

(m) For any opt-in source which is subsequently repowered or replaced, the amount by which the New Jersey emission budget is increased in any given year to accommodate the source shall continue to be the final amount originally approved for the opt-in source pursuant to (f) and (g) above. The source which is repowering or replacing the opt-in source shall continue to be allocated the full amount, provided that the productivity of the repowered or replaced source is at least as great as that of the original opt-in source and no new law or rule establishes a lower allowable emissions limit applicable to the original opt-in source. Otherwise the amount shall be adjusted pursuant to (k) or (l) above, as applicable.

(n) Each year, prior to December 31, the Department shall provide the following information to the Administrator of the NATS and to USEPA, Region II:

1. A list of all sources that are opt-in sources, including any new opt-in sources approved that year; and
2. The number of allowances by which the current year New Jersey emission budget has been increased, for each opt-in source, to accommodate that source.

(o) An owner or operator who elects to opt a source into the NO_x Budget Program shall not opt the source out of the program. The source shall remain in the program and remain subject to the requirements of this subchapter until:

1. The source has ceased to operate and:
 - i. Any permits and certificates issued for the source pursuant to N.J.A.C. 7:27-8 have been canceled; and
 - ii. The provisions of any operating permit issued pursuant to N.J.A.C. 7:27-22 pertaining to the source have been removed; or
2. The source has been replaced, in which case the replacement source shall become a budget source.

7:27-31.5 Interface with the emission offset program

(a) Any owner or operator of a new or modified budget source which is subject to the emission offset requirements at N.J.A.C. 7:27-18 shall meet the applicable emission offset requirements of that subchapter as well as the requirements of this subchapter. Obtaining and holding sufficient allowances for a source under this subchapter does not relieve an owner or operator from the obligation also to obtain any required emission offsets.

(b) Allowances shall be allocated from New Jersey's emissions budget to a new or modified budget source in accordance with N.J.A.C. 7:27-31.7. New Jersey's base emission budget is established at N.J.A.C. 7:27-31.3(b), and shall not be increased to accommodate the new or modified source.

(c) If a budget source's emission reductions, which are creditable emission reductions under N.J.A.C. 7:27-18.5, are

secured for use, by the owner or operator of the budget source or by another person, as NO_x emission offsets for a source which is not a budget source, the owner or operator of the budget source shall report this to the Department. The NATS administrator shall deduct allowances from the budget source's compliance account commensurate in value, in terms of control period emissions, to the emission offsets secured for use by the source which is not a budget source, unless the owner or operator of the source using the emission offsets opts the source for which the emission offsets are being secured into the NO_x Budget Program prior to the date the Department approves a permit for that source. However, if creditable emission reductions generated by a budget source are secured for use as NO_x emission offsets by another budget source, no such deduction will be made.

7:27-31.6 Interface with the open market emissions trading program

(a) NO_x emission reductions made by a budget source during any control period may not be used as the basis for a DER credit under N.J.A.C. 7:27-30.

(b) Except as provided in the provisions for early reductions at N.J.A.C. 7:27-31.12, Early reductions, DER credits shall not be converted to allowances and used to satisfy the requirements of this subchapter.

(c) Allowances shall not be converted to DER credits and used pursuant to the Open Market Trading Program rules at N.J.A.C. 7:27-30, except as provided at N.J.A.C. 7:27-31.8, which allows electric consumers who earn allowances by saving electricity through energy efficiency projects to elect to receive DER credits, instead of allowances. In such case the NATS Administrator shall permanently retire the allowances that would otherwise have been provided to the electric consumer.

7:27-31.7 Annual allowance allocation

(a) Beginning in 1999, the Department shall allocate allowances each year in accordance with this section. For the years 1999, 2000, 2001 and 2002, the Department shall allocate the New Jersey emission budget in accordance with (b) and (c) below; for the year 2003 and each year thereafter, the Department shall allocate the New Jersey emission budget in accordance with (d) and (e) below. In addition, in each of these years, the Department shall allocate additional allowances to opt-in sources in accordance with (f) below. Also, in the year 1999, the Department shall allocate allowances in accordance with (g) below to sources which have been approved to receive early reduction allowances pursuant to N.J.A.C. 7:27-31.12.

(b) By April 1 in each of the years 1999, 2000, 2001, and 2002, the Department shall allocate 17,340 allowances of the New Jersey emission budget, minus any allowances that have been previously allocated pursuant to (c)3ii or (i) below, or pursuant to N.J.A.C. 7:27-31.17(h). This subsection does not apply to opt-in sources; opt-in sources are addressed

separately in (f) below. The Department shall allocate allowances in accordance with the following steps:

1. Step 1: This step determines the number of allowances which are to be allocated to the New Source Reserve. The purpose of this reserve is to hold aside a pool of allowances, so that they are available for distribution after the control period to new budget sources which have not operated for two full May 1 through September 30 periods. The number of allowances to be allocated to this reserve in this step is based on each new budget source's allowable emissions for the control period. For each new budget source, the Department shall allocate allowances from the New Jersey NO_x emission budget into the New Source Reserve in accordance with the following equation:

$$\text{Allowances} = \frac{\text{Allowable Emission Rate} \times \text{Allowable Activity}}{2,000}$$

Where:

Allowable Emission Rate = The allowable emission rate, expressed in pounds per unit of activity. If more than one fuel is allowed to be used, the allowable emission rate shall be the weighted average of the allowable emission rates for each fuel type; the weighting of this average shall be based on the maximum allowable consumption of the fuel associated with the highest allowable NO_x emission rate. If the allowable emission rate for a given fuel is greater than 0.15 lb/MMBtu, then 0.15 lb/MMBtu shall be used as the allowable emission rate for the purpose of this equation;

