COMMONWEALTH OF MASSACHUSETTS

DEPARTMENT OF ENVIRONMENTAL PROTECTION

310 CMR 7.00   AIR POLLUTION CONTROL REGULATIONS

310 CMR 7.28   NOx ALLOWANCE TRADING PROGRAM

7.28: NOx Allowance Trading Program

(1) Purpose and Scope.

(a) The purpose of 310 CMR 7.28 is to control emissions of nitrogen oxides (NOx) during the summertime control period (May 1 through September 30 of each year). 310 CMR 7.28 accomplishes this by establishing a state trading program budget for NOx during each control period from 2003 to 2008, implemented through a NOx allowance trading program beginning May 1, 2003. The Massachusetts Clean Air Interstate Rule (310 CMR 7.32) will supersede this program beginning with the control period in 2009.

(b) The Department will allocate NOx allowances for each control period as described in 310 CMR 7.28(6) equal to the total Massachusetts NOx State trading program budget in tons.

(c) NOx allowances from other states may be used by budget units to comply with 310 CMR 7.28, provided the other state has a NOx allowance trading program approved by EPA.

(d) NOx allowances allocated by the Department may be used by budget units to comply with NOx allowance trading programs of other states, provided the other state has a NOx allowance trading program approved by EPA.

(e) The Department authorizes the Administrator to assist the Department in implementing the NOx allowance program by carrying out the functions set forth for the Administrator in 310 CMR 7.28.

(2) Definitions. The definitions in 310 CMR 7.00 apply to 310 CMR 7.28. However, the following terms have the following meanings when they appear in 310 CMR 7.28. If a term is defined both in 310 CMR 7.00 and in 310 CMR 7.28(2), the definition in 310 CMR 7.28(2) applies.

Account means a record in the NOx Allowance Tracking System where allowances are recorded, and includes compliance, overdraft and general accounts.

Account Number means the identification number given by the Administrator to an account in the NOx Allowance Tracking System (NATS).

Acid Rain Emission Limitation means a limitation on emissions of sulfur dioxide or nitrogen oxides under the Acid Rain Program pursuant to title IV of the federal Clean Air Act.

Allocate or Allocation means the assignment of allowances by the Department to a NOx Allowance Tracking System account, as recorded by the Administrator.

Allowance means a limited authorization to emit one ton of NOx during a specified control period or any control period thereafter. An allowance is usable only for complying with the provisions of 310 CMR 7.28. The use of an allowance after the initial control period is subject to the terms and conditions for use of banked allowances in 310 CMR 7.28(9). All allowances are allocated, transferred, or used as whole allowances. To determine the number of whole allowances, the number of allowances or tons is rounded down for decimals less than 0.5 and rounded up for decimals of 0.5 or greater.

Allowance Deduction means the permanent withdrawal of allowances by the Administrator from a NOx Allowance Tracking System account pursuant to 310 CMR 7.28(14) or 7.28(4)(c)4.

Allowance Transfer means the transfer to another account of one or more allowances by whatever means, including but not limited to purchase, trade, auction, or gift, in accordance with the procedures established in 310 CMR 7.28(10).

Allowance Transfer Deadline means midnight of November 30 or, if November 30 is not a business day, midnight of the first business day thereafter. It is the deadline by which allowances must be transferred, or requested to be transferred, to a compliance or overdraft account to comply with the requirements of 310 CMR 7.28 for the control period of that year.

Authorized Account Representative (AAR) means the individual who is authorized, in writing, to transfer or otherwise manage allowances for an account, as well as to certify any other reports to the NOx Allowance Tracking System (NATS) and the NOx Emissions Tracking System (NETS).

Alternative Authorized Account Representative (AAAR) means the alternate individual who is authorized, in writing, to transfer or otherwise manage allowance for an account, as well as to certify any other reports to the NATS and NETS. The AAAR has the same authority as the "primary" AAR, however, all correspondence from the Administrator will be directed to the primary AAR.

Banked Allowance means an allowance which is not used to reconcile emissions in the

designated year of allocation but which is carried forward in a compliance, overdraft, or general account.

Banking means the retention of allowances from one control period for use in a future control period.

Budget Unit means a fossil fuel fired boiler, combustion turbine or indirect heat exchanger which emits NOx to a stack and has a maximum heat input capacity of 250 MMBtu/Hour, or more; an electric generating unit with a nameplate capacity of 15 MW, or more; any unit which has opted in to 310 CMR 7.28 when the Department approves an opt in application under 310 CMR 7.28(4)(c); or any unit the Department includes in 310 CMR 7.28 pursuant to 310 CMR 7.28(4)(d).

Commence Commercial Operation means, with regard to a unit that serves a generator, to have begun to produce steam, gas, or other heated medium used to generate electricity for sale or use, including test generation.

Commence Operation means to have begun any mechanical, chemical, or electronic process, including start-up of an emissions control technology, emissions monitor or a unit's combustion chamber.

Compliance Account means the account for each budget unit in the NOx Allowance Tracking System, which holds allowances used to determine compliance with 310 CMR 7.28.

Continuous Emission Monitoring System (CEMS) means the equipment required by 310 CMR 7.28(11) used to sample, analyze, measure and provide, by readings taken at least once every 15 minutes of the measured parameters, a permanent record of NOx emissions, expressed in tons per hour of NOx. The following systems are component parts included, consistent with 40 CFR Part 75, in a continuous emission monitoring system:
   (a) Flow monitor;
   (b) Nitrogen oxides pollutant concentration monitors;
   (c) Diluent gas monitor (oxygen or carbon dioxide) when such monitoring is required by 40 CFR Part 75 Subpart H;
   (d) A continuous moisture monitor when such monitoring is required by 40 CFR Part 75 Subpart H; and
   (e) An automated data acquisition and handling system.

Compliance Supplement Allowance means an allowance from the Massachusetts compliance supplement pool of 473 allowances as approved by EPA. Any compliance supplement allowance can only be used during 2003 and 2004, and the Department will retire any remaining allowances.

Control Period means the period beginning May 1 of a calendar year and ending on September 30 of the same year, inclusive.

