

# DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

## DIVISION OF AIR QUALITY

Statutory Authority: 7 Delaware Code, Chapter 60; (7 Del.C. Ch. 60)

7 DE Admin. Code 1139

### FINAL

**Secretary's Order No.: 2013-A-0041**

**1139 Nitrogen Oxides (NOx) Budget Trading Program**

**Date of Issuance: October 14, 2013**

**Effective Date of the Amendment: November 11, 2013**

Under the authority vested in the Secretary of the Department of Natural Resources and Environmental Control ("Department" or "DNREC") the following findings, reasons and conclusions are entered as an Order of the Secretary in the above-referenced rulemaking proceeding.

### **Background and Procedural History**

This Order considers proposed regulatory action to repeal 7 **DE Admin. Code** 1139: Nitrogen Oxides (NOx) Budget Trading Program, and the adoption of an associated State Implementation Plan ("SIP") as a result of the Department's exhaustive review of its existing regulations, pursuant to Governor Markell's Executive Order No. 36 (hereinafter referred to as "E.O. 36"). In June of 2012, Governor Markell issued E.O. 36, which directed all state agencies, including DNREC, to perform a focused review of their existing, older regulations, identify and remove regulatory hurdles, and modernize and streamline any regulations that may be outdated or unnecessarily burdensome, while maintaining the state's commitment to improving public health and environmental performance.

Among the considerations of the Department's aforementioned focused review of its existing regulations under E.O. 36 was to ensure that the same continued to serve the original purpose for which they were adopted, and to provide for improvements. To that end, the Department's Division of Air Quality ("DAQ") identified 7 **DE Admin. Code** 1139, Nitrogen Oxides (NOx) Budget Trading Program, as an existing, older regulation which required repeal at this time.

The Department is proposed to repeal 7 **DE Admin. Code** 1139, Nitrogen Oxides (NOx) Budget Trading Program, in its entirety at this time. This regulation established Delaware's participation in the NOx Budget Trading Program, which was a multi-state NOx emissions cap and trade program established pursuant to Title 40, Part 96 of the Code of Federal Regulations (40 CFR Part 96) and 40 CFR Part 51.121. The underlying federal program was subsequently replaced by the federal Clean Air Interstate Rule (CAIR). Given this, the original Air Regulation 1139 no longer serves its intended purpose. Additionally, the Department is also at this time proposing the adoption and submission to the U.S. Environmental Protection Agency ("EPA") of a State Implementation Plan ("SIP") that demonstrates Delaware's compliance with the federal NOx SIP Call requirements.

The Department's Division of Air Quality commenced the regulatory development process with Start Action Notice 2013-17 (E.O.36). The Department published its initial proposed regulation repeal action in the July 1, 2013 *Delaware Register of Regulations*, and held a public hearing on August 1, 2013.

These proposed regulatory actions were thoroughly vetted by the Department at the aforementioned public hearing on August 1, 2013. Pursuant to Delaware law, the record remained open for fifteen (15) additional days subsequent to the date of the public hearing, for the purpose of receiving additional public comment. No public comment was received by the Department from the public at any time during the course of this proposed promulgation. It should also be noted that all proper notification and noticing requirements concerning this proposed promulgation were met by the Department. Proper notice of the hearing was provided as required by law.

The Department's presiding hearing officer, Lisa A. Vest, prepared a Hearing Officer's Report dated September 30, 2013 (Report). The Report recommends certain findings and the adoption of the proposed regulatory actions as attached to the Report as Appendix A.

### **Findings and Discussion**

I find that the proposed regulatory actions are well-supported by the record developed by the Department, and I adopt the Report to the extent it is consistent with this Order. The Department's experts developed the record and drafted the proposed regulatory actions. As previously noted, no public comment was received by the Department from the public at any time during the course of this proposed promulgation.

I find that the Department's experts in the Division of Air Quality fully developed the record to support adoption of these regulatory actions. The adoption of this Order will enable Delaware to streamline its existing air regulations by repeal of

this older, obsolete regulation, which no longer serves its intended purpose. Moreover, the Department will be able to update EPA with the adoption and submission of a SIP which demonstrates Delaware's compliance with the federal NO<sub>x</sub> SIP Call requirements at this time.

In conclusion, the following findings and conclusions are entered:

- 1.) The Department has jurisdiction under its statutory authority to issue an Order adopting these proposed regulatory actions as final;
- 2.) The Department provided adequate public notice of the proposed regulatory actions, and provided the public with an adequate opportunity to comment on the initial proposed actions, including at the public hearing held on August 1, 2013;
- 3.) The Department held a public hearing on August 1, 2013 in order to consider public comment before making any final decision;
- 4.) The Department's Hearing Officer's Report, including its recommended record and the recommended regulatory actions as set forth in Appendix A, are adopted to provide additional reasons and findings for this Order;
- 5.) The adoption of this Order will enable Delaware to streamline its existing air regulations by repeal of this older, obsolete regulation, which no longer serves its intended purpose. Moreover, the Department will be able to update EPA with the adoption and submission of a SIP which demonstrates Delaware's compliance with the federal NO<sub>x</sub> SIP Call requirements at this time;
- 6.) The recommended regulatory actions should be adopted as final regulatory actions because Delaware will be able to (1) update its existing, older air regulations by removing that which no longer serves its intended purpose, while simultaneously providing additional clarity and understanding to Delaware citizens with regard to these matters; (2) further the purpose of Governor Markell's initiatives as set forth in Executive Order No. 36, to wit: strengthen Delaware's economy by modernizing and streamlining regulations that may be outdated or unnecessarily burdensome, while maintaining the state's commitment to improving public health and environmental performance; and, lastly, because (3) the regulation actions are well supported by documents in the record;
- 7.) The Department shall submit this Order approving the final regulation to the *Delaware Register of Regulations* for publication in its next available issue, and provide such other notice as the law and regulation require and the Department determines is appropriate.