Allowable Activity = The maximum allowable activity of the source for the control period which is based on the lesser of the maximum capacity and any limit on the activity during the control period as established by any law, rule or permit; and

2,000 = The factor converting pounds into tons;

2. Step 2: This step determines the number of allowances which are to be allocated to the Growth Reserve. The purpose of this reserve is to hold aside a pool of allowances, so that they are available for distribution after the control period to certain budget sources to accommodate an increase in fuel use. The number of allowances to be allocated to this reserve in this step is based on up to a 50 percent increase in the average heat input of budget sources having emission rates not greater than 0.15 pounds per MMBtu. The number of allowances to be allocated to the reserve is calculated in accordance with the following procedure for each budget source that is not a new budget source:

i. Calculate the average NO_x emission rate (ER_{NO_x}) of the source, expressed in pounds per MMBtu, in accordance with the following equation:

$$ER_{NO_x} = \frac{E1 + E2}{H1 + H2}$$

Where:

- E1 = The total actual NO_x emissions, expressed in pounds, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input;
- E2 = The total actual NO_x emissions, expressed in pounds, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input;
- H1 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input; and
- H2 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input;

ii. If the average NO_x emission rate (ER_{NO_x}) of the source as calculated in (b)2i above is greater than 0.15 pounds of NO_x per MMBtu, then no allowances shall be allocated to the Growth Reserve with respect to the source.

iii. If the average NO_x emission rate (ER_{NO_x}) of the source as calculated in (b)2i above is not greater than 0.15 pounds of NO_x per MMBtu, then allowances shall be allocated to the Growth Reserve in accordance with the following procedure:

(1) Calculate 150 percent of the average actual heat input of the two control periods, out of the last three years, which had the highest heat input in accordance with the following equation:

$$H_{150\%} = 1.5 \times \left(\frac{H1 + H2}{2} \right)$$

Where:

H_{150%} = 150 percent of the average actual heat input of the two control periods, out of the last three years, which had the highest heat input;

H1 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input; and

H2 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input;

(2) If H_{150%}, as determined in (b)2iii(1) above, is not greater than the maximum allowable heat input of the source during the control period, then number of allowances to be allocated to the reserve is calculated in accordance with the following equation:

$$\text{Allowances} = ER_{NO_x} \times 0.5 \times \frac{(H1 + H2)}{2} \times \frac{1}{2,000}$$

Where:

ER_{NO_x} = The average actual NO_x emission rate, expressed in pounds per MMBtu, as calculated in (b)2i above;

H1 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input;
 H2 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input; and
 2,000 = The factor for converting pounds into tons;

(3) If the result of (b)2iii(1) above is greater than the maximum allowable heat input of the source during the control period, then number of allowances to be allocated to the reserve is calculated in accordance with the following equation:

$$\text{Allowances} = \text{ER}_{\text{NO}_x} \times H_{\text{Allowable}} \left(\frac{H1 + H2}{2} \right) \times \frac{1}{2,000}$$

Where:

ER_{NO_x} = The average actual NO_x emission rate, expressed in pounds per MMBtu, as calculated in (b)2i above;
 $H_{\text{Allowable}}$ = The maximum allowable heat input of the source for the control period which is based on the lesser of the maximum heat input capacity and any limit on the heat input during the control period as established by any law, rule or permit;
 H1 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input;
 H2 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input; and
 2,000 = The factor for converting pounds into tons;

3. (Reserved)

4. Step 3: This step is a preliminary determination of the number of allowances which are to be allocated in (b)5 (Step 4) below to each budget source that is not a new budget source. For this step, the Department shall use the following procedure:

i. If the average NO_x emission rate (ER_{NO_x}) of the source as calculated in (b)2i above is greater than 0.15 pounds of NO_x per MMBtu, then the number of allowances determined in this step is calculated in accordance with the following equation:

$$\text{Allowances} = \frac{0.20}{2,000} \times \left(\frac{H1 + H2}{2} \right)$$

$$\text{Allowances} = \frac{(\text{ER}_{\text{NO}_x} + \text{ER}_{\text{Allowable}})}{2} \times \frac{(H1 + H2)}{2} \times \frac{1}{2,000} \quad \text{Equation 2}$$

Where:

0.15 = The allocation rate, expressed in pounds per MMBtu, which is the maximum rate to be used for the allocation of allowances in this step;
 H1 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input;
 H2 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input; and
 2,000 = The factor for converting pounds into tons;

ii. If the average NO_x emission rate (ER_{NO_x}) of the source as calculated in (b)2i above is not greater than 0.15 pounds of NO_x per MMBtu, then the preliminary determination of the number of allowances to be allocated to the source is calculated in accordance with the following procedure:

(1) If the weighted allowable emission rate as calculated in Equation 1 below is less than 0.15 pounds of NO_x per MMBtu, then the preliminary determination of the number of allowances to be allocated to the source is calculated in accordance with the Equation 2 below:

$$\text{ER}_{\text{Allowable}} = \frac{\sum_{i=1}^n (\text{AER}_i \times (H1_i + H2_i))}{\sum_{i=1}^n (H1_i + H2_i)} \quad \text{Equation 1}$$

Where:

n = The number of types of fuel burned during the two control periods out of the last three which had the greatest heat input;
 AER_i = The lowest allowable emission rate, expressed in pounds per MMBtu, for the source for each type of fuel burned during the two control periods out of the last three which had the greatest heat input;
 $H1_i$ = The heat input, expressed in MMBtu, for each type of fuel burned during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input; and
 $H2_i$ = The heat input, expressed in MMBtu, for each type of fuel burned during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input;

Where:

- ER_{NOx} = The average NO_x emission rate, expressed in pounds per MMBtu, as calculated in (b)2i above;
- ER_{Allowable} = The weighted allowable emission rate, expressed in pounds per MMBtu, as calculated in Equation 1 above;
- H1 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input;
- H2 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input; and
- 2,000 = The factor for converting pounds into tons;

(2) If the weighted allowable emission rate as calculated in Equation 1 of (b)4ii(1) above is not less than 0.15 pounds per MMBtu, then the preliminary determination of the number of allowances to be allocated to the source is calculated in accordance with the following equation:

$$\text{Allowances} = \frac{(ER_{NOx} + 0.15)}{2} \times \frac{(H1 + H2)}{2} \times \frac{1}{2,000}$$

Where:

- ER_{NOx} = The average NO_x emission rate, expressed in pounds per MMBtu, as calculated in (b)2i above;
- 0.15 = 0.15 pounds per MMBtu, which is the maximum rate at which allowances are allocated in this step;
- H1 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input;
- H2 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input; and
- 2,000 = The factor for converting pounds into tons; and

5. Step 4: The Department shall allocate the remainder of the allowances as follows:

i. The sum of the following shall be determined:

- (1) The number of allowances allocated to the New Source Reserve in (b)1 (Step 1) above;
- (2) The number of allowances allocated to the Growth Reserve in (b)2 (Step 2) above;
- (3) The number of allowances that have been previously allocated pursuant to (c)3ii or (i) below, or pursuant to N.J.A.C. 7:27-31.17(h); and
- (4) The number of allowances preliminarily determined in (b)4 (Step 3) above to be allocated to each budget source that is not a new budget source;

ii. If the sum in (b)5i above is less than or equal to 17,340, then the Department shall allocate allowances as follows:

(1) Allowances shall be allocated to each budget source that is not a new budget source, as preliminarily determined in (b)4 (Step 3) above; and

(2) The remaining allowances shall be allocated to companies which operated budget sources in 1990. These companies are listed in Table 1 below. The number of allowances to be allocated to a given company shall be determined in accordance with the following equation:

$$\text{Allowances} = \frac{C\%}{100} \times A_R$$

Where:

- C% = The percent that activity of a given company contributes to the 17,054 allowances of the emission budget for New Jersey for the years 1999 through 2002 as listed in Table 1 below; and
- A_R = The remaining number of allowances, which have not been allocated in (b)1 through 3 (Steps 1 through 3) and (b)5ii(1) above.

TABLE 1

Company	Percent of Total
Atlantic Electric	15.93175%
Chevron Products Company	0.12314%
CIBA GEIGY	0.13487%
Coastal Corporation	2.36895%
Cogen Technologies Energy Group	0.39287%
General Public Utilities Corporation	5.55881%
Milford Power, Limited Partnership	0.32250%
Mobil Oil Corporation	1.97021%
Prime Energy	1.33107%
Public Service Electric and Gas Company	67.46804%
Roche Vitamins Incorporated	2.33376%
Tosco Refinery	1.74153%
City of Vineland Electric Utility	0.32250%
Total	100.00000%

iii. If the sum determined in (b)5i above is greater than 17,340, then the Department shall allocate the remaining allowances to budget sources in proportion to the amount of preliminarily determined in (b)4 (Step 3) above. The proportional share to be allocated to each shall be determined as follows:

$$\text{Allowances} = \frac{17,340 - A_0 - A_1 - A_2}{PA_{Total}} \times PA$$

Where:

- A₀ = The total number of allowances that have been previously allocated pursuant to (c)3ii or (i) below, or pursuant to N.J.A.C. 7:27-31.17(h);
- A₁ = The total number of allowances allocated to the New Source Reserve in (b)1 (Step 1) above;
- A₂ = The total number of allowances allocated to the Growth Reserve in (b)2 (Step 2) above;

PA = The number of allowances preliminarily determined for allocation to the source as determined in (b)4 (Step 3) above; and
 PA_{Total} = The sum of all allowances preliminarily determined for allocation to all budget sources in (b)4 (Step 3) above.

$$ER_{Actual} = \frac{EA}{HA}$$

Where:

EA = Actual emissions during the control period, expressed in pounds of NO_x; and
 HA = Actual heat input during the control period, expressed in MMBtu;

(c) For the years 1999, 2000, 2001, and 2002, after each control period, the Department shall allocate allowances from the New Source Reserve, the Growth Reserve, and Incentive Allowances as follows:

1. The Department shall allocate the allowances in the New Source Reserve by November 30 of the current year as follows:

i. For any new budget source, the Department shall allocate allowances equal to the number of tons of NO_x emitted by the source during the control period, unless the emissions exceed the lesser of 0.15 lb/MMBtu or the lowest allowable emissions limit during the control period, in which case the allowances allocated to the source will be reduced by difference between the actual NO_x emission and the emissions at the lesser of the allowable emission rate or 0.15 lb/MMBtu during the period in which the source exceeded this condition within the control period; and

ii. If there are allowances remaining in the New Source Reserve after the allocation of allowances in accordance with (c)1i above, the Department shall allocate these allowances to companies which operated budget sources in 1990. These companies are listed in Table 1 above. The number of allowances to be allocated to a given company shall be determined in accordance with the following equation:

$$Allowances = \frac{C\%}{100} \times A_R$$

Where:

C% = The percent that activity of a given company contributes to the 17,054 allowances of the base emission budget for New Jersey for the years 1999 through 2002 as listed in Table 1; above and
 A_R = The remaining number of allowances in the New Source Reserve, which have not been allocated in (c)1i above;

