status in 2013 and 2014.

In 2016, the unit will no longer be allocated as a new unit, because the unit will have received allowances (in 2011) of the same vintage year (2015) as the year before the allocation based on qualifying converted baseline heat input for regular source status. The unit will now have transitioned into regular source status.

In 2017, the unit will be allocated 2020 and 2021 CAIR NOx allowances because it has a qualifying converted baseline heat input for regular source status in 2015 and 2016. Allocations to the unit will continue in the same manner in which they are allocated in 2017 every 2 years thereafter.

Allocations to new units in 2009 will be made directly by the EPA under the FIP.

Subsection (f) applies to allocations to qualifying resources and units exempted under the EPA's Acid Rain Program. Qualifying resources may be issued allowances under this provision if they submit an application that meets the requirements of subsection (f). The number of allowances allocated to them will be determined by converting the certified quantity of electric energy production, useful thermal energy and energy equivalent value of the measures approved under the Pennsylvania Alternative Energy Portfolio Standard to equivalent thermal energy. The proposed rulemaking does not limit the CAIR NOx allowances that can be allocated to qualifying resources as a whole. The Board is specifically seeking comment on the proposed approach to allocating CAIR NOx allowances on the basis of new renewable energy sources in this Commonwealth and demand-side management under the Pennsylvania Alternative Energy Portfolio Standard, including the appropriateness of including load shifting as a demand side management measure.

Units exempted under the EPA's Acid Rain Program, and which therefore did not receive SO_2 allowances and yet are subject to the CAIR SO_2 Trading Program, may receive a cost equivalent additional amount of CAIR NOx allowances under subsection (f), based on a ratio of 1 CAIR NOx allowance to every 8 tons of SO_2 emitted. This ratio is derived from historical price data showing a 1:8 price ratio for NOx and SO_2 allowances. Up to 1.3% of the Commonwealth's annual NOx budget is available for allocation to these units for each control period from 2010 through 2015, as described in subsection (f)(4). Subsection (f)(5) provides that the Department may extend, terminate or otherwise modify the allocation after providing public notice and a 30-day public comment period. The proposed allocation of NOx allowances to these units is discussed more completely under Section D of this preamble.

Section 145.213 (relating to supplemental monitoring, recordkeeping and reporting requirements for gross electrical output and useful thermal energy for units subject to 40 CFR 96.170—96.175) contains monitoring, recordkeeping and reporting requirements for gross electrical output and useful thermal energy for units that are subject to the monitoring and reporting requirements of the EPA's CAIR rules. These requirements in the proposed rulemaking are in addition to the requirements in the CAIR rules, and are included to ensure that allocations are made on an equitable basis. This can only be accomplished by requiring all units to collect and report data that meets a standard level of accuracy, consistency and accountability. Most units already have the necessary instrumentation and recordkeeping measures in place.

The provisions in the proposed rulemaking that relate to the CAIR NOx Ozone Season Trading Program are nearly identical to those regarding the CAIR NOx Annual Trading Program. The differences relate to the different control periods (May through September, versus entire year) and different Federal cross-references. Consequently, the discussion of §§ 145.211—145.213 pertain also to §§ 145.221—145.223 (relating to additional requirements for CAIR NOx ozone season trading program),

with the relevant Federal citations being specified in Annex A. No provision is made in \S 145.222 (relating to CAIR NOx Ozone Season allowance allocations) as in \S 145.212 for units exempted under the EPA's Acid Rain Program.

F. Benefits, Costs and Compliance

Benefits

The citizens of this Commonwealth are the major benefactors of this proposed rulemaking. This proposed rulemaking is designed to reduce emissions of PM_{2.5}, ozone and their precursors, NOx and SO₂. The proposed rulemaking is intended to meet the Federal requirements under the CAIR. Implementation of the proposed rulemaking will contribute to the attainment and maintenance of the health-based ozone and fine particle NAAQS. Affected unit owners and operators as well as entities that implement measures within the state to generate credit under the Commonwealth's Advanced Energy Portfolio Standard will receive emission allowances that have a marketable cash value. The budgets for CAIR NOx allowances that will be distributed to these entities contain over 99,000 annual allowances, and 42,000 Ozone Season allowances, which may have a collective market value of approximately \$250 million per year. CAIR NOx allowances would be distributed under the proposed rulemaking based on ongoing production and service activities. Control installation and operation would create jobs and reduce air contaminants that have adverse environmental and health impacts. The EPA claims that the CAIR helps maintain coal as a viable fuel/energy source, keep jobs in this Commonwealth and will not significantly impact regional electricity prices. If the CAIR program ensures that the emission reductions occur in this Commonwealth and elsewhere as projected, the monetized public health benefits are estimated to be almost 20 times greater than the estimated costs of the program.

Twenty-eight other Eastern states must adopt a similar program. Some have regulated electric markets. Although NOx allowances are a small portion of the equation, the allocation method in the proposed rulemaking provides a positive synergistic means of accelerating the desired benefits of market competition. Some of the states have either adopted programs similar to the EPA's CAIR program or the EPA's CAIR FIP in a manner that constrained their allocation methods in ways that do not provide this benefit. Therefore, it is anticipated that this proposed rulemaking will place Pennsylvania units at a competitive advantage.

Compliance Costs

Since the proposed rulemaking sets forth an economic incentive-based trading program, the costs and savings are largely indeterminable since they will vary over different timeframes and will be determined by plant operator decisions and the allowance market. An existing plant operator, for instance, may choose to upgrade the plant emission controls and sell excess allowances it receives to make a profit over the long-term. Every plant in this Commonwealth may choose this path and every plant may make a profit. On the other hand, the opposite could occur. With multistate corporations operating power plants, and with costs and savings being averaged over several states, it is not possible to predict.

Currently under the Acid Rain Program, facilities in this Commonwealth are issued 540,000 tons worth of SO_2 allowances each year. The market value of those allowances at a current market value of \$500 per ton is \$270

million a year. In addition to the SO_2 allowance allocation, facilities in this Commonwealth purchase approximately 400,000 tons worth of additional allowances each year at about \$200 million a year at the current allowance price of \$500 per allowance. The CAIR SO_2 Trading Program will reduce the effective State budget allocation from 540,000 SO_2 allowances to about 270,000 in 2010 and 193,000 in 2015. If purchasing allowances rather than controlling emissions remains cost effective at facilities in this Commonwealth, the cost of the new CAIR SO_2 Trading Program will be the cost of purchasing 270,000 additional tons worth of SO_2 allowances in 2010 at about \$500 a ton (about \$135 million per year) and 347,000 additional tons worth (about \$174 million dollars per year) in 2015.

There is currently no annual NOx trading program in this Commonwealth, but assuming that the predicted price of future CAIR NOx annual allowances is about \$1,200 a ton and facilities in this Commonwealth make no NOx emission reductions, facilities would need to purchase the difference between current annual NOx emissions (about 180,000 tons each year) and the Commonwealth's annual CAIR NOx budget (about 99,000 tons in 2009 and 82,500 in 2015). The annual cost in 2009 would be about \$97.2 million and in 2015 would be about \$117 million. It is impossible to predict whether the economics will continue to favor purchasing allowances over installing controls.

There is currently an ozone season NOx trading program in this Commonwealth. Assuming that the predicted price of future CAIR NOx Ozone Season allowances is about \$1,200 a ton and facilities in this Commonwealth make no ozone season NOx emission reductions, facilities would need to purchase the difference between current ozone season NOx emissions (about 48,000 tons each ozone season) and the Commonwealth's Ozone Season CAIR NOx budget (about 42,000 tons in 2009 and 35,000 in 2015). The annual cost in 2009 would be about \$7.2 million and in 2015 would be about \$15.6 million. It is impossible to predict whether the economics will continue to favor purchasing allowances over installing controls.

In summary, if no emission reductions are made and all allowance are purchased on the market, the costs of the CAIR rule to the regulated community may be about \$239.4 million annually in 2010 and \$306.6 million annually in 2015. Still, the savings associated with the reduction in premature mortality and health care costs yield economic benefits 20 times greater than costs.

Compliance Assistance Plan

The Department plans to educate and assist the regulated community and the public with understanding these new regulatory requirements through various means, including field inspector contacts, mailings and the Small Business Compliance Assistance Program.