Collin P. O'Mara, Secretary

### **~~1139 Nitrogen Oxides (NO<sub>x</sub>) Budget Trading Program~~**

12/11/2000

#### **~~1.0 Purpose~~**

- 1.1 ~~This regulation establishes Delaware's participation in the NO<sub>x</sub> Budget Trading Program. The NO<sub>x</sub> Budget Trading Program is a multi-state NO<sub>x</sub> emissions cap and trade program, established pursuant to Title 40, Part 96 of the Code of Federal Regulations (40 CFR Part 96) and 40 CFR Part 51.121. Its purpose is to reduce emissions of the ozone precursor NO<sub>x</sub>.~~
- 1.2 ~~The goals of this regulation are to 1) improve air quality, 2) encourage NO<sub>x</sub> reductions in Delaware, 3) help to satisfy rate of progress requirements under Section 182(c) of the CAA, and 4) help to satisfy Delaware's obligations under Section 110(a)(2)(D) of the CAA to not contribute to other states' non-attainment. The Department believes that, considering the regional nature of ozone nonattainment and the phenomena of ozone and ozone precursor transport, participation in the NO<sub>x</sub> Budget Trading Program provides for an effective means to meet these goals, and an economical alternative to traditional command and control type regulations.~~
- 1.3 ~~This regulation establishes general, administrative, permitting, monitoring, compliance, penalty and opt-in provisions, that are consistent with 40 CFR Part 96, and allow the transfer of NO<sub>x</sub> allowances for compliance with any NO<sub>x</sub> Budget unit that is covered by this regulation or by the regulation of any other state participating in the NO<sub>x</sub> Budget Trading Program.~~
- 1.4 ~~This regulation establishes a follow on program to the program established by 7 **DE Admin. Code** 1137 (formerly Regulation No. 37), NO<sub>x</sub> Budget Program, of the State of Delaware "Regulations Governing the Control of Air Pollution." The program established by Regulation No. 37 ends with the end of the 2002 NO<sub>x</sub> control period.~~

12/11/2000

#### **~~2.0 Emission Limitation~~**

- 2.1 Each NO<sub>x</sub> Budget unit shall hold in its compliance account or its overdraft account, as of the NO<sub>x</sub> allowance transfer deadline of each control period, a quantity of NO<sub>x</sub> allowances available for deduction that is equal to or greater than the total NO<sub>x</sub> emissions from that NO<sub>x</sub> Budget unit for that control period.
- 2.2 Each NO<sub>x</sub> Budget unit shall be subject to the requirements of 2.1 of this regulation starting on the later of May 1, 2003 or the date the unit commences operation.

12/11/2000

### **3.0 Applicability**

- 3.1 This regulation applies to:
- 3.1.1 Any unit located within the State of Delaware that:
- 3.1.1.1 Serves a generator with a nameplate capacity of 15 megawatts electrical (MWe), or greater; or
- 3.1.1.2 Is not a unit under 3.1.1.1 of this regulation and that has a maximum design heat input capacity of 250 million British Thermal Units per hour (MMBTU/hr), or greater; or
- 3.1.2 Any unit located in the State of Delaware that is issued a final NO<sub>x</sub> Budget permit under 14.0 of this regulation; or
- 3.1.3 Any person that establishes a general account pursuant to 15.0 of this regulation.
- 3.2 Once any unit becomes a NO<sub>x</sub> Budget unit, it shall remain subject to all of the requirements of this regulation, except as follows:
- 3.2.1 For any NO<sub>x</sub> Budget unit that is retired, the NO<sub>x</sub> authorized account representative may submit to the Department, with a copy to the Administrator, a statement indicating that unit is retired and that it shall comply with all of the provisions of 3.2 of this regulation.
- 3.2.2 Upon receipt of the submission under 3.2.1 of this regulation, the Department shall amend or cancel, as applicable, the unit's NO<sub>x</sub> Budget permit.
- 3.2.3 Except as provided for in 3.2.7 of this regulation, an exemption from the requirements of this regulation shall be in effect on and after the date any submission is made pursuant to 3.2.1 of this regulation.
- 3.2.4 The unit shall not emit any NO<sub>x</sub> while the exemption is in effect.
- 3.2.5 The NO<sub>x</sub> authorized account representative of the unit:
- 3.2.5.1 Shall comply with all of the requirements of this regulation concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.
- 3.2.5.2 Shall, except as provided for in 3.2.5.3 of this regulation, comply with all of the requirements of this regulation except for the requirements of 2.0, 7.0, 8.0 and 11.0 through 15.0 of this regulation.
- 3.2.5.3 May, at his option and provided the unit does not receive an annual allocation under Appendix A of this regulation, request that the Administrator close the NO<sub>x</sub> Budget units compliance account and establish and transfer any remaining allowances to a new general account for the owner and operator of the NO<sub>x</sub> Budget source. The NO<sub>x</sub> authorized account representative for the NO<sub>x</sub> Budget source shall become the NO<sub>x</sub> authorized account representative for that general account, and shall comply with all of the requirements of this regulation except for the requirements of 2.0, 6.0, 7.0, 8.0, and 11.0 through 14.0 of this regulation.
- 3.2.6 For any unit identified in 3.1.1 of this regulation that receives an annual allocation under Appendix A of this regulation, that unit shall continue to receive that allocation as provided for in 3.0 of **Appendix A** of this regulation. Any unit identified in 3.1.2 of this regulation shall not receive an allocation under 14.6 of this regulation while the exemption is in effect.
- 3.2.7 If any unit exempted under 3.2 of this regulation is ever reactivated, upon reactivation, for the purposes of applying the requirements of 8.0 of this regulation, the unit shall be treated as a new unit that commences operation or commences commercial operation on the first date on which the unit resumes operation. Prior to commencing operations, the NO<sub>x</sub> authorized account representative shall secure or amend, as applicable, a NO<sub>x</sub> Budget permit.