2. The Department shall allocate allowances in the Growth Reserve by November 30 of the current year as follows:

i. For each budget source that is not a new budget source and that operated at an average actual emission rate of 0.15 pounds of NO_x per MMBtu or less during the control period, the Department shall allocate allowances according to the following procedure:

(1) Calculate the average actual emission rate for the control period of the current year (ER_{Actual}) in accordance with the following equation:

(2) If the average actual emission rate (ER_{Actual}) for the budget source as calculated in accordance with (c)2i(1) above is greater than 0.15 pounds per MMBtu or if the actual emissions during the control period is less than the number of allowances allocated to the source pursuant to (b)5ii(1) or (b)5iii above, then the Department shall allocate no allowances from the Growth Reserve to the budget source;

(3) Except as provided in (c)2iii below, if the average actual emission rate (ER_{Actual}) for the budget source as calculated in accordance with (c)2i(1) above is not greater than 0.15 pounds per MMBtu and if the actual emissions during the control period is greater than the number of allowances allocated to the source pursuant to (b)5ii(1) or (b)5iii above, then the Department shall allocate allowances from the Growth Reserve to the budget source in accordance with the following equation:

$$Allowances = E_{Actual} - A$$

Where:

E_{Actual} = The total NO_x emissions, expressed in tons, of the source during the control period, minus any emissions due to the exceedance of an applicable maximum allowable emissions limit; and
 A = The number of allowances allocated to the source pursuant to (b)5ii(1) or (b)5iii above;

ii. If there are allowances remaining in the Growth Reserve after the allocation of allowances in accordance with (c)2i above, the Department shall allocate these allowances to companies which operated budget sources in 1990. These companies are listed in Table 1 above. The number of allowances to be allocated to a given company shall be determined in accordance with the following equation:

$$Allowances = \frac{C\%}{100} \times A_R$$

Where:

C% = The percent that activity of a given company contributes to the 17,054 allowances of the base emission budget for New Jersey for the years 1999 through 2002 as listed in Table 1 above; and
 A_R = The remaining number of allowances in the Growth Reserve which have not been allocated in (c)2i above;

iii. If there are not enough allowances in the Growth Reserve to allocate allowances to all of the eligible sources accordance with (c)2i above, then the Department shall prorate the allocations to each source according to the amount of allowances each source would

have otherwise received in accordance with the following equation:

$$\text{Allowances} = \frac{A_{\text{Source}}}{A_{\text{Total}}} \times A_{\text{Reserve}}$$

Where:

- A_{Source} = The number of allowances as determined in (c)2i above for each source;
 A_{Total} = The total number of allowances as determined in (c)2i above for all of the eligible sources; and
 A_{Reserve} = The number of allowances in the Growth Reserve;

3. The Department shall allocate allowances for the implementation of environmentally beneficial techniques which save or generate energy as follows:

i. The Department shall allocate allowances to meet claims which were submitted to the Department by October 15 of the current year and which have been approved by the Department pursuant to N.J.A.C. 7:27-31.8 in accordance with the following equation:

$$\text{Allowances} = \frac{1.50}{2,000} \times E$$

Where:

- 1.50 = The rate, expressed in pounds per MW-hr, at which allowances are allocated for the implementation of environmentally beneficial techniques that result in the saving or generation of electricity;
 E = The amount of saved or generated electricity, expressed in MW-hr, in the approved claim pursuant to N.J.A.C. 7:27-31.8; and
 2,000 = The factor for converting pounds into tons;

ii. The Department shall allocate allowances from the next year's base emission budget for New Jersey until all claims are met.

(d) Prior to the control period in the year 2003 and in each year thereafter, the Department shall transfer 4,822 allowances from the base emission budget for New Jersey into the attainment reserve account held by the Department, leaving 8,200 of 13,022 allowances of the base budget for New Jersey to be allocated. The Department shall allocate 8,200 allowances minus any allowances that have been previously allocated pursuant to (c)3ii above, (e)3ii below, (i) below or pursuant to N.J.A.C. 7:27-31.17(h). This subsection does not apply to opt-in sources; opt-in sources are addressed separately in (f) below. The Department shall allocate allowances in accordance with the following steps:

1. Step 1: This step determines the number of allowances which are to be allocated to the New Source Reserve. The purpose of this reserve is to hold aside a pool of allowances, so that they are available for distribution after the control period to new budget sources which have not operated for two full May 1 through September 30 periods. The number of allowances to be allocated to this reserve in this step is based on each new budget source's allowable emissions for the control period. For each new budget source, the Department shall allocate allowances from the New Jersey emission budget into the New Source Reserve in accordance with the following equation:

$$\text{Allowances} = \frac{\text{Allowable Emission Rate} \times \text{Allowable Activity}}{2,000}$$

Where:

Allowable Emission Rate = The allowable emission rate, expressed in pounds per unit of activity. If more than one fuel is allowed to be used, the allowable emission rate shall be the weighted average of the allowable emission rates for each fuel type; the weighting of this average shall be based on the maximum allowable consumption of the fuel associated with the highest allowable NO_x emission rate. If the allowable emission rate for a given fuel is greater than 0.15 lb/MMBtu, then 0.15 lb/MMBtu shall be used as the allowable emission rate for the purpose of this equation; if the allowable emission rate for a given fuel for an industrial boiler or process heater is greater than 0.20 lb/MMBtu, then 0.20 lb/MMBtu shall be used as the allowable emission rate for the purpose of this equation;

Allowable Activity = The maximum allowable activity of the source for the control period which is based on the lesser of the maximum capacity and any limit on the activity during the control period as established by any law, rule or permit; and
 2,000 = The factor converting pounds into tons;