Current Year means the calendar year in which an action takes place. For example, an allowance allocated for use in 2003 which goes unused and becomes a banked allowance on January 1, 2004 can be used in the "current year" 2004 or later, subject to the conditions for banked allowance use, as stated in 310 CMR 7.28(9).

Curtailment or Curtails means a reduction from the representative utilization or capacity factor at a budget unit.

Electric Generating unit means any fossil fuel fired combustion unit that serves a generator of 15 MW nameplate capacity or greater, which provides electricity for sale or use.

Excess Emissions means emissions of NOx reported by a budget unit during the control period, rounded to the nearest whole ton, which are greater than the number of current year and banked allowances in the budget unit's NOx Allowance Tracking System compliance or overdraft accounts available for compliance under 40 CFR 96.54 at the allowance transfer deadline for that year.

Existing Budget Unit means:
    (a) For the year 2000, when the Department allocates allowances for the 2003 control period, any budget unit which has commenced operation, and has electrical or useful steam output for the years 1994 through 1998, including years with an output of zero.
    (b) For the years 2001 onward, when the Department allocates allowances for the 2004 control periods onward, any budget unit which has operated during a control period prior to the current year.
    Once a unit meets the criteria to be an existing budget unit, it will retain that classification.

Fossil Fuel means natural gas, petroleum, coal or any form of solid, liquid or gaseous fuel derived wholly, or in part, from such material.

Fossil Fuel Fired means the combustion of fossil fuel or any derivative of fossil fuel alone, or, in combination with any other fuel, if fossil fuel comprises more than 50% of the annual heat input on a Btu basis. Once a unit is considered fossil fuel fired, then the unit is always considered fossil fuel fired even if the fossil fuel no longer comprises more than 50% of the annual heat input on a Btu basis.

General Account means an account in the NOx Allowance Tracking System (NATS) that is not a compliance or overdraft account.

Heat Input means heat derived from the combustion of fuel in a budget unit and does not

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include the heat derived from preheated combustion air, recirculated flue gas, or exhaust from other budget units.

Indirect Heat Exchanger means combustion equipment in which the flame or the products of combustion are separated from any contact with the principal material in the process by metallic or refractory walls. It includes, but is not limited to, steam boilers, vaporizers, melting pots, heat exchangers, column reboilers, fractioning column feed preheaters, reactor feed preheaters, fuel-fired reactors such as steam hydrocarbon reformer heaters and pyrolysis heaters.

Maximum Heat Input Capacity means a unit-specific maximum hourly heat input (MMBtu), which is the higher of the manufacturer's maximum rated hourly heat input or the highest observed hourly heat input.

Nameplate Capacity means the maximum electrical generating output (expressed in MW) that a generator can sustain over a specified period of time when not restricted by seasonal or other deratings as measured in accordance with the United States Department of Energy standards.

New Budget Unit means, for the purpose of the allocation under 310 CMR 7.28(6), a budget unit which has commenced operation after the 1998 control period, but which has not received an allocation under 310 CMR 7.28 from the Department for the current year's control period or any prior year's control period.

NOx Allowance Tracking System (NATS) means the computer system used by the EPA to track the number of allowances held and used by any account.

NOx Emissions Tracking System (NETS) means the computer system used by the EPA to track the NOx emissions from budget units.

Opt In means that a person who owns, leases, operates or controls a unit elects to become a NOx budget unit under 310 CMR 7.28 through a final, effective NOx budget unit opt-in approval issued under 310 CMR 7.28(4)(c).

Overdraft Account means the NOx Allowance Tracking System account established by the Administrator for each facility where there are two or more budget units.

Quantifiable means a reliable and replicable method for calculating the amount of an emission reduction acceptable to the Department and to the EPA.

Real means a reduction in emissions, quantified retrospectively, net of any consequential increase in emissions due to shifting demand determined using the ISO New England's or successor organization's marginal NOx emission rate.

Recorded with regard to an allowance transfer or allowance deduction, means an account

in the NATS was updated by the Administrator with the details of an allowance transfer or allowance deduction.

Repowering means:

(a) Qualifying Repowering Technology as defined by 40 CFR Part 72 or,
(b) The replacement of a budget unit by either a new combustion unit or the purchase of heat or power from the owner of a new combustion unit, provided the replacement unit:

  1. (regardless of owner) is on the same, or contiguous property as the replaced budget unit;
  2. has a maximum heat output rate or power output rate equal to or greater than the maximum heat output rate or power output rate of the replaced budget unit;
  3. incorporates technology capable of controlling multiple combustion pollutants simultaneously with improved fuel efficiency and significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990.

Representative Emissions for units which opt in to 310 CMR 7.28 are an average of the unit's actual emissions in a control period over two representative, consecutive control periods within the five years preceding the opt in or reclassification. In no event may representative emissions be greater than the allowable emissions for that unit established by any permit or regulation.

State Trading Program Budget means the total number of NOx tons apportioned to all NOx Budget units in a given State, in accordance with the NOx Budget Trading Program under 40 CFR 51.121, for use in a given control period.

Steam Generating Unit means a combustion unit that utilizes greater than 50% of its energy output measured in MMBTU for heat or process applications.

Submitted means sent to the appropriate authority under the signature of the Authorized Account Representative. For purposes of determining when something is submitted, an official U.S. Postal Service postmark or electronic time stamp establishes the date of submittal.

Surplus means an emission reduction which is not required by the Massachusetts SIP at the time the reduction was made, is not relied upon in an applicable attainment demonstration, and is not required by a state or federal permit or order.

(3) The Massachusetts NOx State Trading Program Budget.

(a) From 2003 to 2008, the Massachusetts NOx state trading program budget is 12,861 tons of NO_x for each control period.

(b) The Massachusetts NOx state trading program budget established in 310 CMR 7.28(3)(a) may be modified by the Department to include emissions from units which opt in to 310 CMR 7.28 pursuant to 310 CMR 7.28(4)(c), or which the Department opts in under 310 CMR 7.28(4)(d). The Department will record any modification to the state trading program budget, and submit it by January 1 of each year to the EPA. Modifications to the state trading program budget are subject to a 30-day public notice and comment period, as part of the opt-in process.

(4) Applicability.

(a) 310 CMR 7.28 applies to any person who owns, leases, operates or controls a budget unit.