12/11/2000

### **4.0 Definitions**

The terms used in this regulation shall have the meanings set forth in 4.0 of this regulation.

~~“Administrator” means the Administrator of the United States Environmental Protection Agency or the Administrator’s duly authorized representative.~~

~~“Allocate or allocation” means the determination by the Department or the Administrator of the number of NO<sub>x</sub> allowances to be initially credited to a NO<sub>x</sub> Budget unit.~~

~~“Allowance” means a NO<sub>x</sub> allowance described in 5.1.2 through 5.1.4 of this regulation.~~

~~“Automated data acquisition and handling system” means that component of the continuous emission monitoring system, or other emissions monitoring system approved for use pursuant to 8.0 of this regulation, designed to interpret and convert individual output signals from pollutant concentration monitors, flow monitors, diluent gas monitors, and other component parts of the monitoring system to produce a continuous record of the measured parameters in the measurement units required by 8.0 of this regulation.~~

~~“CAA” means the Clean Air Act, 42 U.S.C. 7401, et seq., as amended by Pub. L. No. 101549 (November 15, 1990).~~

~~“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.~~

~~1. Except as provided in 3.2.7 of this regulation, for a unit that is a NO<sub>x</sub> Budget unit under 3.1.1.1 of this regulation on the date the unit commences commercial operation, such date shall remain the unit’s date of commencement of commercial operation even if the unit is subsequently modified, reconstructed, or repowered.~~

~~2. Except as provided in 3.2.7 or 14.0 of this regulation, for a unit that is not a NO<sub>x</sub> Budget unit on the date the unit commences commercial operation, the date the unit becomes a NO<sub>x</sub> Budget unit shall be the unit’s date of commencement of commercial operation.~~

~~“Commence operation” means to have begun any mechanical, chemical, or electronic process, including, with regard to a unit, start-up of a unit’s combustion chamber.~~

~~1. Except as provided in 3.2.7 of this regulation, for a unit that is a NO<sub>x</sub> Budget unit under 3.1.1 of this regulation on the date the unit commences operation, such date shall remain the unit’s date of commencement of operation even if the unit is subsequently modified, reconstructed, or repowered.~~

~~2. Except as provided in 3.2.7 or 14.0 of this regulation, for a unit that is not a NO<sub>x</sub> Budget unit on the date the unit commences operation, the date the unit becomes a NO<sub>x</sub> Budget unit shall be the unit’s date of commencement of operation.~~

~~“Common stack” means a single flue through which emissions from two or more pieces of equipment are exhausted.~~

~~“Compliance account” means a NATS account, established by the Administrator for a NO<sub>x</sub> Budget unit pursuant to 9.0 of this regulation, in which any allocation for the NO<sub>x</sub> Budget unit is initially recorded and in which are held NO<sub>x</sub> allowances available for deduction by the NO<sub>x</sub> Budget unit for a control period for the purpose of meeting the NO<sub>x</sub> Budget unit’s NO<sub>x</sub> Budget emissions limitation.~~

~~“Continuous emission monitoring system (CEMS)” means the equipment required pursuant to 8.0 of this regulation used to sample, analyze, measure, and provide, by readings taken at least once every 15 minutes of the measured parameters, a permanent record of NO<sub>x</sub> emissions, expressed in pounds of NO<sub>x</sub> per hour. The following systems are component parts included, to the extent required by 8.0 of this regulation, in a continuous emission monitoring system:~~

- ~~1. Flow monitor;~~
- ~~2. NO<sub>x</sub> pollutant concentration monitors;~~
- ~~3. Diluent gas monitor (O<sub>2</sub> or CO<sub>2</sub>);~~
- ~~4. A continuous moisture monitor; and~~
- ~~5. An automated data acquisition and handling system.~~

~~“Control period” means the period beginning May 1 of a year and ending on September 30 of that same year, inclusive.~~

~~“Deducted, Deduction, or Deduct NO<sub>x</sub> Allowance” means the permanent withdrawal of NO<sub>x</sub> allowances by the Administrator from a NATS compliance account or overdraft account, under 12.0 of this regulation, to account for the number of tons of NO<sub>x</sub> emissions from a NO<sub>x</sub> Budget unit for a control period, quantified in accordance with 8.0 of this regulation, or for any other allowance surrender obligation of this regulation.~~

~~“Department” means the State of Delaware Department of Natural Resources and Environmental Control.~~

**“Emissions”** means air pollutants exhausted from a unit or source into the atmosphere, as measured, recorded, and reported to the Administrator by the NO<sub>x</sub> authorized account representative and as determined by the Administrator in accordance with 8.0 of this regulation.

**“Excess emissions”** means any tonnage of NO<sub>x</sub> emitted by a NO<sub>x</sub> Budget unit during a control period that exceeds that unit’s NO<sub>x</sub> Budget emissions limitation.

**“General account”** means a NATS account, established in accordance with 15.0 of this regulation, that is neither a compliance account nor an overdraft account.

**“Generator”** means a device that produces electricity.

**“Heat input”** means the product (in MMBTU/time) of the gross calorific value of the fuel (in MMBTU/lb) and the fuel feed rate into a combustion device (in lb of fuel/time), or as calculated by any other method approved by the Department and the Administrator, as measured, recorded, and reported to the Administrator by the NO<sub>x</sub> authorized account representative and as determined by the Administrator in accordance with 8.0 of this regulation, and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust from other sources.

**“Hold NO<sub>x</sub> allowances or NO<sub>x</sub> allowances held”** means the NO<sub>x</sub> allowances recorded by the Administrator, or submitted to the Administrator for recordation in a NATS account in accordance with 9.0 or 10.0 of this regulation.