2. Step 2: This step determines the number of allowances which are to be allocated to the Growth Reserve. The purpose of this reserve is to hold aside a pool of allowances, so that they are available for distribution after the control period to certain budget sources to accommodate an increase in fuel use. The number of allowances to be allocated to this reserve in this step is based on up to a 50 percent increase in the average heat input of budget sources having emission rates not greater than 0.15 pounds per MMBtu. The number of allowances to be allocated to the reserve is calculated in accordance with the following procedure for each budget source that is not a new budget source:

i. Calculate the average NO_x emission rate (ER_{NO_x}) of the source, expressed in pounds per MMBtu, in accordance with the following equation:

$$\text{ER}_{\text{NO}_x} = \frac{E1 + E2}{H1 + H2}$$

Where:

- $E1$ = The total actual NO_x emissions, expressed in pounds, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input;
 $E2$ = The total actual NO_x emissions, expressed in pounds, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input;
 $H1$ = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input; and
 $H2$ = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input;

ii. If the source is an industrial boiler or a process heater, the number of allowances to be allocated to the Growth Reserve is determined in accordance with the following procedure:

(1) If the average NO_x emission rate (ER_{NO_x}) of the source as calculated in (d)2i above is greater than 0.20 pounds of NO_x per MMBtu, then no allowances shall be allocated to the Growth Reserve with respect to that source; and

(2) If the NO_x emission rate as calculated in (d)2i above is not greater than 0.20 pounds of NO_x per MMBtu, then allowances shall be allocated to the Growth Reserve in accordance with (d)2iv below;

iii. If the source is utilized for the purpose of electric or steam generation or both and is not an industrial boiler nor a process heater, the number of allowances to be allocated to the Growth Reserve is determined in accordance with the following procedure:

(1) If the average NO_x emission rate (ER_{NO_x}) of the source as calculated in (d)2i above is greater than 0.15 pounds of NO_x per MMBtu, then no allowances shall be allocated to the Growth Reserve with respect to that source;

(2) If the average NO_x emission rate (ER_{NO_x}) of the source as calculated in (d)2i above is not greater than 0.15 pounds of NO_x per MMBtu, then allowances shall be allocated to the Growth Reserve in accordance with (d)2iv below;

iv. The number of allowances to be allocated to the Growth Reserve pursuant to (d)2ii(2) and iii(2) above shall be calculated in accordance with the following procedure:

(1) Calculate 150 percent of the average actual heat input of the two control periods, out of the last three years, which had the highest heat input in accordance with the following equation:

$$\text{Allowances} = \text{ER}_{\text{NO}_x} \times H_{150\%} - \left(\frac{H1 + H2}{2} \right) \times \frac{1}{2,000}$$

Where:

- H_{150%} = 150 percent of the average actual heat input of the two control periods, out of the last three years, which had the highest heat input;
- H1 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input; and
- H2 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input;

(2) If H_{150%}, as determined in (d)2iv(1) above, is not greater than the maximum allowable heat input

of the source during the control period, then number of allowances to be allocated to the reserve is calculated in accordance with the following equation:

$$\text{Allowances} = \text{ER}_{\text{NO}_x} \times 0.5 \times \frac{(H1 + H2)}{2} \times \frac{1}{2,000}$$

Where:

- ER_{NO_x} = The average actual NO_x emission rate, expressed in pounds per MMBtu, as calculated in (d)2i above;
- H1 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input;
- H2 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input; and
- 2,000 = The factor for converting pounds into tons; and

(3) If the result of (d)2iv(1) above is greater than the maximum allowable heat input of the source during the control period, then number of allowances to be allocated to the reserve is calculated in accordance with the following equation:

$$\text{Allowance} = \frac{0.15}{2,000} \times \left(\frac{H1 + H2}{2} \right)$$

Where:

- ER_{NO_x} = The average actual NO_x emission rate, expressed in pounds per MMBtu, as calculated in (d)1i above;
- H_{Allowable} = The maximum allowable heat input of the source for the control period which is based on the lesser of the maximum heat input capacity and any limit on the heat input during the control period as established by any law, rule or permit;
- H1 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input;
- H2 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input; and
- 2,000 = The factor for converting pounds into tons;

3. (Reserved)

4. Step 3: This step is a preliminary determination of the number of allowances which are to be allocated in (d)5 (Step 4) below to each budget source that is not a new budget source. In this step, the Department shall preliminarily determine the number of allowances to be allocated to each budget source that is not a new budget source, in accordance with the following procedure:

i. If the source is an industrial boiler or a process heater, the number of allowances to be allocated to the source is preliminarily determined in this step in accordance with the following procedure:

(1) If the average NO_x emission rate (ER_{NO_x}) of the source as calculated in (d)2i above is greater than

0.20 pounds of NO_x per MMBtu, then the number of allowances to be allocated to the source is preliminarily determined in accordance with the following equation:

$$H_{150\%} = 1.5 \times \left(\frac{H1 + H2}{2} \right)$$

Where:

- 0.20 = The allocation rate, expressed in pounds per MMBtu;
- H1 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input;
- H2 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input; and
- 2,000 = The factor for converting pounds into tons;

(2) If the average NO_x emission rate as calculated in (d)2i above is not greater than 0.20 pounds of NO_x per MMBtu, then the number of allowances to be allocated to the source is preliminarily determined in accordance with the following equations:

$$\text{Preliminary Allowances} = \frac{E_{\text{Allowable}} + E_{\text{Actual}}}{2} \quad \text{Equation 1}$$

Where:

- $E_{\text{Allowable}}$ = The average allowable emissions for the source, as determined in Equation 2 below; and
- E_{Actual} = The average actual emissions for the source, as determined in Equation 3 below;

$$E_{\text{Allowable}} = \frac{\sum_{i=1}^n (AER_i \times (H1_i + H2_i))}{2} \times \frac{1}{2,000} \quad \text{Equation 2}$$