(b) 310 CMR 7.28 applies to Authorized Account Representatives (AARs) and Alternative Authorized Account Representatives (AAARs) for general, compliance and overdraft accounts, where appropriate. Any provision of the NOx allowance program that applies to a budget unit (including a provision applicable to the NOx AAR of a NOx budget unit) shall also apply to the owners, lessee, operators or controllers of the budget units.

(c) Any person who owns, leases, operates or controls a unit which does not initially meet the definition of a budget unit, and which emits NOx through a stack may choose to opt in to the NOx allowance program to become a budget unit, subject to the following:

1. The person must submit an opt in application and an emission control plan under 310 CMR 7.28(7) to the Department for approval. The application must document the unit's representative emissions. Representative emissions are an average of the actual emissions in a control period over two representative, consecutive control periods within the five years preceding the opt in application. In no event may representative emissions exceed the allowable emissions for that unit established by any permit or regulation.

2. The unit will be considered a budget unit when the Department approves the opt in application and the emissions control plan. It is then subject to all of the requirements contained in 310 CMR 7.28.

3. Any person who chooses to opt in to 310 CMR 7.28 must modify the facility's operating permit, issued pursuant to 310 CMR 7.00: *Appendix C*, to include the applicability of 310 CMR 7.28, the authority to trade allowances, and the authority to emit in accordance with the allowances allocated or obtained by the allowance transfer deadline.

4. Any person who chooses to opt in to 310 CMR 7.28, and who subsequently ceases or curtails operations, will be subject to an allowance adjustment which

represents emissions equivalent to those reduced through the cessation or curtailment of emitting operations.

5. Any person who opts in to 310 CMR 7.28, can not opt out unless the NOx emitting operations at the opt in unit have permanently ceased.

(d) If the Department determines that a unit that emits NOx through a stack may cause or contribute to a condition of air pollution, the Department may require the person who owns, leases, operates or controls that unit to comply with 310 CMR 7.28 using allowances, as assigned by the Department. The Department will notify the person in writing and allocate allowances to the unit as determined by the Department.

(5) General Provisions.

(a) From 2003 to 2008, any person who owns, leases, operates or controls a budget unit must, by November 30 of each calendar year, possess a number of current year or banked NOx allowances in the budget unit's compliance or overdraft accounts that are available for compliance under 40 CFR 96.54, equal to or greater than the total tons of NOx emitted by that budget unit from May 1 through September 30 of that year. Allowances for which transfer requests have been submitted in accordance with 310 CMR 7.28(10) by November 30 are considered to be in the compliance or overdraft account.

(b) Any person who owns, leases, operates or controls a new budget unit must notify the Department when it commences operation. Any person who owns, leases, operates or controls a new budget unit may request allowances from the Department in accordance with 310 CMR 7.28(6).

(c) Any person subject to 310 CMR 7.28 must comply with all other applicable regulations, including, but not limited to, 310 CMR 7.02 *Preconstruction Plan Approval and Emission Limitations*, 310 CMR 7.19 *Reasonably Available Control Technology for sources of NOx*, 310 CMR 7.00: *Appendix A Emissions Offsets and Nonattainment Review*, and 310 CMR 7.00: *Appendix C Operating Permit Program*. If provisions or requirements from any other regulation conflict with a provision of 310 CMR 7.28, the more stringent of the provisions will apply unless otherwise determined by the Department in the unit's approved emission control plan. Regardless of the Department's determination in the emission control plan, a person must comply with all applicable federal requirements.

(d) Except as otherwise provided in 310 CMR 7.28, NOx allowances cannot be used to meet or exceed the limitations of any other permit or regulation issued under 310 CMR 7.00.

(e) Offsets required for new or modified units subject to 310 CMR 7.00 *Appendix A,*

Emissions Offsets and Nonattainment Review, must be obtained in accordance with 310 CMR 7.00 *Appendix A* and *Appendix B*, as applicable. NOx allowances under 310 CMR 7.28 may not be used for offsets.

(f) The reductions of NOx emissions at a budget unit may be used to meet the requirements of 310 CMR 7.00 *Appendix A* or *B*. The use of the NOx emission reductions under 310 CMR 7.00 *Appendix A* or *B* may not result in a reduction of the budget unit's allowance allocation except as provided under 310 CMR 7.28(6)(h).

(6) Allowance Allocation.

(a) New Unit Set-Aside.

1. For each year from 2003 to 2008, the Department will allocate 5% of the Massachusetts NO_x state trading program budget to a new unit set-aside account. New budget units may request allowances from this new unit set-aside account according to the procedures in 310 CMR 7.28(6)(c), and the Department will allocate allowances from the new unit set-aside account to the new budget unit. If, in total, new budget units request more allowances than are available in the new unit set-aside account that calendar year, including those available under 310 CMR 7.28(6)(a)2., then allowances will be allocated to the new budget units by the Department pro rata based on net control period electrical and useful steam output.

2. In any calendar year, if new budget units request more allowances than are available in the new unit set-aside account, then a maximum of 2% of the Massachusetts NO_x state trading program budget from the public benefit set-aside account may be transferred to the new unit set-aside account to satisfy new budget unit requests. Allowances requested under 310 CMR 7.28(6)(b)1. will be allocated before any transfers to the new unit set-aside can be made.

3. Unused allowances allocated to the new unit set-aside will be banked in the new unit set-aside account. Each year, when the number of banked allowances is determined under 310 CMR 7.28(9), if the number of banked allowances in the new unit set-aside account is 10% or greater of the total Massachusetts NO_x state trading program budget, any banked allowances in excess of 5% of the Massachusetts NO_x state trading program budget will be allocated to existing units pro rata based on net control period electrical and useful steam output for that calendar year.

4. After a new budget unit has operated in one control period it becomes an existing budget unit and the Department will allocate allowances for the control period commencing three years in the future according to 310 CMR 7.28(6)(d). The unit will continue to receive allowances from the new unit set-aside according to 310 CMR 7.28(6)(c) until it is eligible to use allowances allocated

under 310 CMR 7.28(6)(d).

(b) Public Benefit Set-Aside.

1. For each year from 2003 to 2008, The Department will allocate 5% of the Massachusetts NO_x state trading program budget to a public benefit set-aside (PBSA) account to provide for allocations of allowances for Energy Efficiency Projects (EEPs) and Renewable Energy Projects (REPs).