Paperwork Requirements

This proposed rulemaking utilizes the existing Federal recordkeeping and reporting requirements, as expanded slightly under the CAIR model rules. The EPA will not administer the allowance tracking portion of the program for a state nor allow a state to engage in interstate allowance trading unless the state's CAIR program includes these recordkeeping and reporting requirements. In addition, the proposed rulemaking specifies reporting of electrical and useful thermal output to ensure the producing facilities receive the correct amount of allowances.

G. Pollution Prevention (if applicable)

The Federal Pollution Prevention Act of 1990 established a National policy that promotes pollution prevention as the preferred means for achieving state environmental protection goals. The Department encourages pollution prevention, which is the reduction or elimination of pollution at its source, through the substitution of environmentally-friendly materials, more efficient use of raw materials and the incorporation of energy efficiency strategies. Pollution prevention practices can provide greater environmental protection with greater efficiency because they can result in significant cost savings to facilities that permanently achieve or move beyond compliance. This proposed rulemaking incorporates the following pollution prevention incentives:

The proposed rulemaking modestly increases the cost of emissions from fossil-fired power generators and thereby encourages fewer polluting power supply options to be adopted. The NOx portion of the proposed rulemaking includes provisions for the owners of alternative power generation resources to receive NOx allowances in proportion to the pollution prevention benefits the resources provide. These resources include wind, solar and energy efficiency projects. Because the NOx allowances for these resources are based on the output, on par with fossil generation, the proposed rulemaking gives no competitive advantage to one form of energy production over the other in the energy market. In this way, the proposed rulemaking increases the potential for the adoption of less polluting resources.

H. Sunset Review

The regulations will be reviewed in accordance with the sunset review schedule published by the Department to determine whether the regulations effectively fulfill the goals for which they were intended.

I. Regulatory Review

Under section 5(a) of the Regulatory Review Act (71 P. S. § 745.5(a)), on April 17, 2007, the Department submitted a copy of this proposed rulemaking and a copy of a Regulatory Analysis Form to the Independent Regulatory Review Commission (IRRC) and to the Chairpersons of the House and Senate Environmental Resources and Energy Committees. A copy of this material is available to the public upon request.

Under section 5(g) of the Regulatory Review Act, IRRC may convey any comments, recommendations or objections to the proposed rulemaking within 30 days of the close of the public comment period. The comments, recommendations or objections must specify the regulatory review criteria which have not been met. The Regulatory Review Act specifies detailed procedures for review, prior to final publication of the rulemaking, by the Department, the General Assembly and the Governor of comments, recommendations or objections raised.

J. Public Comments

Written Comments—Interested persons are invited to submit comments, suggestions or objections regarding the proposed rulemaking to the Environmental Quality Board, P. O. Box 8477, Harrisburg, PA 17105-8477 (express mail: Rachel Carson State Office Building, 15th Floor, 400 Market Street, Harrisburg, PA 17101-2301). Comments submitted by facsimile will not be accepted. Comments, suggestions or objections must be received by the Board by July 2, 2007. Interested persons may also

submit a summary of their comments to the Board. The summary may not exceed one page in length and must also be received by July 2, 2007. The one-page summary will be provided to each member of the Board in the agenda packet distributed prior to the meeting at which the final regulation will be considered.

Electronic Comments—Comments may be submitted electronically to the Board at RegComments@state.pa.us and must also be received by the Board by July 2, 2007. A subject heading of the proposal and a return name and address must be included in each transmission.

K. Public Hearings

May 29, 2007

The Board will hold three public hearings for the purpose of accepting comments on this proposed rule-making. The hearings will be held as follows:

Department of Environmental

1 p.m.	Southwest Regional Office Waterfront A and B Conference Room 400 Waterfront Drive Pittsburgh, PA 15222
May 30, 2007 1 p.m.	Department of Environmental Protection Southcentral Regional Office Susquehanna A Conference Room 909 Elmerton Avenue Harrisburg, PA 17110
May 31, 2007 1 p.m.	Department of Environmental Protection Southeast Regional Office Delaware River Conference Room 2 East Main Street Norristown, PA 19401

Persons wishing to present testimony at a hearing are requested to contact the Environmental Quality Board, P. O. Box 8477, Harrisburg, PA 17105-8477, (717) 787-4526 at least 1 week in advance of the hearing to reserve a time to present testimony. Oral testimony is limited to 10 minutes for each witness. Witnesses are requested to submit three written copies of their oral testimony to the hearing chairperson at the hearing. Organizations are limited to designating one witness to present testimony on their behalf at each hearing.

Persons in need of accommodations as provided for in the Americans With Disabilities Act of 1990 should contact the Board at (717) 787-4526 or through the Pennsylvania AT&T Relay Service at (800) 654-5984 (TDD) to discuss how the Department may accommodate their needs.

> KATHLEEN A. MCGINTY, Chairperson

Fiscal Note: 7-411. (1) Clean Air Fund;

		Major Emissions Facilities
(2)	Implementing Year 2006-07 is	\$0
(3)	1st Succeeding Year 2007-08 is 2nd Succeeding Year 2008-09 is 3rd Succeeding Year 2009-10 is	\$0 \$0 \$500,000
	4th Succeeding Year 2010-11 is 5th Succeeding Year 2011-12 is	\$500,000 \$500,000

	Major Emissions Facilities
(4) 2005-06 Program—	\$24,290,000
2004-05 Program—	\$24,533,000
2003-04 Program—	\$26,960,000

(8) recommends adoption.

Annex A

TITLE 25. ENVIRONMENTAL PROTECTION PART I. DEPARTMENT OF ENVIRONMENTAL PROTECTION

Subpart C. PROTECTION OF NATURAL RESOURCES

ARTICLE III. AIR RESOURCES CHAPTER 121. GENERAL PROVISIONS

§ 121.1. Definitions.

The definitions in section 3 of the act (35 P. S. \S 4003) apply to this article. In addition, the following words and terms, when used in this article, have the following meanings, unless the context clearly indicates otherwise:

Vintage or vintage year—The calendar year assigned to an allowance by the issuing authority that designates the first year in which it is valid for use in meeting an emission limit.

CHAPTER 129. STANDARDS FOR SOURCES ADDITIONAL NOx REQUIREMENTS

§ 129.204. Emission accountability.

* * * * *

(b) The owner or operator shall determine actual emissions in accordance with one of the following:

* * * * *

(2) If the owner or operator of the unit is not required to monitor NOx emissions with a CEMS, one of the following shall be used to determine actual emissions of NOx:

* * * * *

- (iv) An alternate calculation and recordkeeping procedure based upon emissions testing and correlations with operating parameters. The operator of the unit shall demonstrate that the alternate procedure does not underestimate actual emissions throughout the allowable range of operating conditions. In regard to obtaining the Department's approval for an alternate calculation method and recordkeeping procedure for actual emissions, the owner or operator may request an adjustment to the allowable emissions calculations set forth in §§ 129.201—129.203. An allowable emission adjustment may not overestimate a unit's allowable emissions and must be based upon the parameters and procedures proposed in the alternate calculation method for actual emissions. The alternate calculation and recordkeeping procedures must be approved by the Department, in writing, prior to implementation.
- (c) The owner or operator of a unit subject to this section shall surrender to the Department one **CAIR** NOx **Ozone Season** allowance, as defined in § **[145.2]145.202** (relating to definitions), for each ton of

NOx by which the combined actual emissions exceed the allowable emissions of the units subject to this section at a facility from May 1 through September 30. The surrendered NOx allowances shall be of current year vintage. For the purpose of determining the amount of allowances to surrender, any remaining fraction of a ton equal to or greater than 0.50 ton is deemed to equal 1 ton and any fraction of a ton less than 0.50 ton is deemed to equal zero tons.

CHAPTER 145. INTERSTATE POLLUTION TRANSPORT REDUCTION

Subchapter A. NOx BUDGET TRADING PROGRAM **GENERAL PROVISIONS**

(*Editor's Note*: The following section is new. It has been printed in regular type to enhance readability.)

§ 145.8. Transition to CAIR NOx trading programs.