**“Life of the unit, firm power contractual arrangement”** means a unit participation power sales agreement under which a utility or industrial customer reserves, or is entitled to receive, a specified amount or percentage of nameplate capacity and associated energy from any specified unit and pays its proportional amount of such unit’s total costs, pursuant to a contract:

1. For the life of the unit; or
2. For a cumulative term of no less than 30 years, including contracts that permit an election for early termination; or
3. For a period equal to or greater than 25 years or 70% of the economic useful life of the unit determined as of the time the unit is built, with option rights to purchase or release some portion of the nameplate capacity and associated energy generated by the unit at the end of the period.

**“Maximum design heat input”** means the ability of a unit to combust a stated maximum amount of fuel per hour on a steady state basis, as determined by the physical design and physical characteristics of the unit.

**“Monitoring system”** means any monitoring system that meets the requirements of 8.0 of this regulation, including a continuous emission monitoring system, an excepted monitoring system, or an alternative monitoring system.

**“Nameplate capacity”** means the maximum electrical generating output (in MWe) 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.

**“NATS”** means NO<sub>x</sub> Allowance Tracking System; the system by which the Administrator records any allocation, deduction, or transfer of any NO<sub>x</sub> allowances under the NO<sub>x</sub> Budget Trading Program.

**“NATS account”** means a compliance, overdraft, or general account in the NATS, established by the Administrator, for purposes of recording any allocation and holding, transferring, or deducting any NO<sub>x</sub> allowances.

**“NO<sub>x</sub> allowance transfer deadline”** means midnight of November 30 or, if November 30 is a weekend or federal holiday, midnight of the first business day thereafter and is the deadline by which NO<sub>x</sub> allowances must be submitted for recordation in a NO<sub>x</sub> Budget units compliance account or overdraft account, in order to meet the unit’s NO<sub>x</sub> Budget emissions limitation for the control period immediately preceding such deadline.

**“NO<sub>x</sub> authorized account representative”** means:

1. For a NO<sub>x</sub> Budget source, the natural person who is authorized by the owners and operators of that source and all NO<sub>x</sub> Budget units at that source, in accordance with 6.0 of this regulation, to represent and legally bind each owner and operator in matters pertaining to the NO<sub>x</sub> Budget Trading Program.
2. For a general account, the natural person who is authorized, in accordance with 15.0 of this regulation, to transfer or otherwise dispose of NO<sub>x</sub> allowances held in the general account.
3. Except where used in 6.0 and 15.0 of this regulation, the term NO<sub>x</sub> authorized account representative shall be construed to include any alternate NO<sub>x</sub> authorized account representative.

**“NO<sub>x</sub> Budget emissions limitation”** means the limitation described in 2.1 of this regulation.

~~“NO<sub>x</sub> Budget permit” means the permit described in 7.0 and 14.0 of this regulation.~~

~~“NO<sub>x</sub> Budget source” means a source that includes one or more NO<sub>x</sub> Budget unit or units.~~

~~“NO<sub>x</sub> Budget Trading Program” means the program described in 1.1 of this regulation.~~

~~“NO<sub>x</sub> Budget unit” means any unit described in 3.1.1 or 3.1.2 of this regulation.~~

~~“Operator” means any person who operates, controls, or supervises a NO<sub>x</sub> Budget unit, a NO<sub>x</sub> Budget source, or a unit for which an application for a NO<sub>x</sub> Budget permit under 14.0 of this regulation is submitted and not denied or withdrawn and shall include, but not be limited to, any holding company, utility system, or plant manager of such a unit or source.~~

~~“Opt in unit” means a unit described in 3.1.2 of this regulation.~~

~~“Overdraft account” means the NATS account, established by the Administrator under 9.1.1 of this regulation, for each NO<sub>x</sub> Budget source where there are two or more NO<sub>x</sub> Budget units.~~

~~“Owner” means any of the following persons:~~

- ~~1. Any holder of any portion of the legal or equitable title in a NO<sub>x</sub> Budget unit or in a unit for which an application for a NO<sub>x</sub> Budget permit under 14.0 of this regulation is submitted and not denied or withdrawn;~~  
~~or~~
- ~~2. Any holder of a leasehold interest in a NO<sub>x</sub> Budget unit or in a unit for which an application for a NO<sub>x</sub> Budget permit under 14.0 of this regulation is submitted and not denied or withdrawn; or~~
- ~~3. Any purchaser of power from a NO<sub>x</sub> Budget unit or from a unit for which an application for a NO<sub>x</sub> Budget permit under 14.0 of this regulation is submitted and not denied or withdrawn under a life-of-the-unit, firm power contractual arrangement. However, unless expressly provided for in a leasehold agreement, owner shall not include a passive lessor, or a person who has an equitable interest through such lessor, whose rental payments are not based, either directly or indirectly, upon the revenues or income from the NO<sub>x</sub> Budget unit or the unit for which an application for a NO<sub>x</sub> Budget permit under 14.0 of this regulation is submitted and not denied or withdrawn; or~~
- ~~4. With respect to any general account, any person who has an ownership interest with respect to the NO<sub>x</sub> allowances held in the general account and who is subject to the binding agreement for the NO<sub>x</sub> authorized account representative to represent that person's ownership interest with respect to NO<sub>x</sub> allowances.~~

~~“Receive or receipt of” means, when referring to the Department or the Administrator, to come into possession of a document, information, or correspondence (whether sent in writing or by authorized electronic transmission), as indicated in an official correspondence log, or by a notation made on the document, information, or correspondence, by the Department or the Administrator in the regular course of business.~~

~~“Recordation, record, or recorded” means, with regard to any NO<sub>x</sub> allowance, the movement of that NO<sub>x</sub> allowance by the Administrator from one NATS account to another, for purposes of allocation, transfer, or deduction.~~

~~“Source” means any governmental, institutional, commercial, or industrial structure, installation, plant, building, or facility that emits or has the potential to emit any regulated air pollutant under the CAA.~~