2. In any calendar year, if requests for allowances from the public benefit set-aside total more allowances than are available in the public benefit unit set-aside account, then a maximum of 2% of the Massachusetts NO_x state trading program budget from the new unit set-aside account may be transferred to the public benefit set-aside account to satisfy those requests. Allowances requested under 310 CMR 7.28(6)(a)1. will be allocated before any transfers to the public benefit set-aside can be made.

3. Unused allowances allocated to the public benefit set-aside will be banked in the public benefit set-aside account. Each year, when the number of banked allowances is determined under 310 CMR 7.28(9) , if the number of banked allowances in the public benefit set-aside account is 10% or greater of the total Massachusetts NO_x state trading program budget, any banked allowances in excess of 5% of the Massachusetts NO_x state trading program budget will be allocated to existing units pro rata based on net control period electrical and useful steam output for that calendar year.

(c) Allocation process for new budget units 1. Any person who owns, leases, operates or controls a new budget unit may request that the Department allocate allowances to the unit from the new unit set-aside account. Allowances will be allocated to the overdraft account for each facility, or for facilities with only one budget unit, to the unit's compliance account. No later than October 15 of each year, each budget unit may request that the Department allocate allowances to that unit pursuant to 310 CMR 7.28(5)(b). By November 15 of each year the Department will allocate allowances from the new unit set-aside account to new budget units using the following formulae:

1. For electric generation:

$$\frac{(MWh) * (0.2\ lbs/MWh)}{2000\ lbs/ton}$$

Where MWh = Actual net electric output for the current year's control period in megawatt hours.

2. For steam generation:

$$\frac{(SO) * (0.44 \text{ lbs/MMBtu output})}{2,000 \text{ lbs/ton}}$$

Where: SO = Actual net steam output for the current year's control period in MMBtu.

3. For units with both electrical and useful steam output, the Department will add the number of allowances allocated for each type of output together to determine the total.

(d) Allocation process for existing budget units

1. Except as stated in 310 CMR 7.28(6)(d)3., for each control period from 2003 to 2008, the Department will allocate allowances to existing budget units using the formulae in 7.28(6)(d)1. Through 2005, allocations will be made by April 1 of each year, three years before the control period the allowances are first usable. Allowances will be allocated to the overdraft account for each facility, or for facilities with only one budget unit, to the unit's compliance account. If a name or Office of Regulatory Information Systems (ORIS) code change occurs for a facility after 310 CMR 7.28 is promulgated, the Department will incorporate that change in its allocation process.

a. For electric generation:

$UUA(y) = AEO(y-6, y-5, y-4) * 1.5 \text{ lbs/MWh} / 2000 \text{ lbs/ton}$

$UAA(y) = UUA(y) * (\text{Allowance available for allocation})/\text{sum of all } UUA(y)$

b. For useful steam generation:

$UUA(y) = ASO(y-6, y-5, y-4) * 0.44 \text{ lbs/MMBtu output} / 2000 \text{ lbs/ton}$

$UAA(y) = UUA(y) * (\text{Allowances available for allocation})/\text{sum of all } UUA(y)$

Where: $UUA(y)$ = a unit's unadjusted allocation for year y

$AEO(y-6, y-5, y-4)$ = a unit's net electric output in MWh for the average of the two highest control periods 6, 5 or 4 years prior to year y

$ASO(y-6, y-5, y-4)$ = a unit's net steam output in MMBtu for the average of the two highest control periods 6, 5 or 4 years prior to year y

$UAA(y)$ = a unit's allocation, adjusted so the total control period allocation

does not exceed the Massachusetts state trading program budget.

For the control period of 2003 only, the Department will determine allocations using the average net electrical or useful steam output for the highest two years from 1994 through 1998 to determine an existing budget unit's average output for the above equations. The Department may use heat input providing useful steam output as a surrogate for steam output in the above equation as necessary.

For units with both electrical and useful steam output, the Department will add the number of allowances allocated for each type of output together to determine the total.

If a budget unit has no operating history during 1994 through 1998, but has commenced operation during 1999, then the budget unit will be allocated from the new source set-aside for the 2003 control period.

2. For budget units with less than three full control periods of historical output the Department will determine the Units Unadjusted Allocation ($UUA(y)$) for the above equations according to the following:

a. For budget units with less than one full control period of operation:

$AEO(y)$ = (greater of actual capacity utilization in percent or 0.9) * 3672 h * (nameplate capacity of the budget unit in MW)

$ASO(y)$ = (greater of actual capacity utilization in percent or 0.9) * 3672 h * (nameplate capacity of the budget unit in MMBtu/h)

b. For budget units with only one full control period of operation:

$AEO(y)$ = (electrical output from the one full control period in MWh)

$ASO(y)$ = (useful steam output from the one full control period in MMBtu)

c. For budget units with two full control periods of operation:

$AEO(y)$ = (average electrical output from the two full control periods in MWh)

$ASO(y)$ = (average useful steam output from the two full control periods in MMBtu)

After a unit has commenced operation, every control period is included in determining whether a unit has three full control periods of historical operation, including control periods with an electrical or useful steam output

of zero.

3. For control periods 2003 through 2005, the existing budget units in Table 1 will receive the allocation listed in the table. Beginning with the allocation for control period 2006, the existing budget units in Table 1 will be allocated allowances according to the formulae in 310 CMR 7.28(6)(d)1.

PROPOSED 310 CMR 7.28(6)(d) TABLE 1 NOx Allowance Allocation, 2003 – 2005		
NAME	ORIS Code	Control period Allowance Allocation
Braintree	01660	76
General Electric Lynn	10029	60
MA Bay Transit Authority	10176	6
MA Water Resources Authority	10823	37
Peabody	01658	19
Taunton	01682	92

4. For the allocation for the 2008 control period, which occurs in the Spring of 2005, the Department will forward a template to be used by the budget units for submitting control period output data. After receiving output data from the budget units, the Department will calculate the allocation for the 2008 control period and forward a draft spreadsheet containing all of the budget units' allocations, including output data and calculations, to the budget units. There will be a 30-day comment period during which budget units may notify the Department of any errors in the output data and the calculation of the allocations contained in the spreadsheet. If the Department receives any comments and makes revisions to the spreadsheet, then it will provide a ten-day comment period on the revised spreadsheet. The Department will post the final allocation on the Department website and send it to EPA and budget units by April 1st 2005.