- (a) The final year for NOx allowance allocations to be made by the Department under §§ 145.41 and 145.42 (relating to timing requirements for NOx allowance allocations; and NOx allowance allocations) will be 2008. Allocations in 2009 will be made in accordance with the Federal CAIR Ozone Season Trading Program, 40 CFR Part 97 (relating to Federal NOx Budget Trading Program and CAIR NOx and ${\rm SO_2}$ Trading Programs). CAIR NOx Ozone Season allowance allocations for the control period starting May 1, 2010, and for each control period thereafter, will be distributed in accordance with Subchapter D (relating to CAIR NOx and SO₂ trading programs).
- (b) The emission limitations and monitoring requirements established in Subchapter A are replaced by the requirements in Subchapter D pertaining to the CAIR NOx Ozone Season Trading Program beginning with the May 1, 2010, control period. If the owner or operator of a NOx budget unit or CAIR NOx Ozone Season unit, as defined in § 145.202 (relating to definitions), has failed to demonstrate compliance with § 145.54 (relating to compliance), the provisions in 40 CFR 96.354 (relating to compliance with CAIR NOx emissions limitation) shall be used to withhold CAIR NOx Ozone Season allowances in calendar year 2010 and beyond. If no CAIR NOx Ozone Season allowances are provided to the unit under § 145.221 (relating to timing requirements for CAIR NOx Ozone Season allowance allocations), the owner or operator of the unit shall acquire and retire a number of CAIR NOx Ozone Season allowances as specified in 40 CFR 96.354.

INTERSTATE POLLUTION TRANSPORT REDUCTION REQUIREMENTS

(Editor's Note: The following section is new. It has been printed in regular type to enhance readability.)

§ 145.101. Transition requirements for nonelectric generating units.

- (a) Beginning May 1, 2009, the applicability requirements in § 145.4(a)(2) (relating to applicability) will no longer apply to nonelectric generating units.
- (b) Beginning May 1, 2009, nonelectric generating units will be subject to one of the following:
- (1) Ozone Season NOx permit limit. The Department will establish an Ozone Season NOx permit limit effective May 1, 2009, equal to the most recent Ozone Season NOx allowance allocation for each nonelectric generating unit

that meets the applicability requirements of a NOx budget unit under § 145.4(a)(2) before May 1, 2009.

- (2) NOx allowance allocation. If the Department approves a plan approval application by May 1, 2008, for a nonelectric generating unit to be subject to CAIR NOx Ozone Season requirements under §§ 145.221—145.223 (relating to timing requirements for CAIR NOx Ozone Season allowance allocations; CAIR NOx Ozone Season allowance allocations; and supplemental monitoring, recordkeeping and reporting requirements for gross electrical output and useful thermal energy for units subject to 40 CFR 96.370—96.375), the Ozone Season NOx permit limit described in paragraph (1) will not apply to the nonelectric generating unit. The unit will receive CAIR NOx Ozone Season allowances for the duration of the CAIR NOx Ozone Season Trading Program or for the life of the unit, whichever is shorter, under the allocation cycle described in § 145.221. The amount of CAIR NOx Ozone Season allowances allocated to a nonelectric generating unit under this paragraph will equal the unit's 2008 NOx allowance allocation under Subchapter A (relating to NOx Budget Trading Program). The Department will amend the unit's permit to subject the unit to §§ 145.221—145.223 for the duration of the CAIR NOx Ozone Season Trading Program.
- (c) A nonelectric generating unit may meet the limit in subsection (a) or (b) by retiring CAIR NOx Ozone Season allowances.
- (d) A nonelectric generating unit may opt-in to the CAIR NOx Ozone Season program in accordance with 40 CFR Part 96, Subpart IIII (relating to CAIR NOx Ozone Season opt-in units).
- (e) A nonelectric generating unit shall comply with the 40 CFR Part 75 (relating to continuous emission monitoring) monitoring requirements specified under 40 CFR Part 96, Subpart HHHH (relating to monitoring and reporting) to demonstrate compliance with this section. Alternatively, if approved by the Department in writing, a nonelectric generating unit may meet the monitoring requirements of this section by complying with the most recent version of the Department's continuous emissions monitoring system program manual.

Subchapter B. EMISSIONS OF NOx FROM STATIONARY INTERNAL COMBUSTION ENGINES

§ 145.113. Standard requirements.

(d) The owner or operator of a unit subject to this section shall surrender to the Department one CAIR NOx Ozone Season allowance, as defined in § **[145.2] 145.202** (relating to definitions), for each ton of NOx by which the combined actual emissions exceed the allowable emissions of the units subject to this section at a facility from May 1 through September 30. The surrendered CAIR NOx Ozone Season allowances shall be of current year vintage. For the purposes of determining the amount of allowances to surrender, any remaining fraction of a ton equal to or greater than 0.50 ton is deemed to equal 1 ton and any fraction of a ton less than 0.50 ton is deemed to equal zero tons.

Subchapter C. EMISSIONS OF NOx FROM **CEMENT MANUFACTURING**

§ 145.143. Standard requirements.

(d) The owner or operator of a Portland cement kiln subject to this section shall surrender to the Department one CAIR NOx Ozone Season allowance, as defined in § [145.2]145.202 (relating to definitions), for each ton of NOx by which the combined actual emissions exceed the allowable emissions of the Portland cement kilns subject to this section at a facility from May 1 through September 30. The surrendered CAIR NOx Ozone Season allowances shall be of current year vintage. For the purposes of determining the amount of allowances to surrender, any remaining fraction of a ton equal to or greater than 0.50 ton is deemed to equal 1 ton and any fraction of a ton less than 0.50 ton is deemed to equal zero tons.

* * * * *

(*Editor's Note*: The following subchapter is new. It has been printed in regular type to enhance readability.)

Subchapter D. CAIR NOx AND SO₂ TRADING PROGRAMS

GENERAL PROVISIONS

145.201. Purpose.145.202. Definitions.145.203. Applicability.

145.204. Incorporation of Federal regulations by reference.

ADDITIONAL REQUIREMENTS FOR CHAPTER 127 EMISSION REDUCTION CREDIT PROVISIONS

145.205. Emission reduction credit provisions.

ADDITIONAL REQUIREMENTS FOR CAIR NOx ANNUAL TRADING PROGRAM

145.211. Timing requirements for CAIR NOx allowance allocations.

145.212. CAIR NOx allowance allocations.

145.213. Supplemental monitoring, recordkeeping and reporting requirements for gross electrical output and useful thermal energy for units subject to 40 CFR 96.170—96.175.

ADDITIONAL REQUIREMENTS FOR CAIR NOX OZONE SEASON TRADING PROGRAM

145.221. Timing requirements for CAIR NOx Ozone Season allowance allocations.

145.222. CAIR NOx Ozone Season allowance allocations.

145.223. Supplemental monitoring, recordkeeping and reporting requirements for gross electrical output and useful thermal energy for units subject to 40 CFR 96.370—96.375.

GENERAL PROVISIONS

§ 145.201. Purpose.

This subchapter incorporates by reference the CAIR NOx Annual Trading Program and CAIR NOx Ozone Season Trading Program as a means of mitigating the interstate transport of fine particulates and nitrogen oxides, and the CAIR $\rm SO_2$ Trading Program as a means of mitigating the interstate transport of fine particulates and sulfur dioxide. This subchapter also establishes general provisions and the applicability, allowance and supplemental monitoring, recordkeeping and reporting provisions.

§ 145.202. Definitions.

The following words and terms, when used in this subchapter, have the following meanings, unless the context clearly indicates otherwise:

Acid Rain Program—A multistate sulfur dioxide and nitrogen oxides air pollution control and emission reduction program established by the Administrator under Title IV of the Clean Air Act (42 U.S.C.A. §§ 7651—76510), regarding acid deposition control, and 40 CFR Parts 72—78.

Administrator—The Administrator of the EPA or the Administrator's authorized representative.

Bottoming-cycle cogeneration unit—A cogeneration unit in which the energy input to the unit is first used to produce useful thermal energy and at least some of the reject heat from the useful thermal energy application or process is then used for electricity production.

CAIR NOx allowance—A limited authorization issued by a permitting authority or the Administrator under provisions of a state implementation plan that are approved under 40 CFR 51.123(o)(1), (2) or (p) (relating to findings and requirements for submission of State implementation plan revisions relating to emissions of oxides of nitrogen pursuant to the Clean Air Interstate Rule), or under 40 CFR Part 97, Subpart EE (relating to CAIR NOx allowance allocations) or 40 CFR 97.188 (relating to CAIR NOx allowance allocations to CAIR NOx opt-in units), to emit 1 ton of nitrogen oxides during a control period of the specified calendar year for which the authorization is allocated or of any calendar year thereafter under the CAIR NOx Program. An authorization to emit nitrogen oxides that is not issued under provisions of a state implementation plan that are approved under 40 CFR 51.123(o)(1), (2) or (p) or 40 CFR Part 97, Subpart EE or 40 CFR 97.188 will not be a CAIR NOx allowance.