~~“State trading program budget” means the total number of NO<sub>x</sub> tons apportioned to all NO<sub>x</sub> Budget units in a given State, in accordance with the NO<sub>x</sub> Budget Trading Program, for use in a given control period.~~

~~“Submit” means to send or transmit a document, information, or correspondence to the person specified in accordance with the applicable regulation:~~

- ~~1. In person;~~
- ~~2. By United States Postal Service; or~~
- ~~3. By other means of dispatch or transmission or delivery.~~

~~Compliance with any “submission,” “service,” or “mailing” deadline shall be determined by the date of dispatch, transmission, or mailing and not the date of receipt.~~

~~“Ton or tonnage” means any “short ton” (i.e., 2,000 pounds). For the purpose of determining compliance with the NO<sub>x</sub> Budget emissions limitation, total tons for a control period shall be calculated as the sum of all recorded hourly emissions (or the tonnage equivalent of the recorded hourly emissions rates) in accordance with 8.0 of this regulation, with any remaining fraction of a ton equal to or greater than 0.50 ton deemed to equal one ton and any fraction of a ton less than 0.50 ton deemed to equal zero tons.~~

~~“Unit” means any of the following fossil fuel fired combustion operations: boiler, indirect heat exchanger, combustion turbine, or combined cycle system. For the purposes of this definition:~~

1. Fossil fuel means natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material.
2. Fossil fuel fired means,
  - A. The combustion of fossil fuel, alone or in combination with any other fuel, where fossil fuel actually combusted comprises more than 50% of the annual heat input on a BTU basis during any year starting in 1990 or, if a unit had no heat input starting in 1990, during the last year of operation of the unit prior to 1990; or
  - B. The combustion of fossil fuel, alone or in combination with any other fuel, where fossil fuel is projected to comprise more than 50% of the annual heat input on a BTU basis during any year; provided that the unit shall be "fossil fuel fired" as of the date, during such year, on which the unit begins combusting fossil fuel.
3. Boiler means an enclosed fossil or other fuel fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or other medium.
4. Indirect heat exchanger means combustion equipment in which the flame or products of combustion are separated from any contact with the principal material in the process by metallic or refractory walls, which includes, but is not limited to, steam boilers, vaporizers, melting pots, heat exchangers, column reboilers, fractioning column feed preheaters, and fuel fired reactors such as steam hydrocarbon reformer heaters and pyrolysis heaters.
5. Combustion turbine means an enclosed fossil or other fuel fired device that is comprised of a compressor, a combustor, and a turbine, and in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine.
6. Combined cycle system means a system comprised of one or more combustion turbines, heat recovery steam generators, and steam turbines configured to improve overall efficiency of electricity generation or steam production.

12/11/2000

## 5.0 General Provisions

### 5.1 Allocations and NO<sub>x</sub> Allowances.

- 5.1.1 An allocation may be made only by the Department in accordance with **Appendix A**, **Appendix B**, and 14.6 of this regulation, or by the Administrator as provided for in **Appendix A** of this regulation.
- 5.1.2 A NO<sub>x</sub> allowance is a limited authorization, by the Department and the Administrator, to emit up to one ton of NO<sub>x</sub> during the control period of a specified year or of any year thereafter, in accordance with the NO<sub>x</sub> Budget Trading Program. No provision of the NO<sub>x</sub> Budget Trading Program, the NO<sub>x</sub> Budget permit application, the NO<sub>x</sub> Budget permit, or an exemption under 3.2 of this regulation, and no provision of law shall be construed to limit the authority of the United States or the State of Delaware to terminate or limit such authorization.
- 5.1.3 NO<sub>x</sub> allowances shall be held in, deducted from, or transferred among NATS accounts in accordance with 9.0, 10.0, 12.0 and 13.0 of this regulation. Any NO<sub>x</sub> allowance that is held in a NATS account shall remain in such NATS account unless and until that NO<sub>x</sub> allowance is deducted, transferred, or terminated.
- 5.1.4 A NO<sub>x</sub> allowance does not constitute a property right.

### 5.2 Record Keeping. Except as provided for below, the NO<sub>x</sub> authorized account representative of each NO<sub>x</sub> Budget source shall keep on site at that source each of the following documents for, at a minimum, a period of five years from the date that document is created. This period of time may be extended for cause at any time prior to the end of that five year period upon written notification from either the Department or the Administrator.

- 5.2.1 The account certificate of representation submitted pursuant to 6.0 of this regulation, and all documents that demonstrate the truth of the statements in that account certificate of representation. The certificate and documents shall be retained on site at the source beyond that five year period until they are superseded by the submission of a new account certificate of representation.
- 5.2.2 The NO<sub>x</sub> Budget permit application submitted pursuant to 7.0 of this regulation, and all documents used to complete that application. The application and documents shall be retained on site at the source beyond that five year period until they are superseded by the submission of a new application.
- 5.2.3 All emissions monitoring information pursuant to 8.0 of this regulation, except that to the extent 8.0 of this regulation provides for a three year period, that three year period shall apply.
- 5.2.4 Copies of any report, compliance certification, and any other submission or record made or required under the NO<sub>x</sub> Budget Trading Program.