(e) After the allowance transfer deadline of November 30 of each year, no person who owns, leases operates or controls a budget unit may transfer banked or current year allowances to or from that unit's compliance account until all compliance issues are resolved with the Department and the Department releases the compliance account.

(f) If a person who owns, leases, operates or controls a budget unit reduces the unit's emissions, and transfers those emission reductions under 310 CMR 7.00: *Appendix A* or *B* to a person not subject to 310 CMR 7.28 or another NOx allowance trading program approved by EPA, that person (the originator) must surrender or retire allowances equal to the emission reductions transferred off-budget. This surrender or retirement will not be made if the unit receiving the emission reductions from a budget unit voluntarily opts in to the Massachusetts trading program or other state's approved trading program. The opt in must occur prior to the use of emission reductions.

(g) 1. Any person who owns, leases, operates or controls a new budget unit which repowered an existing budget unit, as determined by the Department, must choose one of the following options before the new budget unit commences operation:

> a. receive allowances under 310 CMR 7.28(6) as a new unit, and remit allowances equal to the allocation for the existing unit to the Department, if already allocated; or,

> b. retain the allocation for the existing unit, and receive no allowances from the Department's new unit set-aside account for the new budget unit.

2. If the person who owns, leases, operates or controls the new budget unit does not indicate to the Department before the unit commences operation which option in 310 CMR 7.28(6)(g)1. is chosen, the Department will choose an option.

(h) An allowance is not a security or other form of property. An allowance allocation may be separated from the budget unit to which it is initially allocated according to the procedures of 310 CMR 7.28(10)(h).

(i) After providing an opportunity for public comment, the Department may condition, limit, suspend or terminate any allowance or the authorization to emit that an allowance represents.

(j) The Department will allocate 473 allowances from EPA's compliance supplement pool on a *pro rata* basis to those compliance and overdraft accounts that contain banked allowances from 2000, 2001 or 2002 on March 1, 2003. The Department will determine the budget units' pro rata shares by the number of allowances banked pursuant to 310 CMR 7.27. Allowances from EPA's compliance supplement pool may only be used for compliance in the 2003 and 2004 control periods.

(7) Emission Control Plans and Operating Permits.

(a) Emission Control Plan Application Deadlines.

1. Any person who owns, leases, operates or controls an existing budget unit(s)

must submit an emission control plan for Department approval under 310 CMR 7.28 by November 1, 2001.

2. Any person who owns, leases, operates or controls a new budget unit must submit an emission control plan at least 18 months before the later of May 1, 2003 or the date on which the unit commences operation, if the unit does not have an emission control plan contained in an approval issued by the Department under 310 CMR 7.02(2) or 310 CMR 7.00: *Appendix A*.

3. A plan approval under 310 CMR 7.02(2) is not required for construction, substantial reconstruction or alteration of the budget unit(s) to comply with 310 CMR 7.28 unless such construction, substantial reconstruction or alteration to the facility that includes the budget unit(s) causes an increase in emissions of any criteria air pollutant or triggers any other applicable section under 310 CMR 7.02(4)(b) and (c).

4. All emission control plan applications are subject to the fee regulations and approval timelines contained in 310 CMR 4.00.

(b) Emission Control Plan Contents The emission control plan submitted pursuant to 310 CMR 7.28(7)(a) must include at least the following, in a format specified by the Department:

1. The name of the company.

2. A list of budget units.

3. A compliance account identification number for each budget unit.

4. The AAR, and AAAR, if applicable, for each budget unit.

5. If applicable, the operating practices, control efficiency, design, specifications, and standard operating and maintenance procedures for equipment used to meet the requirements of 310 CMR 7.28.

6. A monitoring plan which meets the requirements of 310 CMR 7.28(11) and 40 CFR 96.74(b).

7. Signature of the AAR or AAAR.

8. Identification of the NOx Budget unit, including plant name and the ORIS or facility code assigned to the facility by the U.S. Energy Information Administration, if applicable.

9. Any other information requested by the Department.

(c) The Department will approve emission control plans in two phases. The submittal deadline for the second phase will be contained in the approval for the first phase. The Department's two-phase approval process follows:

1. Approval of the detailed monitoring plan required pursuant to 310 CMR 7.28(11);

2. Approval of the certification of the monitoring system required under 310 CMR 7.28(11).

(d) Revisions to Emission Control Plans

1. If any person who owns, leases, operates or controls a budget unit proposes a change in the monitoring methodology pursuant to 40 CFR Part 75 Subpart H, then that person must submit a revised monitoring plan to the Department prior to making the modification. The Department will modify the emission control plan upon approval of the revised monitoring plan.

2. If any person who owns, leases, operates or controls a budget unit makes any change to the unit's approved detailed monitoring plan (represented electronically by the record type 500s), then that person must either

a. notify the Department of the change and provide an explanation of the change in the next quarterly electronic report or

b. notify the Department of the change an provide and explanation of the change, and submit an electronic copy of the revised detailed monitoring plan within two weeks after the next quarterly submittal deadline.

3. For any person who owns, leases, operates or controls a budget unit that is also subject to the operating permit program under 310 CMR 7.00: *Appendix C*, the operating permit will be modified upon approval of the revision to the emission control plan, in accordance with the procedures in 310 CMR 7.00: *Appendix (C)(8)*.

4. Allowance transfers under 310 CMR 7.28(10) are not considered revisions to the emission control plan.

(8) NOx Allowance Tracking System (NATS).

(a) The NOx Allowance Tracking System (NATS) is EPA's electronic record keeping and reporting system, which is the official database for all allowance use, and transfer related to 310 CMR 7.28. The NATS will track:

1. the allowances allocated by the Department to each budget unit;

2. the allowances held in each account;

3. the allowances used by each budget unit to comply with 310 CMR 7.28 for each control period;

4. the compliance and overdraft accounts established for each budget unit to determine compliance with 310 CMR 7.28 for the unit;

5. any general accounts opened by individuals or entities, which are not used to determine compliance with 310 CMR 7.28;

6. allowance transfers; and,

7. deductions of allowances for compliance purposes or to meet any other requirements of 310 CMR 7.28.