CAIR NOx Annual Trading Program—A multistate nitrogen oxides air pollution control and emission reduction program approved and administered by the Administrator in accordance with 40 CFR Part 96, Subparts AA—II and 40 CFR 51.123 or established by the Administrator in accordance with 40 CFR Part 97, Subparts AA—II and 40 CFR 51.123(p) and 52.35 (relating to what are the requirements of the Federal Implementation Plans (FIPs) for the Clean Air Interstate Rule relating to emissions of nitrogen oxides?), as a means of mitigating interstate transport of fine particulates and nitrogen oxides. The term refers to the program as adopted in §§ 145.201—145.205, 145.211—145.213 and 145.221—145.223.

CAIR NOx Ozone Season allowance—A limited authorization issued by a permitting authority or the Administrator under provisions of a state implementation plan that are approved under 40 CFR 51.123(aa)(1) or (2) (and (bb)(1)), (bb)(2), (dd) or (ee), or under 40 CFR Part 97, Subpart EEEE (relating to CAIR NOx Ozone Season allowance allocations) or 40 CFR 97.388 (relating to CAIR NOx Ozone Season allowance allocations to CAIR NOx Ozone Season opt-in units), to emit 1 ton of nitrogen oxides during a control period of the specified calendar year for which the authorization is allocated or of any calendar year thereafter under the CAIR NOx Ozone Season Trading Program or a limited authorization issued by a permitting authority for a control period during 2003 through 2008 under the NOx Budget Trading Program in accordance with 40 CFR 51.121(p) (relating to findings and requirements for submission of State implementation plan revisions relating to emissions of oxides of nitrogen) to emit 1 ton of nitrogen oxides during a control period, provided that the provision in 40 CFR 51.121(b)(2)(ii)(E) may not be used in applying this definition and the limited authorization may not have been used to meet the allowance-holding requirement under the NOx Budget Trading Program. An authorization to emit nitrogen oxides that is not issued under provisions of a state implementation plan approved under 40 CFR 51.123(aa)(1) or (2) (and (bb)(1)), (bb)(2), (dd) or (ee) or 40 CFR Part 97, Subpart EEEE or 40 CFR 97.388 or under the NOx Budget Trading Program as described in the prior sentence will not be a CAIR NOx Ozone Season CAIR NOx Ozone Season Trading Program—A multistate nitrogen oxides air pollution control and emission reduction program approved and administered by the Administrator in accordance with 40 CFR Part 96, Subparts AAAA—IIII and 40 CFR 51.123 or established by the Administrator in accordance with 40 CFR Part 97, Subparts AAAA—IIII and 40 CFR 51.123(ee) and 52.35 as a means of mitigating interstate transport of ozone and nitrogen oxides. The term refers to the program as adopted in §§ 145.201—145.204 (relating to general provisions) and §§ 145.221—145.223 (relating to additional requirements for CAIR NOx Ozone Season trading program).

CAIR NOx Ozone Season unit—A unit that is subject to the CAIR NOx Ozone Season Trading Program under 40 CFR 96.304 (relating to applicability) and, except for purposes of 40 CFR 96.305 (relating to retired unit exemption) and 40 CFR Part 96, Subpart EEEE, a CAIR NOx Ozone Season opt-in unit under 40 CFR Part 96, Subpart IIII.

CAIR NOx unit—A unit that is subject to the CAIR NOx Annual Trading Program under 40 CFR 96.104 (relating to applicability) and, except for purposes of 40 CFR 96.105 (relating to retired unit exemption) and 40 CFR Part 96, Subpart EE (relating to CAIR NOx allowance allocations), a CAIR NOx opt-in unit under 40 CFR Part 96, Subpart II (relating to CAIR NOx opt-in units).

 $\it CAIR~SO_2$ Trading Program—A multistate sulfur dioxide air pollution control and emission reduction program approved and administered by the Administrator in accordance with 40 CFR Part 96, Subparts AAA—III and 40 CFR 51.124 (relating to findings and requirements for submission of State implementation plan revisions relating to emissions of sulfur dioxide under the Clean Air Interstate Rule) or established by the Administrator in accordance with 40 CFR Part 97, Subparts AAA—III and 40 CFR 51.124(r) and 52.36 (relating to what are the requirements of the Clean Air Interstate Rule Federal Implementation Plans relating to emissions of sulfur dioxide?), as a means of mitigating interstate transport of fine particulates and sulfur dioxide.

CAIR SO_2 unit—A unit that is subject to the CAIR SO_2 Trading Program under 40 CFR 96.204 (relating to applicability) and, except for purposes of 40 CFR 96.205 (relating to retired unit exemption), a CAIR SO_2 opt-in unit under 40 CFR Part 96, Subpart III (relating to CAIR SO_2 opt-in units).

Cogeneration unit—A stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine meeting both of the following requirements:

- (i) Having equipment used to produce electricity and useful thermal energy for industrial, commercial, heating or cooling purposes through the sequential use of energy.
- (ii) Producing during the 12-month period starting on the date the unit first produces electricity and during any calendar year after the calendar year in which the unit first produces electricity, the following:
- (A) For a topping-cycle cogeneration unit, both of the following:
- (I) Useful thermal energy not less than 5% of total energy output.
- (II) Useful power that, when added to one-half of useful thermal energy produced, is not less than 42.5% of total energy input, if useful thermal energy produced is 15% or more of total energy output, or not less than 45%

- of total energy input, if useful thermal energy produced is less than 15% of total energy output.
- (B) For a bottoming-cycle cogeneration unit, useful power not less than 45% of total energy input.

Combustion turbine—

- (i) An enclosed device comprising 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.
- (ii) If the enclosed device is combined cycle, the term includes any associated duct burner, heat recovery steam generator, and steam turbine.

Commence commercial operation—

- (i) For purposes of the CAIR NOx Annual Trading Program, the term "commence commercial operation" means, with regard to a unit, the following:
- (A) 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 40 CFR 96.105 and 40 CFR 96.184(h) (relating to opt-in process).
- (I) For a unit that is a CAIR NOx unit under 40 CFR 96.104 on the later of November 15, 1990, or the date the unit commences commercial operation as defined in this subparagraph and that subsequently undergoes a physical change (other than replacement of the unit by a unit at the same source), the 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 CAIR NOx unit under 40 CFR 96.104 on the later of November 15, 1990, or the date the unit commences commercial operation as defined in this subparagraph and that is subsequently replaced by a unit at the same source (in other words, repowered), the 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 this clause or clause (B), as appropriate.
- (B) Notwithstanding clause (i)(A) and except as provided in 40 CFR 96.105, for a unit that is not a CAIR NOx unit under 40 CFR 96.104 on the later of November 15, 1990, or the date the unit commences commercial operation as defined in clause (i)(A), the unit's date for commencement of commercial operation shall be the date on which the unit becomes a CAIR NOx unit under 40 CFR 96.104.
- (I) For a unit with a date for commencement of commercial operation as defined in this subparagraph and that subsequently undergoes a physical change (other than replacement of the unit by a unit at the same source), the 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 this subparagraph and that is subsequently replaced by a unit at the same source (in other words, repowered), the 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 this clause or clause (A), as appropriate.

- (ii) For purposes of the CAIR NOx Ozone Season Trading Program, the term "commence commercial operation" means, with regard to a unit, the following:
- (A) 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 40 CFR 96.305 and 96.384(h) (relating to opt-in process).
- (I) For a unit that is a CAIR NOx Ozone Season unit under 40 CFR 97.304 (relating to applicability) on the later of November 15, 1990, or the date the unit commences commercial operation as defined in this subparagraph and that subsequently undergoes a physical change (other than replacement of the unit by a unit at the same source), the 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 CAIR NOx Ozone Season unit under 40 CFR 96.304 on the later of November 15, 1990, or the date the unit commences commercial operation as defined in this subparagraph and that is subsequently replaced by a unit at the same source (in other words, repowered), the 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 this clause or clause (B), as appropriate.
- (B) Notwithstanding clause (A) and except as provided in 40 CFR 96.305, for a unit that is not a CAIR NOx Ozone Season unit under 40 CFR 96.304 on the later of November 15, 1990, or the date the unit commences commercial operation as defined in clause (A), the unit's date for commencement of commercial operation shall be the date on which the unit becomes a CAIR NOx Ozone Season unit under 40 CFR 96.304.
- (I) For a unit with a date for commencement of commercial operation as defined in this subparagraph and that subsequently undergoes a physical change (other than replacement of the unit by a unit at the same source), the 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 this subparagraph and that is subsequently replaced by a unit at the same source (in other words, repowered), the 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 this clause or clause (A), as appropriate.