- 5.2.5 Records demonstrating that any unit exempted under 3.2 of this regulation is retired. The owner or owners and operator or operators of that unit bears the burden of proof that the unit is retired.
- 5.3 ~~Computation of Time. Unless otherwise stated:~~
- 5.3.1 ~~Any time period scheduled to begin on the occurrence of an act or event shall begin on the day that act or event occurs.~~
- 5.3.2 ~~Any time period scheduled to begin before the occurrence of an act or event shall begin not later than the day before that act or event occurs.~~
- 5.3.3 ~~If the final day of any time period falls on a weekend or a State of Delaware or Federal holiday, that time period shall be extended to the next business day.~~
- 5.4 ~~Liability.~~
- 5.4.1 ~~Each NO<sub>x</sub> Budget source and each NO<sub>x</sub> Budget unit shall comply with all of the requirements of the NO<sub>x</sub> Budget Trading Program and any applicable NO<sub>x</sub> Budget permit.~~
- 5.4.2 ~~No permit revision shall excuse any violation of the requirements of the NO<sub>x</sub> Budget Trading Program that occurs prior to the date that revision takes effect.~~
- 5.4.3
- 5.4.3.1 ~~Any provision of the NO<sub>x</sub> Budget Trading Program that applies to a NO<sub>x</sub> Budget source (including a provision applicable to the NO<sub>x</sub> authorized account representative of that NO<sub>x</sub> Budget source) shall also apply to the owners and operators of that source and of the NO<sub>x</sub> Budget units at that source.~~
- 5.4.3.2 ~~Any provision of the NO<sub>x</sub> Budget Trading Program that applies to a NO<sub>x</sub> Budget unit (including a provision applicable to the NO<sub>x</sub> authorized account representative of that NO<sub>x</sub> Budget unit) shall also apply to the owners and operators of that unit.~~
- 5.4.3.3 ~~Except with regard to the requirements applicable to units with a common stack under 8.0 of this regulation, the owners and operators and the NO<sub>x</sub> authorized account representative of one NO<sub>x</sub> Budget unit shall not be liable for any violation by any other NO<sub>x</sub> Budget unit of which they are not owners or operators or the NO<sub>x</sub> authorized account representative and that is located at a source of which they are not owners or operators or the NO<sub>x</sub> authorized account representative.~~
- 5.4.4 ~~No provision of the NO<sub>x</sub> Budget Trading Program, a NO<sub>x</sub> Budget permit application, a NO<sub>x</sub> Budget permit, or an exemption under 3.2 of this regulation shall be construed to exempt or exclude the owners and operators and, to the extent applicable, the NO<sub>x</sub> authorized account representative of a NO<sub>x</sub> Budget source or NO<sub>x</sub> Budget unit from compliance with any other applicable State or Federal requirement.~~
- 5.4.5 ~~Any person who knowingly violates any requirement or prohibition of the NO<sub>x</sub> Budget Trading Program, a NO<sub>x</sub> Budget permit, or an exemption under 3.2 of this regulation shall be subject to enforcement pursuant to applicable State or Federal law.~~
- 5.4.6 ~~Any person who knowingly makes a false material statement in any record, submission, or report under the NO<sub>x</sub> Budget Trading Program shall be subject to criminal enforcement pursuant to the applicable State or Federal law.~~

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## **6.0 ~~NO<sub>x</sub> Authorized Account Representative for NO<sub>x</sub> Budget Sources~~**

- 6.1 ~~On or before the later of November 1, 2001 or the date 18 months before the date on which any NO<sub>x</sub> Budget unit commences operation, the NO<sub>x</sub> authorized account representative and any alternate NO<sub>x</sub> authorized account representative of any NO<sub>x</sub> Budget source shall submit to the Administrator, with a copy to the Department, a complete account certificate of representation. Such account certificate of representation:~~
- 6.1.1 ~~Shall designate one and only one NO<sub>x</sub> authorized account representative, and may designate one and only one alternate NO<sub>x</sub> authorized account representative. Such NO<sub>x</sub> authorized account representative and any alternate NO<sub>x</sub> authorized account representative shall be selected by an agreement between the owners and operators of the source and all NO<sub>x</sub> Budget units at that source, binding on such owners and operators. Such agreement shall include a procedure for authorizing any alternate NO<sub>x</sub> authorized account representative to act in lieu of the NO<sub>x</sub> authorized account representative.~~
- 6.1.2 ~~Shall include all of the following information in a format specified by the Administrator:~~

- 6.1.2.1 Identification of the NO<sub>x</sub> Budget source and each NO<sub>x</sub> Budget unit at that source for which the account certificate of representation is submitted.
  - 6.1.2.2 The name, mailing address, email address (if any), telephone number, and facsimile transmission number (if any) of the NO<sub>x</sub> authorized account representative and any alternate NO<sub>x</sub> authorized account representative.
  - 6.1.2.3 A list of the owners and operators of the NO<sub>x</sub> Budget source and of each NO<sub>x</sub> Budget unit at the source.
  - 6.1.2.4 The following certification statement by the NO<sub>x</sub> authorized account representative and any alternate NO<sub>x</sub> authorized account representative: "I certify that I was selected as the NO<sub>x</sub> authorized account representative or alternate NO<sub>x</sub> authorized account representative, as applicable, by an agreement binding on the owners and operators of the NO<sub>x</sub> Budget source and each NO<sub>x</sub> Budget unit at the source. I certify that I have all the necessary authority to carry out my duties and responsibilities under the NO<sub>x</sub> Budget Trading Program on behalf of the owners and operators of the NO<sub>x</sub> Budget source and of each NO<sub>x</sub> Budget unit at the source and that each such owner and operator shall be fully bound by my representations, actions, inactions, or submissions and by any decision or order issued to me by the Department, the Administrator, or a court regarding the source or unit."
  - 6.1.2.5 The signature of the NO<sub>x</sub> authorized account representative and any alternate NO<sub>x</sub> authorized account representative, and the date(s) or dates the account certificate of representation was signed.
- 6.1.3 Shall not include, unless otherwise required by the Department or the Administrator, documents of agreement referred to in the account certificate of representation. If submitted, neither the Department nor the Administrator shall be under any obligation to review or evaluate the sufficiency of such documents.
- 6.2 Upon receipt by the Administrator of a complete account certificate of representation under 6.1 of this regulation:
- 6.2.1 The NO<sub>x</sub> authorized account representative of the source shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each owner and operator of the NO<sub>x</sub> Budget source represented and each NO<sub>x</sub> Budget unit at that source in all matters pertaining to the NO<sub>x</sub> Budget Trading Program, notwithstanding any agreement between the NO<sub>x</sub> authorized account representative and such owners and operators. The owners and operators shall be bound by any decision or order issued to the NO<sub>x</sub> authorized account representative by the Department, the Administrator, or a court regarding the source or unit.
  - 6.2.2 Any representation, action, inaction, or submission by the alternate NO<sub>x</sub> authorized account representative shall be deemed to be a representation, action, inaction, or submission by the NO<sub>x</sub> authorized account representative.
  - 6.2.3 The Department and the Administrator shall rely on the account certificate of representation submitted pursuant to 6.1 of this regulation unless and until the Administrator receives a superseding complete account certificate of representation changing the NO<sub>x</sub> authorized account representative or alternate NO<sub>x</sub> authorized account representative. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous NO<sub>x</sub> authorized account representative or alternate NO<sub>x</sub> authorized account representative prior to the time and date when the Administrator receives the superseding account certificate of representation shall be binding on the new NO<sub>x</sub> authorized account representative and alternate NO<sub>x</sub> authorized account representative and the owners and operators of the NO<sub>x</sub> Budget source and the NO<sub>x</sub> Budget units at the source.
  - 6.2.4 Except as provided in 6.2.3 of this regulation, no objection or other communication submitted to the Department or the Administrator concerning the authorization, or any representation, action, inaction, or submission of the NO<sub>x</sub> authorized account representative or the alternate NO<sub>x</sub> authorized account representative shall affect any representation, action, inaction, or submission of the NO<sub>x</sub> authorized account representative or the alternate NO<sub>x</sub> authorized account representative, or the finality of any decision or order by the Department or the Administrator under the NO<sub>x</sub> Budget Trading Program.
  - 6.2.5 Neither the Department nor the Administrator shall adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of any NO<sub>x</sub> authorized account representative or the alternate NO<sub>x</sub> authorized account representative.