(b) The Administrator will establish a compliance account for each budget unit and an overdraft account, if applicable. The Administrator will give each account an account number and provide the following information, at a minimum, associated with each account:

1. the name of the account owner,

2. the name of the AAR,

3. the mailing address of the AAR, and

4. the phone number of the AAR.

(c) The Administrator will also establish general accounts upon request. Any person or group may open a general account. An AAR must be designated for each general account. The AAR will be officially designated when the Administrator receives a complete application. That representative has the same obligations as an AAR designated by a budget unit, as applicable. The application for a general account shall be submitted in a format prescribed by the Administrator, must be signed and dated by the AAR for the general account and must contain the following statement (verbatim): "I certify that I was selected as the NOx authorized account representative or the NOx alternate authorized account representative, as applicable, by an agreement that is binding on all persons who have an ownership interest with respect to allowances held in the general account. I certify that I have all the necessary authority to carry out my duties and responsibilities under the NOx Allowance Trading Program on behalf of such persons and that each such person shall be fully bound by my representations, actions, inactions, or submissions and by any order or decision issued to me by the Administrator or a court regarding the general account."

(d) Only an AAR can request transfers of allowances from an account. For each account, one AAR must be, and one alternate may be, identified to represent the budget unit, or the owner of a general account. The AAR is responsible for all transactions and reports submitted to the NATS.

(e) The AAR will be officially designated when the Administrator receives a complete account certificate of representation, submitted in a format prescribed by the Administrator, containing, at a minimum, the following information:

>   1. identification of the budget unit by plant name, state and unit number for which the certification of representation is submitted;

>   2. the name, address, telephone and facsimile number of the AAR and any alternate; and

>   3. a list of owners, lessees, operators and controllers of the budget unit.

>   The AAR must submit a revised application when any of the above information changes.

(f) The account certificate of representation must be signed and dated by the AAR for the budget unit and must contain the following statement (verbatim): "I certify that I was selected as the NOx authorized account representative or alternate NOx authorized account representative, as applicable, by an agreement binding on the owners, lessees, operators and controllers of the NOx budget unit. I certify that I have all the necessary authority to carry out my duties and responsibilities under the NOx Allowance Trading Program on behalf of the owners, lessees, operators and controllers of the NOx budget unit(s) and that each such owner, lessee, operator and controller shall be fully bound by my representations, actions, inactions, or submissions and by any decision or order issued to me by the permitting authority, the Administrator, or a court regarding the unit." Designation of an AAR for each budget unit must be completed by the first submission requirement under 310 CMR 7.28. Submitting a revised account certificate of representation pursuant to 40 CFR 96.12 can designate a new AAR. The Administrator will confirm the change of AAR in writing once the change is recorded in the NATS.

(g) Each unit account will have a unique identification number, and the Administrator will assign each allowance a unique serial number. Each allowance serial number will also indicate the first year it may be used for compliance with 310 CMR 7.28.

(h) Any objections concerning the AAR and AAAR are subject to the provisions of 40 CFR 96.14 and 96.51.

(i) The AAR or AAAR must include the certification statement in 310 CMR

7.28(10)(c)2. in all submissions.

(j) The Administrator may, at his or her sole discretion and on his or her own motion, correct any error in any NOx Allowance Tracking System account. Within ten business days of making such correction, the Administrator will notify the AAR for the account.

(9) Allowance Banking.

(a) Allowances may be banked for future use in a compliance, overdraft or general account.

(b) Any allowance not retired or used for compliance with 310 CMR 7.28 in a given year, will be retained in a compliance, overdraft or general account and designated as a "banked" allowance.

(c) Banked allowances may be used for compliance with 310 CMR 7.28 in accordance with the following requirements:

1. By May 1 of each year, the total number of banked allowances in all of the states' trading programs will be determined by the Administrator and used to determine how banked allowances may be used in the current year as follows:

a. If the total number of banked allowances is less than or equal to 10% of the total of states' trading program budgets for the current year's control period, all banked allowances may be used for compliance with 310 CMR 7.28 on a 1-for-1 basis.

b. If the total number of banked allowances exceeds 10% of the total of states' trading program budgets for the current year's control period, banked allowances in each NATS compliance, overdraft and general account will be subject to the following:

i. A ratio will be established according to the following formula:

0.10 x the total of states' trading program budgets
the total number of banked allowances in NATS.

ii. The ratio calculated in 310 CMR 7.28(9)(c)1.b.i. will be applied to the banked allowances in each account. The resulting number is the number of banked allowances in the account that can be used in the current year's control period on a 1-for-1 basis. Allowances in excess of that number, if used, must be used on a 2-for-1 basis.

2. The Administrator will notify the AAR for each account of the ratio which

must be applied to banked allowances to determine the number of banked allowances available for use in the current year's control period on a 1-for-1 basis, and the number of banked allowances available for use in the current year's control period on a 2-for-1 basis.

(10) Allowance Use and Transfer.

(a) An allowance is a limited authorization to emit one ton of NOx during a specified control period or any control period thereafter. An allowance is usable only for complying with the provisions of 310 CMR 7.28 and may be bought, sold or traded at any time in accordance with 310 CMR 7.28.

(b) A budget unit may only use allowances designated for that control period year or banked allowances for compliance with 310 CMR 7.28. Allowances must be in the budget unit's compliance or overdraft account as of the allowance transfer deadline, or transferred into the compliance or overdraft account by an allowance transfer request submitted by the allowance transfer deadline in accordance with 310 CMR 7.28(10)(c) through (e).

(c) An allowance transfer will occur as follows:

1. The transfer request must be on a form, or electronic media, in a format determined by the Administrator. The request must be submitted to the Administrator and include, at a minimum:

a. The account numbers identifying both the originating account and the destination account;

b. The names and addresses associated with the AARs of the originating account and the destination account; and,

c. The serial number for each allowance or range of allowances being transferred.