Control period—For purposes of the:

- (i) CAIR NOx Annual Trading Program, the period beginning January 1 of a calendar year, except as provided in 40 CFR 96.106(c)(2) (relating to standard requirements), and ending on December 31 of the same year, inclusive.
- (ii) CAIR NOx Ozone Season Trading Program, the period beginning May 1 of a calendar year, except as provided in 40 CFR 96.306(c)(2) (relating to standard requirements), and ending on September 30 of the same year, inclusive.

Demand side management—The management of customer consumption of electricity or the demand for electricity through the implementation of any of the following:

- (i) Energy efficiency technologies, management practices or other strategies in residential, commercial, institutional or government customers that reduce electricity consumption by those customers.
- (ii) Load management or demand response technologies, management practices or other strategies in residential, commercial, industrial, institutional and government customers that shift electric load from periods of higher demand to periods of lower demand.
- (iii) Industrial by-product technologies consisting of the use of a by-product from an industrial process, including the reuse of energy from exhaust gases or other manufacturing by-products that are used in the direct production of electricity at the facility of a customer.

EIA—The Energy Information Administration of the United States Department of Energy or its successor.

Gross electrical output—The total electrical output from an electric generating unit before making any deductions for energy output used in any way related to the production of energy. For an electric generating unit generating only electricity, the gross electrical output is the output from the turbine/generator set.

MWh-Megawatt-hour—One million watt-hours.

Operator—

- (i) For purposes of the CAIR NOx Annual Trading Program, any person who operates, controls or supervises a CAIR NOx unit, CAIR NOx source, CAIR NOx Ozone Season unit or CAIR NOx Ozone Season source.
- (ii) The term includes a holding company, utility system or plant manager of the unit or source.

Owner—Any of the following persons:

- (i) With regard to a CAIR NOx source, CAIR NOx unit at a source, CAIR NOx Ozone Season source or CAIR NOx Ozone Season unit at a source, respectively, any of the following persons:
- (A) A holder of any portion of the legal or equitable title in a CAIR NOx unit at the source, the CAIR NOx unit, the CAIR NOx Ozone Season unit at the source or the CAIR NOx Ozone Season unit.
- (B) A holder of a leasehold interest in a CAIR NOx unit at the source, the CAIR NOx unit, a CAIR NOx Ozone Season unit at the source or the CAIR NOx Ozone Season unit.
- (C) A purchaser of power from a CAIR NOx unit at the source, the CAIR NOx unit, a CAIR NOx Ozone Season unit at the source or the CAIR NOx Ozone Season source under a life-of-the-unit, firm power contractual arrangement; provided that, unless expressly provided for in a leasehold agreement, the term "owner" does not include a passive lessor, or a person who has an equitable interest through a passive lessor, whose rental payments are not based (either directly or indirectly) on the revenues or income from the CAIR NOx unit or CAIR NOx Ozone Season unit.
- (ii) With regard to any general account, a person who has an ownership interest with respect to the CAIR NOx allowances or CAIR NOx Ozone Season allowances held in the general account and who is subject to the binding agreement for the CAIR authorized account representative to represent the person's ownership interest with respect to CAIR NOx allowances or CAIR NOx Ozone Season allowances.

Ozone Season—The period beginning May 1 of a calendar year and ending on September 30 of the same year, inclusive.

Pennsylvania Alternative Energy Portfolio Standard—An applicable standard promulgated under the Alternative Energy Portfolio Standards Act (73 P. S. §§ 1648.1—1648.8).

Renewable energy—Energy generated:

- (i) By one or more of the following fuels, energy resources or technologies, and that does not emit NOx or SO₂:
 - (A) Solar photovoltaic or solar thermal energy.
 - (B) Wind energy.
- (C) Fuel cells that do not employ a fuel processor that emits NOx.
 - (D) Ocean thermal, wave or tidal energy.
 - (E) Low-impact hydro energy.
 - (F) Geothermal energy.
- (ii) From nuclear fuel, biomass, landfill gas, fuel cells that employ a fuel processor that emits NOx, or hydro using pumped storage is not renewable energy.

Renewable energy certificate—The tradable alternative energy credit instrument used to establish, verify and monitor compliance with the Pennsylvania Alternative Energy Portfolio Standard. A unit of credit shall equal 1 megawatt-hour of electricity from an alternative energy source.

Tier I renewable energy qualifying source—A renewable energy measure that generates renewable energy certificates under the applicable Pennsylvania Alternative Energy Portfolio Standard.

Tier II demand side management energy efficiency qualifying source—A demand side management energy efficiency measure that has no associated NOx emissions and that generates certified alternative energy credit under the applicable Pennsylvania Alternative Energy Portfolio Standard.

Topping-cycle cogeneration unit—A cogeneration unit in which the energy input to the unit is first used to produce useful power, including electricity, and at least some of the reject heat from the electricity production is then used to provide useful thermal energy.

Unit—A stationary, fossil-fuel-fired boiler, combustion turbine or other stationary, fossil-fuel-fired combustion device.

Useful power—With regard to a cogeneration unit, electricity or mechanical energy made available for use, excluding any such energy used in the power production process (which process includes any onsite processing or treatment of fuel combusted at the unit and any onsite emission controls).

Useful thermal energy—With regard to a cogeneration unit, thermal energy that is any of the following:

- (i) Made available to an industrial or commercial process (not a power production process), excluding heat contained in condensate return or makeup water.
- (ii) Used in a heating application (for instance, space heating or domestic hot water heating).
- (iii) Used in a space cooling application (in other words, thermal energy used by an absorption chiller).

§ 145.203. Applicability.

This subchapter applies to CAIR NOx units, CAIR NOx Ozone Season units and CAIR SO₂ units. This subchapter also applies to tier I renewable energy qualifying sources and tier II demand side management energy efficiency qualifying sources.

§ 145.204. Incorporation of Federal regulations by reference.

- (a) Except as otherwise specified in this subchapter, the provisions of the CAIR NOx Annual Trading Program, found in 40 CFR Part 96 (relating to NOx budget trading program and CAIR NOx and SO_2 trading programs for state implementation plans), including all appendices, future amendments and supplements thereto, are incorporated by reference.
- (b) Except as otherwise specified in this subchapter, the provisions of the CAIR $\rm SO_2$ Trading Program, found in 40 CFR Part 96, including all appendices, future amendments and supplements thereto, are incorporated by reference.
- (c) Except as otherwise specified in this subchapter, the provisions of the CAIR NOx Ozone Season Trading Program, found in 40 CFR Part 96, including all appendices, future amendments and supplements thereto, are incorporated by reference.
- (d) In the event of a conflict between Federal regulatory provisions incorporated by reference in this subchapter and Pennsylvania regulatory provisions, the provision expressly set out in this subchapter shall be followed unless the Federal provision is more stringent. Federal regulations that are cited in this subchapter or that are cross-referenced in the Federal regulations incorporated by reference include any Pennsylvania modifications made to those Federal regulations.

ADDITIONAL REQUIREMENTS FOR CHAPTER 127 EMISSION REDUCTION CREDIT PROVISIONS

§ 145.205. Emission reduction credit provisions.

A permit or plan approval will not be issued to the owner or operator of a unit not subject to this subchapter for which emission reduction credits (ERCs) or creditable emission reductions were considered in an applicability determination under Chapter 127, Subchapter E (relating to new source review) or for which any emission trade under Chapter 127 (relating to construction, modification, reactivation and operation of sources) is authorized, if the ERCs or creditable emission reductions were, or will be, generated by a unit subject to this subchapter, unless the following conditions are satisfied:

- (1) Prior to issuing the permit or plan approval, the Department permanently reduces the Commonwealth's applicable CAIR NOx trading budget beginning six control periods after the date the unit will be authorized in the permit or plan approval to commence operation or increase emissions. The Department will reduce the trading budget for each control period by an amount of allowances equal to the amount that would be required to be surrendered under this subchapter if the allowable emissions stemming from the ERCs or creditable emission reductions were emitted.
- (2) The permit or plan approval contains a condition prohibiting the owner or the operator of the unit from commencing operation or increasing emissions until the owner or the operator of the unit that generated the ERCs or creditable emission reductions surrenders to the Department an amount of allowances equal to the

amount that would be required to be surrendered under this subchapter if the allowable emissions stemming from the ERCs or creditable emission reductions were emitted for five consecutive control periods beginning with that date. The allowances surrendered must be of present or past vintage years.