### 6.3 - Changes in the owners and operators

- 6.3.1 ~~Within 30 days following any change in the owner or owners and operator or operators of a NO<sub>x</sub> Budget source or a NO<sub>x</sub> Budget unit at that source, including the addition of a new owner or operator, the NO<sub>x</sub> authorized account representative or the alternate NO<sub>x</sub> authorized account representative shall submit to the Administrator, with a copy to the Department, a revised account certificate of representation amending the list of owners and operators to include that change.~~
- 6.3.2 ~~In the event a new owner or operator of a NO<sub>x</sub> Budget source or a NO<sub>x</sub> Budget unit is not included in the list of owners and operators submitted in the account certificate of representation, such new owner or operator shall be deemed to be subject to and bound by the account certificate of representation, the representations, actions, inactions, and submissions of the NO<sub>x</sub> authorized account representative and any alternate NO<sub>x</sub> authorized account representative of the source or unit, and the decisions, orders, actions, and inactions of the Department or the Administrator, as if the new owner or operator were included in such list.~~

### 6.4 Submissions/Certifications

- 6.4.1 ~~The NO<sub>x</sub> authorized account representative or the alternate NO<sub>x</sub> authorized account representative shall sign and certify all submissions under the NO<sub>x</sub> Budget trading program with the following certification statement: "I am authorized to make this submission on behalf of the owners and operators of the NO<sub>x</sub> Budget sources or NO<sub>x</sub> 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."~~
- 6.4.2 ~~The Department and the Administrator shall accept or act on any submission made under the NO<sub>x</sub> Budget Trading program only if that submission has been made, signed, and certified in accordance with 6.4.1 of this regulation.~~

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## 7.0 Permits

- 7.1 ~~Except as provided for in 3.2 of this regulation, on and after May 1, 2002 each NO<sub>x</sub> Budget unit shall be covered by a NO<sub>x</sub> Budget permit. Such NO<sub>x</sub> Budget permit shall be a complete and segregable portion of, and made federally enforceable by, the permit issued pursuant to:~~
- 7.1.1 ~~For any NO<sub>x</sub> Budget unit required to be covered by a 7 ~~DE Admin. Code~~ 1130 permit, 7 ~~DE Admin. Code~~ 1130 of the State of Delaware "Regulations Governing the Control of Air Pollution."~~
- 7.1.2 ~~For any NO<sub>x</sub> Budget unit not required to be covered by a 7 ~~DE Admin. Code~~ 1130 permit, 7 ~~DE Admin. Code~~ 1102 of the State of Delaware "Regulations Governing the Control of Air Pollution."~~
- 7.2 ~~On or before the later of November 1, 2001, or the date 18 months before the date on which any NO<sub>x</sub> Budget unit commences operation, the NO<sub>x</sub> authorized account representative of each NO<sub>x</sub> Budget source shall submit to the Department:~~
- 7.2.1 ~~A complete NO<sub>x</sub> Budget permit application that includes, at a minimum, all of the following information:~~
- 7.2.1.1 ~~Identification of the NO<sub>x</sub> Budget source, including the plant name and the ORIS (Office of Regulatory Information Systems) or facility code assigned to the source by the Energy Information Administration of the United States Department of Energy, if applicable;~~
- 7.2.1.2 ~~Identification of each NO<sub>x</sub> Budget unit at that NO<sub>x</sub> Budget source; and~~
- 7.2.1.3 ~~Identification of each applicable requirement of this regulation, to include the requirements of 2.1, 5.1.2, 5.1.3, 5.2, 5.4, 6.4, 8.2, 8.3 and 10.0 of this regulation.~~
- 7.2.2 ~~In a timely manner, any supplemental information that the Department determines is necessary in order to review a NO<sub>x</sub> Budget permit application or issue or deny any NO<sub>x</sub> Budget permit or permits.~~
- 7.3 ~~Each NO<sub>x</sub> Budget permit issued by the Department:~~
- 7.3.1 ~~Shall specify the information submitted under 7.2.1 of this regulation, as approved by the Department.~~
- 7.3.2 ~~Shall be deemed to incorporate automatically the definitions of terms under 4.0 of this regulation. Upon recordation by the Administrator, every allocation, transfer, or deduction of a NO<sub>x</sub> allowance to or from a~~

~~NO<sub>x</sub> Budget unit's compliance account or the overdraft account of the source where the unit is located shall be deemed to amend automatically, and become a part of the associated NO<sub>x</sub> Budget permit by operation of law without any further review.~~

- 7.4 Any initial, revised, or renewed NO<sub>x</sub> Budget permit shall become effective upon issuance by the Department of the corresponding ~~7 DE Admin. Code 1102 or 7 DE Admin. Code 1130~~ permit, as applicable, that administers that NO<sub>x</sub> Budget permit.