2. The transfer request must be signed and dated by the AAR for the originating account. The AAR for the originating account must provide a copy of the transfer request to each person who owns, leases, operates or controls the budget unit. To be considered correctly submitted, the request for transfer must include the following statement of certification (verbatim):

a. For general accounts: "I am authorized to make this submission on behalf of the persons having an ownership interest with respect to the NOx allowances held in the general account. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my

inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

b. For compliance and overdraft accounts: "I am authorized to make this submission on behalf of the owners, lessee, operators or controllers of the NOx budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

(d) Transfer requests will be processed by the Administrator in order of receipt.

(e) The Administrator will verify the following:

1. Each allowance listed in the transfer request is held by the originating account at the time the transfer will be recorded;

2. The acquiring party has an account in the NATS; and,

3. The transfer request was filed by the person named as AAR for the originating account.

(f) Valid allowance transfers, after verification by the Administrator, will be recorded in the NATS by deducting the specified allowances from the originating account and adding them to the acquiring account.

(g) The Administrator will notify the AAR for the originating account of an allowance transfer. Notification may be made on paper or electronically and will include:

1. The effective date of the transfer;

2. The identity of the originating account and the acquiring account by name as well as account number; and,

3. The number of allowances transferred and their serial numbers, or

4. The reason for failure if the transfer is not recorded.

(h) If the AAR for a budget unit determines that some or all allocated allowances should be transferred to another budget unit's compliance account, overdraft account or general account for the remainder of the current control period, then the AAR of the originating account must submit to the Administrator a request for transfer that states this intent. A request for transfer of allowances for the remainder of the control period must comply with 310 CMR 7.28(10)(c). In addition, the request must be submitted to the Department with a letter requesting that future allowance allocations be made directly to the acquiring account.

(i) Any AAR shall make available to the Department, upon request, information regarding transaction cost and allowance price.

(11) Emission Monitoring.

(a) General Requirements. Any person who owns, leases, operates or controls a budget unit must comply with the following, as applicable:

1. Any person who owns, leases, operates or controls a budget unit that commences operation before January 1, 2002 shall install, operate and successfully complete all applicable certification testing requirements for monitoring heat input, NOx emission rate and NOx mass emissions pursuant to the requirements of 40 CFR Part 75 Subpart H by May 1, 2002.

2. A person who owns, leases, operates or controls a new budget unit which commences operation on or after January 1, 2002, must install, operate and successfully complete all applicable certification testing requirements for monitoring heat input, NOx emission rate and NOx mass emissions pursuant to the requirements of 40 CFR Part 75 Subpart H by the later of the following dates:

     May 1, 2002 or the earlier of: 180 days after the date on which the unit commences operation or 90 days after the date on which the unit commences commercial operation.

3. Any person who owns leases, operates or controls a budget unit may petition the Department and EPA pursuant to 40 CFR 75.70(h) to use an alternative monitoring methodology.

4. All monitoring systems are subject to initial performance testing and periodic calibration, accuracy testing and quality assurance/quality control testing as specified in 40 CFR Part 75 Subpart H.

5. During a period when valid data is not being recorded by a monitoring system approved under 310 CMR 7.28, the missing or invalid data must be replaced with

default data in accordance with the provisions of 40 CFR 75.70(f).

6. NOx emissions data must be reported to the NOx Emissions Tracking System (NETS) in accordance with 310 CMR 7.28(13).

7. Budget units must report data pursuant to the requirements of 310 CMR 7.28(11) for every hour.

8. Any person who owns, leases, operates or controls a new budget unit must determine, record and report NOx mass, heat input (if required for purposes of allocation) and any other values required to determine NOx mass (*e.g.*, NOx emission rate and heat input or NOx concentration and stack flow) using the provisions in 40 CFR 75.70(g) from the date and hour the unit commences operation until all required certification tests are successfully completed.

(b) Notification. Any person who owns, leases, operates or controls a budget unit subject to 310 CMR 7.28 must comply with the notification requirements in 40 CFR 75.61, where applicable.

(c) The Department and the Administrator will follow the procedures of 40 CFR 75.70(h) on petitions for using alternative monitoring procedures from 40 CFR 75.

(12) Record Keeping. Any person who owns, leases, operates or controls a budget unit must keep all measurements, data, reports and other information required by 310 CMR 7.28 for five years, or any other period consistent with the budget unit's operating permit.

(13) Reporting.

(a) The AAR must submit quarterly reports for each calendar quarter beginning with:

1. For units commencing operation prior to May 1, 2002, the earlier of the calendar quarter that includes the date of initial certification or, if the certification tests are not completed by May 1, 2002, the partial calendar quarter from May 1, 2002 through June 30, 2002. Data shall be recorded and reported from the earlier of the date and hour corresponding to the date and hour of certification or the first hour on May 1, 2002; or

2. For a unit that commences operation on after May 1, 2002, the calendar quarter in which the unit commences operation. Data shall be reported from the date and hour the unit commenced operation.

(b) The AAR for each budget unit using CEMS must submit to the Administrator all emissions and operating information for each calendar quarter of each year in accordance with the standards specified in 40 CFR Part 75 Subpart H and 40 CFR 75.64. For budget units not using CEMS, reports must only be submitted for the

second and third quarters of each calendar year.

(c) The quarterly reports must contain the following information as applicable:

1. For units subject to an Acid Rain Emissions limitation, quarterly reports shall include all of the data and information required in 40 CFR Part 75 Subpart H for each NOx Budget unit (or group of units using a common stack) as well as information required in 40 CFR Part 75 Subpart G.

2. For units not subject to an Acid Rain Emissions limitation, quarterly reports are only required to include all of the data and information required in 40 CFR Part 75 Subpart H for each NOx Budget unit (or group of units using a common stack).

(d) Should a budget unit be permanently shut down, the Department will grant an exemption from the requirements of 310 CMR 7.28 upon request from the budget unit's AAR, and provided the shutdown is part of an approved emission control plan or approved under 310 CMR 7.00: *Appendix B*. The request must include an identification of the budget unit being shut down, and the date of shutdown. Department approval of the request for shutdown exemption will be sent to the AAR, and the Administrator, and may contain conditions as deemed necessary by the Department.

(e) By October 15 of each year, any person who owns, leases, operates or controls a new or existing budget unit must report to the Department each facility's metered net electric and useful steam output for that year's control period. Net electric output must be reported in megawatt-hours, and steam output in MMBtu. If data for steam output is not available, the person may report heat input providing useful steam output as a surrogate for steam output.