ADDITIONAL REQUIREMENTS FOR CAIR NOX ANNUAL TRADING PROGRAM

§ 145.211. Timing requirements for CAIR NOx allowance allocations.

- (a) *Provisions not incorporated by reference.* The requirements of 40 CFR 96.141 (relating to timing requirements for CAIR NOx allowance allocations) are not incorporated by reference. Instead of 40 CFR 96.141, the requirements set forth in this section apply.
- (b) Regular allocations. The Department will make regular allocations of CAIR NOx allowances as follows:
- (1) Except for allocations made under subsection (c), by April 30, 2008, the Department will submit to the Administrator the CAIR NOx allowance allocations made in accordance with § 145.212 (relating to CAIR NOx allowance allocations) for the control periods in 2010 and 2011 in a format prescribed by the Administrator.
- (2) Except for allocations made under subsection (c), by April 30, 2009, the Department will submit to the Administrator the CAIR NOx allowance allocations made in accordance with § 145.212 for the control periods in 2012 and 2013 in a format prescribed by the Administrator. By April 30 every 2 years after 2009, the Department will submit the allocations for the next two consecutive control periods.
- (c) New CAIR NOx unit allowance allocations. By April 30, 2011, and by April 30 every year thereafter, the Department will submit to the Administrator the CAIR NOx allowance allocations made in accordance with § 145.212(e). The Department will base the allocations on actual emissions in the calendar year preceding the year of the submission.
- (d) *Publication*. The Department will publish notice of the proposed CAIR NOx allowance allocations in the *Pennsylvania Bulletin* as follows, and will publish the final allocations after a 15-day public comment period:
- (i) For allocations made under subsection (b)(1), by April 1, 2008.
- (ii) For allocations made under subsection (b)(2), by April 1, 2009, and by April 1 every 2 years thereafter.
- (iii) For allocations made under subsection (c), by March 1 each year, beginning in 2011.

§ 145.212. CAIR NOx allowance allocations.

- (a) Provisions not incorporated by reference. The requirements of 40 CFR 96.142 (relating to CAIR NOx allowance allocations) are not incorporated by reference. Instead of 40 CFR 96.142, the requirements set forth in this section apply.
- (b) Baseline heat input. Except for new unit allocations made under subsection (e) based on a previous year's emissions, and except for allocations made to subsection (f)(1) qualifying resources, the control period baseline heat input (in mmBtu) used with respect to CAIR NOx allowance allocations under subsection (c) for each CAIR NOx unit will be converted as follows:
- (1) A unit's control period heat input and a unit's status as coal-fired or oil-fired for a calendar year under this paragraph will be determined in one of the following two ways:

- (i) In accordance with 40 CFR Part 75 (relating to continuous emission monitoring), to the extent that the unit was otherwise subject to 40 CFR Part 75 for the year.
- (ii) Based on the best available data reported to the Department for the unit, to the extent the unit was not otherwise subject to the requirements of 40 CFR Part 75 for the year.
- (2) Except as provided in subparagraphs (iv) and (v), a unit's converted control period heat input for a calendar year shall be determined as follows:
- (i) The control period gross electrical output of the generators served by the unit multiplied by 7,900 Btu/kWh if the unit is coal-fired for the year, and divided by 1,000,000 Btu/mmBtu.
- (ii) The control period gross electrical output of the generators served by the unit multiplied by 6,675 Btu/kWh if the unit is not coal-fired for the year, and divided by 1,000,000 Btu/mmBtu.
- (iii) If a generator is served by two or more units, the gross electrical output of the generator will be attributed to each unit in proportion to the share of the total control period heat input from each of the units for the year.
- (iv) For a unit that is a boiler and has equipment used to produce electricity and useful thermal energy for industrial, commercial, heating or cooling purposes through the sequential use of energy, the total heat energy (in Btus) of the steam produced by the boiler during the annual control period, divided by 0.8 and by 1,000,000 Btu/mmBtu.
- (v) For a unit that is a combustion turbine and has equipment used to produce electricity and useful thermal energy for industrial, commercial, heating or cooling purposes through the sequential use of energy, the annual control period gross electrical output of the enclosed device comprising the compressor, combustor and turbine multiplied by 3,413 Btu/KWh, plus the total heat energy (in Btu) of the steam produced by any associated heat recovery steam generator during the annual control period divided by 0.8, and with the sum divided by 1,000,000 Btu/mmBtu.
- (vi) Calculations will be based on the best output data available on or before January 31 of the year the allocations are published. If unit level electrical or steam output data are not available from EIA, or submitted by this date by the owner or operator of the CAIR NOx unit, then heat input data for the period multiplied by 0.25 and converted to MWh will be used to determine total output.
- (vii) If the total allowances calculated for all eligible recipients exceeds the CAIR NOx annual budget, the Department will adjust allocations on a prorata basis to meet the budget.
- (c) Existing unit, new unit and subsection (f)(1) qualifying resource allocation baseline. For each control period beginning with January 1, 2010, and each year thereafter, the Department will allocate to qualifying resources and CAIR NOx units, including CAIR NOx units issued allowances under subsection (e), a total amount of CAIR NOx allowances equal to the number of CAIR NOx allowances remaining in the Commonwealth's trading budget under 40 CFR 96.140 (relating to state trading budgets) for those control periods using baseline heat input data as determined under subsection (b) from a baseline year that is 5 years before the control period.
- (d) Proration of allowance allocations. Except for allocations made under subsections (e) and (f)(2), the Depart-

- ment will allocate CAIR NOx allowances to each existing CAIR NOx unit and qualifying resource in an amount determined by multiplying the amount of CAIR NOx allowances allocated under subsection (c) or (f), as applicable, by the ratio of the baseline heat input of the existing CAIR NOx unit or qualifying resource to the amount of baseline heat input of existing CAIR NOx units and qualifying resources and rounding to the nearest whole allowance as appropriate. The Department will make CAIR NOx allowance allocations under this subsection after the Department makes CAIR NOx allowance allocations to units under subsection (e).
- (e) Allocations to new CAIR NOx units. By March 31, 2011, and March 31 each year thereafter, the Department will allocate CAIR NOx allowances under § 145.211(c) (relating to timing requirements for CAIR NOx allowance allocations) to CAIR NOx units equal to the previous year's emissions at each unit, unless the unit has been issued allowances of the previous year's vintage in a regular allocation under § 145.211(b). The Department will allocate CAIR NOx allowances under this subsection of a vintage year that is 5 years later than the year in which the emissions were generated. The number of CAIR NOx allowances allocated may not exceed the actual emission of the year preceding the year in which the Department makes the allocation. The allocation of these allowances to the new unit will not reduce the number of allowances the unit is entitled to receive under § 145.211(b).
- (f) Allocations to qualifying resources and units exempted by section 405(g)(6)(A) of the Clean Air Act. For each two control periods beginning with 2010 and thereafter, the Department will allocate CAIR NOx allowances to qualifying resources under paragraph (1) in this Commonwealth that are not also allocated CAIR NOx allowances under subsection (c) and to existing units under paragraph (2) that were exempted at any time under section 405(g)(6)(A) of the Clean Air Act (42 U.S.C.A. § 7651d(g)(6)(A)), regarding phase II sulfur dioxide requirements, and that commenced operation prior to January 1, 2000, but did not receive an allocation of SO_2 allowances under the EPA's Acid Rain program, as follows:
- (1) The Department will allocate CAIR NOx allowances to a tier I renewable energy qualifying resource or tier II demand side management energy efficiency qualifying resource in accordance with subsections (c) and (d) upon receipt by the Department of an application, in writing, meeting the requirements of this paragraph. The number of allowances allocated to the qualifying resource will be determined by converting the certified quantity of electric energy production, useful thermal energy, and energy equivalent value of the measures approved under the Pennsylvania Alternative Energy Portfolio Standard to equivalent thermal energy. To receive allowances under this subsection, the qualifying resource must have commenced operation after January 1, 2005, must be located in this Commonwealth and may not be a CAIR NOx unit. The following procedures apply:
- (i) The Department will transfer the allowances into an account designated by the owner or operator of the qualifying resource, or into an account designated by an aggregator approved by the Public Utility Commission or its designee.
- (ii) The applicant shall provide the Department with the corresponding renewable energy certificate serial numbers.