Where:

- n = The number of type of fuel burned during the two greatest heat input control periods during the last three years;
- AER_i = The lesser of 0.20 pounds per MMBtu or the lowest allowable emission rate expressed in pounds per MMBtu for the source for each type of fuel burned during the two greatest heat input control periods;
- $H1_i$ = The heat input, expressed in MMBtu, for each type of fuel during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input;
- $H2_i$ = The heat input, expressed in MMBtu, for each type of fuel during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input; and
- 2,000 = The factor for converting pounds into tons;

$$E_{\text{Actual}} = \frac{E_1 + E_2}{2} \times \frac{1}{2,000} \quad \text{Equation 3}$$

Where:

- $E1$ = The total actual NO_x emissions, expressed in pounds, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input;
- $E2$ = The total actual NO_x emissions, expressed in pounds, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input; and
- 2,000 = The factor for converting pounds into tons; and

ii. If the source is utilized for the purpose of electric generation alone or for the purpose of generation of a combination electricity and useful heat, the number of allowances to be allocated to the source is preliminarily determined in accordance with the following procedure:

(1) If the average NO_x emission rate (ER_{NO_x}) of the source as calculated in (d)2i above is greater than 0.15 pounds of NO_x per MMBtu, then the number of allowances for the source is preliminarily determined in accordance with the following equation:

$$\text{Allowances} = \frac{1.50 \times \left(\frac{OE1 + OE2}{2} \right) + 0.44 \times \left(\frac{OS1 + OS2}{2} \right)}{2,000}$$

Where:

- 1.50 = The allocation rate, expressed in pounds per MW-hr;
- OE1 = The net electric output, expressed in MW-hr, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual net electric output;
- OE2 = The net electric output, expressed in MW-hr, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual net electric output;
- 0.44 = The allocation rate, expressed in pounds per MMBtu output which is approximately equivalent to the allocation rate of 1.1 pounds per MW-hr;
- OS1 = The net useful heat output, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual net electric output;
- OS2 = The net useful heat output, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual net electric output; and
- 2,000 = The factor for converting pounds into tons; and

(2) If the average NO_x emission rate (ER_{NO_x}) of the source as calculated in (d)2i above is not greater than 0.15 pounds of NO_x per MMBtu, then the number of allowances to be allocated to the source is preliminarily determined in accordance with the following equations:

$$\text{Allowances} = \frac{E_{\text{Allowable}} + E_{\text{Actual}}}{2} \quad \text{Equation 1}$$

Where:

- E_{Allowable} = The average allowable emissions for the source, as determined in Equation 2 below if the allowable emission rate is expressed on a heat input basis or in a similar manner if the allowable emission rate is expressed on an output basis; and
- E_{Actual} = The average actual emissions for the source, as determined in Equation 3 below; and

$$E_{\text{Allowable}} = \frac{\sum_{i=1}^n (AER_i \times (H1_i + H2_i))}{2} \times \frac{1}{2,000} \quad \text{Equation 2}$$

Where:

- n = The number of type of fuel burned during the two greatest heat input control periods during the last three years;
- AER_i = The lesser of 0.15 pounds per MMBtu or the lowest allowable emission rate expressed in pounds per MMBtu for the source for each type of fuel burned during the two greatest heat input control periods;
- H1_i = The heat input, expressed in MMBtu, for each type of fuel during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input;
- H2_i = The heat input, expressed in MMBtu, for each type of fuel during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input; and
- 2,000 = The factor for converting pounds into tons;

$$E_{\text{Actual}} = \frac{E_1 + E_2}{2} \times \frac{1}{2,000} \quad \text{Equation 3}$$

Where:

- E1 = The total actual NO_x emissions, expressed in pounds, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input;
- E2 = The total actual NO_x emissions, expressed in pounds, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input; and
- 2,000 = The factor for converting pounds into tons; and

5. Step 4: The Department shall allocate the remainder of the allowances as follows:

- i. The sum of the following shall be determined:
 - (1) The number of allowances allocated to the New Source Reserve in (d)1 (Step 1) above;
 - (2) The number of allowances allocated to the Growth Reserve in (d)2 (Step 2) above;
 - (3) The number of allowances that have been previously allocated pursuant to (c)3ii above, (e)3ii below, (i) below, or pursuant to N.J.A.C. 7:27-31.17(h); and
 - (4) The number of allowances preliminarily determined in (d)4 (Step 3) above to be allocated to each budget source that is not a new budget source;
- ii. If the sum in (d)5i above is less than or equal to 8,200, then the Department shall allocate allowances as follows:

(1) Allowances shall be allocated to each budget source that is not a new budget source, as preliminarily determined in (d)4 (Step 3) above; and

(2) Any remaining allowances that were not allocated in (d)1 (Step 1), (d)2 (Step 2), or (d)5ii(1) above shall be allocated to the Department's attainment reserve account; or

iii. If the sum determined in (d)5i above is greater than 8,200, then the Department shall allocate the remaining allowances to budget sources in proportion to the amount of preliminarily determined in (d)4 (Step 3) above. The proportional share to be allocated to each shall be determined as follows:

$$\text{Allowances} = \frac{8,200 - A0 - A1 - A2}{PA_{\text{Total}}} \times PA$$

Where:

- A0 = The total number of allowances that have been previously allocated pursuant to (c)3ii above, (e)3ii below, (i) below or pursuant to N.J.A.C. 7:27-31.17(h)
- A1 = The total number of allowances allocated to the New Source Reserve in (d)1 (Step 1) above;
- A2 = The total number of allowances allocated to the Growth Reserve in (d)2 (Step 2) above;
- PA = The number of allowances preliminarily determined for allocation to the source as determined in (d)4 (Step 3) above; and
- PA_{Total} = The sum of all allowances preliminarily determined for allocation to all budget sources in (d)4 (Step 3) above.