(14) Compliance Determination at the End of a Season.

(a) The data reported to the Administrator by the AAR for a budget unit in accordance with 310 CMR 7.28(13), and the allowance allocations and transfers recorded in the NATS compliance or overdraft account for that budget unit, are the basis for determining compliance with 310 CMR 7.28.

(b) Each year by November 30, the AAR for each budget unit may request that the Administrator deduct current year allowances from the compliance or overdraft account equivalent to the NOx emissions from the budget unit in the current control period. The request must be submitted by the AAR to the Administrator no later than the allowance transfer deadline (November 30). The request must identify the compliance or overdraft account from which the deductions should be made, and if desired, the serial numbers of the allowances to be deducted. If no serial numbers are identified, the Administrator will deduct allowances in the following order: current

year allowances allocated to the account; current year allowances transferred to the account; banked allowances allocated to the account; and, banked allowances transferred to the account. Banked allowances may be used in place of current year allowances subject to the conditions in 310 CMR 7.28(9).

(c) The Administrator will determine whether there are sufficient allowances in the compliance or overdraft account to cover the control period NOx emissions. Regardless of the AAR's request to the Administrator to deduct allowances pursuant to 310 CMR 7.28(14)(b), the Administrator will deduct a number of allowances equal to the current control period's NOx emissions, rounded to the nearest whole ton, from the budget unit's compliance or overdraft account.

(d) Should the emissions of the budget unit in the current control period exceed the allowances in the budget unit's compliance or overdraft account available for compliance for the control period, the AAR is responsible for obtaining additional allowances by the allowance transfer deadline. The total number of allowances in the compliance or overdraft account, including allowance transfers submitted to the Administrator in accordance with 310 CMR 7.28(10) by the allowance transfer deadline, must equal or exceed the control period emissions of NOx rounded to the nearest whole ton.

(e) If the total number of allowances in the budget unit's compliance or overdraft account available for compliance, including allowance transfers submitted to the Administrator by the allowance transfer deadline in accordance with 310 CMR 7.28(10), does not equal or exceed the control period emissions of NOx from that budget unit, the Department will apply deduction penalties according to 310 CMR 7.28(16), and may take any additional enforcement action it deems appropriate.

(f) The Department or the Administrator may review and conduct independent audits concerning any compliance certification or any other submission under the 310 CMR 7.28 NOx Allowance Trading Program and make appropriate adjustments of the information in the compliance certifications or other submissions. The Administrator may deduct NOx allowances from, or transfer NOx allowances to, a unit's compliance account or overdraft account based on the information in the compliance certifications or other submissions as audited.

(15) Compliance Certification.

(a) For each control period, the AAR for the budget unit shall submit an annual compliance certification report to the Department and the Administrator.

(b) The compliance certification report shall be submitted no later than the allowance transfer deadline (November 30) of each year.

(c) The compliance certification shall contain the following elements, in a format

prescribed by the Administrator:

1. Identification of the budget unit, including name, unit address, name of AAR and NATS account number.

2. At the AAR's option, the serial numbers of the NOx allowances that are to be deducted from each unit's compliance account for the control period, and the percent of allowances to be deducted for each unit on a common stack.

3. A statement that emissions data have been submitted to the Administrator in accordance with the procedures established in 310 CMR 7.28(13) and in conformance with the requirements of the Administrator.

4. A statement that the budget unit holds sufficient current year or banked allowances available under 40 CFR 96.54 in its compliance or overdraft account for the control period, as of the allowance transfer deadline, to equal or exceed the recorded emissions for the control period.

5. A statement certifying that the monitoring data reflected operations at the budget unit.

6. A statement that all emissions from the budget unit were accounted for, either through the applicable monitoring or through application of the appropriate missing data procedures and reported in the quarterly reports. If provisionally certified data were reported, the NOx AAR must indicate whether the status of all provisionally certified data was resolved and all necessary quarterly reports were submitted.

7. A statement indicating whether there was any changes in the method of operation of the budget unit or the method of monitoring the budget unit during the current year. If a change must be reported, then specify the nature of the change, the reason for the change, when the change occurred, and how the unit's compliance status was determined subsequent to the change, including what method was used to determine emissions when a change mandated the need for monitor re-certification.

8. A certification statement stating (verbatim): "I am authorized to make this submission on behalf of the owners, lessees, operators and controllers of the NOx Budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and

information, including the possibility of fine or imprisonment."

(d) The Department may verify compliance by whatever means necessary, including but not limited to:

1. Inspection of a unit's operating records;

2. Obtaining information on allowance deduction and transfers from the NATS;

3. Obtaining information on emissions from the NETS;

4. Testing emission monitoring devices; and,

5. Requiring the person who owns, leases, operates or controls a budget unit to conduct emissions testing under the supervision of the Department.

(16) Penalties.

(a) If the total tons of NOx emitted from a budget unit exceed the number of current year or banked allowances available under 40 CFR 96.54 for the control period as of the allowance transfer deadline, the Administrator will automatically deduct allowances from the budget unit's allocation for the next control period at a rate of three allowances for every one ton of excess emissions.

(b) The penalty provisions in 310 CMR 7.28(16)(a) are in addition to any applicable enforcement provisions.

(17) Account Maintenance Fees - (Reserved).

(18) Audit.

(a) The Department will conduct, or have conducted, an audit of the implementation of the NOx Allowance Trading Program beginning in 2006 and every three years thereafter to ensure that the program is providing expected performance with regards to emissions monitoring and allowance use. The audits will include, as appropriate, confirmation of the accuracy of emissions reporting through validation of CEMS and data acquisition systems at budget units, and review of allowance transfer and use by budget units. Each audit will examine the extent to which banked allowances have, or have not, contributed to emissions in excess of the state trading program budget for a given control period.

(b) In addition to the Department audit, the Department may request a third party audit of the program.

(c) Should an audit result in recommendations for revisions at a state level, the

Department will consider the audit recommendations, in consultation with the other states in the NOx allowance program, and if necessary, propose the appropriate revisions as changes to current procedures or modifications to 310 CMR 7.00.