- (iii) At least one whole allowance must be generated per owner, operator or aggregator for an allowance to be issued.
- (2) The Department will allocate CAIR NOx allowances to the owner or operator of a CAIR SO₂ unit that commenced operation prior to January 1, 2000, that has not received an SO₂ allocation for that compliance period, as follows:
- (i) The owner or operator of a unit may apply, in writing, to the Department under this subsection to receive a cost-equivalent additional amount of CAIR NOx allowances that were needed during each CAIR NOx allowance allocation cycle to be allocated in the following allocation cycle.
- (ii) The cost-equivalent additional amount of CAIR NOx allowances an owner or operator may request under this paragraph is 1 CAIR NOx allowance for every 8 tons of SO_2 emitted from a qualifying unit during the control period.
- (iii) If the original CAIR NOx allowance allocation for the unit for the cycle exceeded its actual emissions of NOx for the cycle, the value of the excess CAIR NOx allowances will not be included in the amount of CAIR NOx allowances allocated.
- (iv) If the total number of NOx allowances requested by all qualified units under this paragraph exceeds 1.3% of the Pennsylvania annual CAIR NOx budget, units will receive a prorated allocation based upon the following equation:
- (A unit's requested cost-equivalent CAIR NOx allowance allocation—facility excess allowances for the control period) × (0.013 × number of CAIR NOx allowances in Pennsylvania CAIR NOx budget for the control period)
- Total number of CAIR NOx allowances requested from all units requesting allowances under this paragraph
- (v) Owners and operators of previously exempted units that opt in to or are opted in to the Acid Rain Program will also reduce the number of NOx allowances requested each year under this section by 1 NOx allowance for every 8 SO_2 allowances they are issued under the opt-in provisions of the Acid Rain Program.
- (3) The Department will review each CAIR NOx allowance allocation request under this subsection and will allocate CAIR NOx allowances for each control period under a request as follows:
- (i) The Department will accept an allowance allocation request only if the request meets, or is adjusted by the Department as necessary to meet, the requirements of this section.
- (ii) On or after January 1 of the year of allocation, the Department will determine the sum of the CAIR NOx allowances requested.
- (4) Up to 1.3% of the Commonwealth's annual NOx budget is available for allocation in each control period from 2010—2015 for the purpose of offsetting SO_2 emissions under paragraph (2). Beginning January 1, 2016, the units will no longer be allocated CAIR NOx allowances under paragraph (2).
- (5) Notwithstanding the provisions of paragraphs (2)—(4), the Department may extend, terminate or otherwise modify the allocation of NOx allowances made available under this subsection for units exempted under section 405(g)(6)(A) of the Clean Air Act after providing notice in the *Pennsylvania Bulletin* and at least a 30-day public comment period.

- (g) Errors in allocations discovered after allocations are made shall be corrected in a subsequent allocation cycle.
- § 145.213. Supplemental monitoring, recordkeeping and reporting requirements for gross electrical output and useful thermal energy for units subject to 40 CFR 96.170—96.175.
- (a) By January 1, 2008, or by the date of commencing commercial operation, whichever is later, the owner or operator of the CAIR NOx unit shall install, calibrate, maintain and operate a wattmeter, measure gross electrical output in megawatt-hours on a continuous basis and record the output of the wattmeter. If a generator is served by two or more units, the information to determine the heat input of each unit for that control period shall also be recorded, so as to allow each unit's share of the gross electrical output to be determined. If heat input data are used, the owner or operator shall comply with the applicable provisions of 40 CFR Part 75 (relating to continuous emission monitoring).
- (b) By September 1, 2008, for a CAIR NOx unit that is a cogeneration unit, and for a CAIR NOx unit with cogeneration capabilities, the owner or operator shall install, calibrate, maintain and operate meters for steam flow in lbs/hr, temperature in degrees Fahrenheit, and pressure in PSI, to measure and record the useful thermal energy that is produced, in mmBtu/hr, on a continuous basis. The owner or operator of a CAIR NOx unit that produces useful thermal energy but uses an energy transfer medium other than steam, such as hot water or glycol, shall install, calibrate, maintain and operate the necessary meters to measure and record the data necessary to express the useful thermal energy produced, in mmBtu/hr, on a continuous basis. If the unit ceases to produce useful thermal energy, the owner or operator may cease operation of the meters, but operation of the meters shall be resumed if the unit resumes production of useful thermal energy.
- (c) Beginning with 2008, the designated representative of the unit shall submit to the Department an annual report showing monthly gross electrical output and monthly useful thermal energy from the unit. The report is due by January 31 for the preceding calendar year.
- (d) The owner or operator of a CAIR NOx unit shall maintain onsite the monitoring plan detailing the monitoring system and maintenance of the monitoring system, including quality assurance activities. The owner or operator of a CAIR NOx unit shall retain the monitoring plan for at least 5 years from the date that it is replaced by a new or revised monitoring plan. The owner or operator of a CAIR NOx unit shall provide the Department with a written copy of the monitoring plan by January 1, 2008, and thereafter within 3 calendar months of making updates to the plan.
- (e) The owner or operator of a CAIR NOx unit shall retain records for at least 5 years from the date the record is created or the data collected as required by subsections (a) and (b), and the reports submitted to the Department and the EPA in accordance with subsections (c) and (d).

ADDITIONAL REQUIREMENTS FOR CAIR NOX OZONE SEASON TRADING PROGRAM

§ 145.221. Timing requirements for CAIR NOx Ozone Season allowance allocations.

(a) *Provisions not incorporated by reference.* The requirements of 40 CFR 96.341 (relating to timing requirements for CAIR NOx Ozone Season allowance allocations)

- are not incorporated by reference. Instead of 40 CFR 96.341, the requirements in this section apply.
- (b) Regular allocations. The Department will make regular allocations of CAIR NOx Ozone Season allowances as follows:
- (1) Except for allocations made under subsection (c), by April 30, 2008, the Department will submit to the Administrator the CAIR NOx Ozone Season allowance allocations made in accordance with § 145.222 (relating to CAIR NOx Ozone Season allowance allocations) for the control periods in 2010 and 2011 in a format prescribed by the Administrator.
- (2) Except for allocations made under subsection (c), by April 30, 2009, the Department will submit to the Administrator the CAIR NOx Ozone Season allowance allocations made in accordance with § 145.222 for the control periods in 2012 and 2013 in a format prescribed by the Administrator. By April 30 every 2 years after 2009, the Department will submit the allocations for the next two consecutive control periods.
- (c) New CAIR NOx unit allowance allocations. By April 30, 2011, and by April 30 every year thereafter, the Department will submit to the Administrator the CAIR NOx Ozone Season allowance allocations made in accordance with § 145.222(e). The Department will base the allocations on actual emissions in the Ozone Season in the calendar year preceding the year of the submission.
- (d) *Publication*. The Department will publish notice of the proposed CAIR NOx Ozone Season allowance allocations in the *Pennsylvania Bulletin* as follows and will publish the final allocations after a 15-day public comment period:
- (1) For allocations made under subsection (b)(1), by April 1, 2008.
- (2) For allocations made under subsection (b)(2), by April 1, 2009, and by April 1 every 2 years thereafter.
- (3) For allocations made under subsection (c), by March 1 each year, beginning in 2011.

§ 145.222. CAIR NOx Ozone Season allowance allocations.

- (a) Provisions not incorporated by reference. The requirements of 40 CFR 96.342 (relating to CAIR NOx Ozone Season allowance allocations) are not incorporated by reference. Instead of 40 CFR 96.342, the requirements in this section apply.
- (b) Baseline heat input. Except for new unit allocations made under subsection (e) based on a previous year's emissions, and except for allocations made to subsection (f) qualifying resources, the control period baseline heat input (in mmBtu) used with respect to CAIR NOx Ozone Season allowance allocations under subsection (c) for each CAIR NOx Ozone Season unit will be converted as follows:
- (1) A unit's control period heat input and a unit's status as coal-fired or oil-fired for the Ozone Season portion of a calendar year under this paragraph will be determined in one of the following two ways:
- (i) In accordance with 40 CFR Part 75 (relating to continuous emission monitoring), to the extent that the unit was otherwise subject to the requirements of 40 CFR Part 75 for the control period.
- (ii) Based on the best available data reported to the Department for the unit, to the extent the unit was not otherwise subject to the requirements of 40 CFR Part 75 for the year.