(e) After the control period of the year 2003 and of each year thereafter, the Department shall allocate allowances from the New Source Reserve, the Growth Reserve, and Incentive Allowances as follows:

1. The Department shall allocate the allowances in the New Source Reserve by November 30 of the current year as follows:

i. For any new budget source, the Department shall allocate allowances equal to the number of tons of NO_x emitted during the control period, unless the emissions exceed:

(1) For an industrial boiler or process heater, the lesser of 0.20 lb/MMBtu or the lowest allowable emissions limit during the control period, in which case the allowances allocated to the source will be reduced by difference between the actual NO_x emission and the emissions at the lesser of the allowable emission rate or 0.020 lb/MMBtu during the period in which the source exceeded this condition within the control period; or

(2) For a source that is not an industrial boiler nor a process heater, the lesser of 0.15 lb/MMBtu or the lowest allowable emissions limit during the control period, in which case the allowances allocated to the source will be reduced by difference between the actual NO_x emission and the emissions at the lesser of the allowable emission rate or 0.15 lb/MMBtu during the period in which the source exceeded this condition within the control period; and

ii. If there are allowances left in the New Source Reserve after distributing the allowances in accordance with (e)1i above, then the Department shall allocate such allowances in accordance with (e)4 below;

2. The Department shall allocate the allowances in the Growth Reserve by November 30 of the current year as follows:

i. The only sources that are eligible to be allocated allowances from the Growth Reserve in this subparagraph are industrial boilers or process heaters that emitted NO_x at a rate less than or equal to 0.20 pounds per MMBtu heat input and other budget sources that emitted NO_x at a rate less than or equal to 0.15 pounds per MMBtu heat input. For each budget source that is not a new budget source, the Department shall allocate allowances in accordance with the following procedure:

(1) Calculate the average actual emission rate of the source for the control period of the current year (ER_{Actual}) in accordance with the following equation:

$$ER_{\text{Actual}} = \frac{EA}{HA}$$

Where:

- EA = Actual emissions during the control period, expressed in pounds of NO_x; and
- HA = Actual heat input during the control period, expressed in MMBtu;

(2) If the average actual emission rate (ER_{Actual}) for the budget source as calculated in accordance with (e)2i(1) above is greater than 0.20 pounds per MMBtu for industrial boilers or process heaters or 0.15 pounds per MMBtu for any other budget source, then the Department shall allocate no allowances from the Growth Reserve to the budget source;

(3) Except as provided in (e)2iii below, if the average actual emission rate (ER_{Actual}) for the budget source as calculated in accordance with (e)2i(1) above is not greater than 0.20 lb/MMBtu for industrial boilers or process heaters or 0.15 pounds per MMBtu for any other budget source, and if the actual emissions during the control period is greater than the number of allowances allocated to the source pursuant to (d)5ii(1) or (d)5iii above, then the Department shall allocate allowances from the Growth Reserve to the budget source in accordance with the following equation:

$$\text{Allowances} = E_{\text{Actual}} - A$$

Where:

- E_{Actual} = The total NO_x emissions, expressed in tons, of the source during the control period, minus any emissions due to the exceedance of an applicable maximum allowable emissions limit; and
- A = The number of allowances allocated to the source pursuant to (d)5ii(1) or (d)5iii above;

ii. If there are allowances left in the Growth Reserve after distributing the allowances in accordance with (e)2i above, then the Department shall allocate such allowances in accordance with (e)4 below;

iii. If there are not enough allowances in the Growth Reserve to allocate allowances to all of the eligible sources accordance with (e)2i above, then the Department shall prorate the allocations to each source according to the amount of allowances each source would have otherwise received in accordance with the following equation:

$$\text{Allowances} = \frac{A_{\text{Source}}}{A_{\text{Total}}} \times A_{\text{Reserve}}$$

Where:

- A_{Source} = The number of allowances as determined in (e)2i above for each source;
- A_{Total} = The total number of allowances as determined in (e)2i above for all of the eligible sources; and
- A_{Reserve} = The number of allowances in the Growth Reserve;

3. The Department shall allocate allowances for the implementation of environmentally beneficial techniques which save or generate energy as follows:

i. The Department shall allocate allowances to meet claims which were submitted to the Department by October 15 of the current year and which have been approved by the Department pursuant to N.J.A.C. 7:27-31.8 in accordance with the following equation:

$$\text{Allowances} = \frac{1.50}{2,000} \times E$$

Where:

- 1.50 = The rate, expressed in pounds per MW-hr, at which allowances are allocated for the implementation of environmentally beneficial techniques that result in the saving or generation of electricity;
- E = The amount of saved or generated electricity, expressed in MW-hr, in the approved claim pursuant to N.J.A.C. 7:27-31.8; and
- 2,000 = The factor for converting pounds into tons;

ii. The Department shall allocate allowances from the next year's base emission budget for New Jersey until all claims are met.