- (2) Except as provided in subparagraphs (iv) and (v), a unit's converted control period heat input for the ozone season portion of a calendar year shall be determined as follows:
- (i) The control period gross electrical output of the generators served by the unit multiplied by 7,900 Btu/kWh if the unit is coal-fired for the ozone season control period, and divided by 1,000,000 Btu/mmBtu.
- (ii) The control period gross electrical output of the generators served by the unit multiplied by 6,675~Btu/kWh if the unit is not coal-fired for the ozone season control period, and divided by 1,000,000~Btu/mmBtu.
- (iii) If a generator is served by 2 or more units, the gross electrical output of the generator will be attributed to each unit in proportion to the share of the total control period heat input from each of the units for the ozone season control period.
- (iv) For a unit that is a boiler and has equipment used to produce electricity and useful thermal energy for industrial, commercial, heating or cooling purposes through the sequential use of energy, the total heat energy (in Btus) of the steam produced by the boiler during the ozone season control period, divided by 0.8 and by 1,000,000 Btu/mmBtu.
- (v) For a unit that is a combustion turbine and has equipment used to produce electricity and useful thermal energy for industrial, commercial, heating or cooling purposes through the sequential use of energy, the control period gross electrical output of the enclosed device comprising the compressor, combustor and turbine multiplied by 3,413 Btu/kWh, plus the total heat energy (in Btu) of the steam produced by any associated heat recovery steam generator during the ozone season control period divided by 0.8, and with the sum divided by 1,000,000 Btu/mmBtu.
- (vi) Calculations will be based on the best output data available on or before January 31 of the year the allocations are published. If unit level electrical or steam output data are not available from EIA, or submitted by this date by the owner or operator of the CAIR NOx Ozone Season unit, then heat input data for the period multiplied by 0.25 and converted to MWh will be used to determine total output.
- (vii) If the total allowances calculated for all eligible recipients exceeds the CAIR NOx Ozone Season budget, the Department will adjust allocations on a prorata basis to meet the budget.
- (c) Existing unit, new unit and subsection (f)(1) qualifying resource allocation baseline. For each control period beginning with the 2010 control period and thereafter, the Department will allocate to qualifying resources and CAIR NOx Ozone Season units, including CAIR NOx Ozone Season units issued allowances under subsection (e), a total amount of CAIR NOx Ozone Season allowances equal to the number of CAIR NOx Ozone Season allowances remaining in the Commonwealth's trading budget under 40 CFR 96.140 (relating to state trading budgets) for those control periods using baseline heat input data as determined under subsection (b) from an ozone season control period in a baseline year that is 5 years before the control period.
- (d) Proration of allowance allocations. Except for allocations made under subsection (e), the Department will allocate CAIR NOx Ozone Season allowances to each existing CAIR NOx Ozone Season unit and qualifying resource in an amount determined by multiplying the

- amount of CAIR NOx Ozone Season allowances allocated under subsection (c) or (f), as applicable, by the ratio of the baseline heat input of the existing CAIR NOx Ozone Season unit or qualifying resource to the amount of baseline heat input of existing CAIR NOx Ozone Season units and qualifying resources and rounding to the nearest whole allowance as appropriate. The Department will make CAIR NOx Ozone Season allowance allocations under this subsection after the Department makes CAIR NOx Ozone Season allowance allocations to units under subsection (e).
- (e) Allocations to new CAIR NOx Ozone Season units. By March 31, 2011, and March 31 each year thereafter, the Department will allocate CAIR NOx Ozone Season allowances under § 145.221(c) (relating to timing requirements for CAIR NOx Ozone Season allowance allocations) to CAIR NOx Ozone Season units equal to the previous year's emissions at each unit, unless the unit has been issued allowances of the previous year's vintage in a regular allocation under § 145.221(b). The Department will allocate CAIR NOx allowances under this subsection of a vintage year that is 5 years later than the year in which the emissions were generated. The number of CAIR NOx Ozone Season allowances allocated shall not exceed the actual emission of the year preceding the year in which the Department makes the allocation. allocation of these allowances to the new unit will not reduce the number of allowances the unit is entitled to receive under § 145.221(b).
- (f) Allocations to qualifying resources. For each two control periods beginning with the 2010 control period, and thereafter, the Department will allocate CAIR NOx Ozone Season allowances to qualifying resources in this Commonwealth that are not also allocated CAIR NOx Ozone Season allowances under subsection (c), as follows:
- (1) The Department will allocate CAIR NOx Ozone Season allowances to a tier I renewable energy qualifying resource or tier II demand side management energy efficiency qualifying resource in accordance with subsections (c) and (d) upon receipt by the Department of an application, in writing, meeting the requirements of this paragraph. The number of allowances allocated to the qualifying resource will be determined by converting the certified quantity of electric energy production, useful thermal energy, and energy equivalent value of the measures approved under the Pennsylvania Alternative Energy Portfolio Standard to equivalent thermal energy. To receive allowances under this subsection, the qualifying resource must have commenced operation after January 1, 2005, must be located in this Commonwealth and may not be a CAIR NOx Ozone Season unit. The following procedures apply:
- (i) The Department will transfer the allowances into an account designated by the owner or operator of the qualifying resource, or into an account designated by an aggregator approved by the Public Utility Commission or its designee.
- (ii) The applicant shall provide the Department with the corresponding renewable energy certificate serial numbers.
- (iii) At least one whole allowance must be generated per owner, operator or aggregator for an allowance to be issued.
- (2) The Department will review each CAIR NOx Ozone Season allowance allocation request under this subsection and will allocate CAIR NOx Ozone Season allowances for each control period under a request as follows:

- (i) The Department will accept an allowance allocation request only if the request meets, or is adjusted by the Department as necessary to meet, the requirements of this section.
- (ii) On or after January 1 of the year of allocation, the Department will determine the sum of the CAIR NOX Ozone Season allowances requested.
- (g) Errors in allocations discovered after allocations are made shall be corrected in a subsequent allocation cycle.
- § 145.223. Supplemental monitoring, recordkeeping and reporting requirements for gross electrical output and useful thermal energy for units subject to 40 CFR 96.370—96.375.
- (a) By January 1, 2008, or by the date of commencing commercial operation, whichever is later, the owner or operator of the CAIR NOx Ozone Season unit shall install, calibrate, maintain and operate a wattmeter, measure gross electrical output in megawatt-hours on a continuous basis and record the output of the wattmeter. If a generator is served by two or more units, the information to determine the heat input of each unit for that control period shall also be recorded, so as to allow each unit's share of the gross electrical output to be determined. If heat input data are used, the owner or operator shall comply with the applicable provisions of 40 CFR Part 75 (relating to continuous emission monitoring).
- (b) By September 1, 2008, for a CAIR NOx Ozone Season unit that is a cogeneration unit, and for a CAIR NOx Ozone Season unit with cogeneration capabilities, the owner or operator shall install, calibrate, maintain and operate meters for steam flow in lbs/hr, temperature in degrees Fahrenheit and pressure in PSI, to measure and record the useful thermal energy that is produced, in mmBtu/hr, on a continuous basis. The owner or operator of a CAIR NOx Ozone Season unit that produces useful thermal energy but uses an energy transfer medium

- other than steam, such as hot water or glycol, shall install, calibrate, maintain and operate the necessary meters to measure and record the data necessary to express the useful thermal energy produced, in mmBtu/hr, on a continuous basis. If the unit ceases to produce useful thermal energy, the owner or operator may cease operation of the meters, but operation of the meters shall be resumed if the unit resumes production of useful thermal energy.
- (c) Beginning with 2008, the designated representative of the unit shall submit to the Department an annual report showing monthly gross electrical output and monthly useful thermal energy from the unit. The report is due by January 31 for the preceding calendar year.
- (d) The owner or operator of a CAIR NOx Ozone Season unit shall maintain onsite the monitoring plan detailing the monitoring system and maintenance of the monitoring system, including quality assurance activities. The owner or operator of a CAIR NOx Ozone Season unit shall retain the monitoring plan for at least 5 years from the date that it is replaced by a new or revised monitoring plan. The owner or operator of a CAIR NOx Ozone Season unit shall provide the Department with a written copy of the monitoring plan by January 1, 2008, and thereafter within 3 calendar months of making updates to the plan.
- (e) The owner or operator of a CAIR NOx Ozone Season unit shall retain records for at least 5 years from the date the record is created or the data collected as required by subsections (a) and (b), and the reports submitted to the Department and the EPA in accordance with subsections (c) and (d).

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