4. If there are any allowances remaining in the New Source Reserve or Growth Reserve, after allowances are allocated in accordance with (e)1i and 2i above, the Department shall allocate the remaining allowances in accordance with the following procedure:

i. The Department shall first compare the number of allowances that remain in the two reserves, with the difference between the following:

- (1) The number of allowances preliminarily determined to be allocated in (d)4 above; and

(2) The number of allowances actually allocated to budget sources in (d)5 above;

ii. If, pursuant to (e)4i above, the number of allowances that remain in the two reserves is less than the difference, then the Department shall allocate all of the allowances remaining in the two reserves to each budget source in accordance with the following equation:

$$\text{Allowances} = \frac{A_R}{PA_{\text{Total}}} \times PA$$

Where:

- A_R = The total number of allowances remaining in the two reserves;
- PA = The number of allowances preliminarily determined for allocation to the source in (d)4 above; and
- PA_{Total} = The total number of allowances preliminary determined for allocation to all budget sources in (d)4 above; and

iii. If, pursuant to (e)4i above, the number of allowances that remain in the two reserves is equal to or greater than the difference, then the Department shall allocate the remaining allowances according to the following procedure:

(1) The Department shall allocate allowances to each budget source in accordance with the following equation:

$$\text{Allowances} = \frac{PA_{\text{Total}} - A5}{PA_{\text{Total}}} \times PA$$

Where:

- A5 = The total number of allowances allocated to budget sources in (d)5 above;
- PA = The number of allowances preliminarily determined for allocation to each source as determined in (d)4 above; and
- PA_{Total} = The total number of allowances preliminarily determined for allocation to all sources in (d)4 above; and

(2) The Department shall transfer any allowances that still remain unallocated to the Department's attainment reserve account.

(f) Each year, beginning in the year 1999, the Department shall allocate a number of allowances prior to the control period into the compliance account of each opt-in source equal to the amount of allowances added to the New Jersey emission budget to accommodate the opt-in source pursuant to N.J.A.C. 7:27-31.4, Opt-in provisions. However, if the productivity of the source is curtailed during the control period, then a number of allowances shall be deducted accordingly from the source's compliance account during the end-of-season reconciliation process and be permanently retired, pursuant to N.J.A.C. 7:27-31.17(g)3.

(g) Before the control period of 1999, the Department shall allocate a quantity of allowances to the compliance account of each source equal to the amount of early reductions for which the Department has approved the creation

of early reduction allowances pursuant to N.J.A.C. 7:31.12, Early reductions.

(h) In the computations at (b)5ii(2), (b)5iii, (c)1ii, (c)2ii, (c)2iii, (d)5iii, (e)2ii, (e)4ii and (e)4iii(1) above to determine the number of whole allowances to be allocated or distributed, individual quantities of allowances with the highest decimals shall be rounded up and the remaining quantities of allowances with lower decimals shall be rounded down, such that the total amount of allowances allocated or distributed under the provision equals the total number of allowances available.

(i) The Department reserves the right, in any year, prior to carrying out the allocation process in (b) or (d) above, to allocate to another jurisdiction a limited number of current year allowances, not to exceed two percent of the base emission budget for the year. The Department shall exercise this right only if implementation of the OTC MOU result has the anomalous outcome of the other jurisdiction having insufficient allowances to meet the needs of even its low-emitting budget sources. In the year 2003 and thereafter, the Department shall take these allowances from its attainment reserve account.

7:27-31.8 Claims for Incentive allowances

(a) In order to provide an incentive for the saving or generation of electricity through the implementation of certain environmentally beneficial techniques, pursuant to N.J.A.C. 7:27-31.7(c)3 or (e)3, the Department shall distribute allowances each year to persons who have demonstrated, in accordance with the procedures of this section, that they have saved or generated electricity through the implementation of such techniques.

(b) Distribution of allowances pursuant to N.J.A.C. 7:27-31.7(c)3 or (e)3 shall be based on claims submitted by the persons who have saved or generated the electricity. No such incentive allowances shall be allocated for any claim that is not received by the Department by October 30 of the year in which the electricity savings or generation occurred during the control period.

(c) The following persons are eligible to submit a claim for incentive allowances:

1. A New Jersey electric consumer who:
 - i. Purchases its electricity from a company which owns a NO_x Budget source located in New Jersey; and
 - ii. Reduces its electricity consumption at a facility located in New Jersey through implementation of an energy efficiency measure, initiated in 1992 or thereafter, which:

- (1) Belongs to a class to which the following quantification guidance document applies: "Measurement Protocol for Commercial, Industrial and Residential Facilities," issued by New Jersey's board of Regulatory Commissioners on April 28, 1993;

- (2) Does not result in the construction, installation, or operation of a new emission source or increase the emissions of any existing emission source at the facility;

- (3) Does not cause an increase in emissions of any HAP; and

- (4) Does not cause an increase, which is greater than five tons per year, in the emission of any regulated air contaminant other than NO_x;

2. The owner or operator of equipment that is not a budget source, which commenced operation in 1992 or thereafter and which generates electricity through one of the following environmentally beneficial techniques:

- i. Generation through the burning of landfill gas or digester gas;

- ii. Generation by a fuel cell; or

- iii. Generation using solar energy or wind power; and

3. The owner or operator of equipment that generates electricity by another environmentally beneficial technique approved by the Department.

(d) A person eligible to receive an incentive allocation may, pursuant to the Open Market Emissions Trading (OMET) Program rules at N.J.A.C. 7:27-30, elect to receive DER credits instead. In such case, the person shall also file a Notice of DER Credit Generation as required by the OMET Program rules, and the Department shall request that the NATS Administrator transfer any allowance that would otherwise have been allocated to the claimant into a retirement account.

(e) Prior to filing a claim under this section, a person shall establish a general account in the NATS pursuant to the procedures at N.J.A.C. 7:27-31.13.

(f) A claim for incentive allowances shall include:

1. Documentation that the person submitting the claim is eligible to submit a claim for incentive allowances pursuant to (c) above;

2. Specification of the amount of electric generation or savings during the control period that is being claimed, expressed in MW-hr as calculated pursuant to (g) below;

3. The calculations made to determine the amount of electricity generation or savings being claimed and a report of the data and the methods on which the calculations are based;