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## **8.0 Monitoring and Reporting**

- 8.1 The emissions measurements recorded and reported in accordance with 8.0 of this regulation shall be used to determine compliance by any NO<sub>x</sub> Budget unit with its NO<sub>x</sub> Budget emissions limitation.
- 8.2 Each NO<sub>x</sub> Budget unit shall:
- 8.2.1 Comply with all of the requirements of Subpart H of 40 CFR Part 75 (7/1/99 edition), and all of the requirements of this regulation.
  - 8.2.2 Monitor and record heat input at the unit level utilizing the procedures set forth in 40 CFR Part 75 (7/1/1999 edition).
- 8.3 For the purpose of complying with the requirements of this regulation and Subpart H of 40 CFR Part 75, the definitions in 4.0 of this regulation and in 40 CFR 72.2 (7/1/99 edition) shall apply, except the terms "affected unit," "designated representative," and "continuous emission monitoring system" in 40 CFR Part 75 shall be replaced with "NO<sub>x</sub> Budget unit," "NO<sub>x</sub> authorized account representative," and "continuous emission monitoring system," respectively, as defined in 4.0 of this regulation.
- 8.4 The compliance deadlines referred to in 40 CFR Part 75.70(b) shall be as follows:
- 8.4.1 Monitoring systems shall be installed and certification tests shall be completed, pursuant to the requirements of Subpart H of 40 CFR Part 75, not later than:
    - 8.4.1.1 For any NO<sub>x</sub> Budget unit identified in 3.1.1 of this regulation that commences operation before January 1, 2002, May 1, 2002.
    - 8.4.1.2 For any NO<sub>x</sub> Budget unit not covered by 8.4.1.1 of this regulation, the later of the following dates:
      - 8.4.1.2.1 May 1, 2002; or
      - 8.4.1.2.2 The earlier of:
        - 8.4.1.2.2.1 180 days after the date on which that unit commences operation, or
        - 8.4.1.2.2.2 For any unit identified in 3.1.1.1 of this regulation, 90 days after the date on which that unit commences commercial operation.
      - 8.4.1.2.3 For any NO<sub>x</sub> Budget unit that reports on a control season basis under 40 CFR 75.74(b)(2), where the applicable deadline under 8.4.1.2.2 of this regulation does not occur during a control period, May 1 immediately following the date determined in accordance with 8.4.1.2.2 of this regulation.
  - 8.4.2 For any NO<sub>x</sub> Budget unit with a new stack or flue for which construction is completed after the applicable deadline under 8.4.1 or 14.3 of this regulation:
    - 8.4.2.1 90 days after the date on which emissions first exit to the atmosphere through the new stack or flue, or
    - 8.4.2.2 If that unit reports on a control season basis under 40 CFR 75.74(b)(2) and the applicable deadline under 8.4.2.1 of this regulation does not occur during the control period, May 1 immediately following the applicable deadline in 8.4.2.1 of this regulation.
  - 8.4.3 Data shall be recorded and reported on and after the date specified in 8.4.1 of this regulation. The provisions of 40 CFR 75.70(g), concerning the reporting of data prior to initial certification, shall apply from the date and hour that any unit starts operating until all required certification tests are successfully completed.
- 8.5 The requirements of 40 CFR Part 75.70(d)(1), concerning initial certification and recertification procedures, shall be expanded to include the following additional requirements:
- 8.5.1 If, prior to January 1, 1998, the Administrator approved a petition under 40 CFR 75.17(a) or (b) for apportioning the NO<sub>x</sub> emission rate measured in a common stack or a petition under 40 CFR 75.66 for an alternative to a requirement in 40 CFR 75.17 of this chapter, the NO<sub>x</sub> authorized account representative shall resubmit the petition to the Administrator under 40 CFR 75.70(h)(1) and (2) to determine if the approval applies under the NO<sub>x</sub> Budget Trading Program.

- ~~8.5.2 The NO<sub>x</sub> authorized account representative of each unit applying to monitor using an alternative monitoring system under Subpart E of 40 CFR Part 75 shall apply for certification to the Department prior to use of the system under the NO<sub>x</sub> Budget Trading Program. The NO<sub>x</sub> authorized account representative shall comply with the notification and application requirements for certification, or for recertification following a replacement, modification or change, according to the procedures in 8.6 of this regulation.~~
- ~~8.6 Except as otherwise specified in 8.7 of this regulation (pertaining to the low mass emissions excepted methodology under 40 CFR 75.19), the initial certification and recertification procedures referred to in 40 CFR Part 75.70(d)(2) shall be as follows:~~
- ~~8.6.1 Each monitoring system required by Subpart H of 40 CFR Part 75 (which includes the automated data acquisition and handling system) shall complete all of the initial certification testing required under 40 CFR 75.20 not later than the deadlines specified in 8.4 of this regulation. In addition, whenever the owner or operator installs a monitoring system in order to meet the requirements of this regulation in a location where no such monitoring system was previously installed, initial certification according to 40 CFR 75.20 is required.~~
- ~~8.6.2 Whenever the owner or operator makes a replacement, modification, or change in a certified monitoring system that the Administrator or the Department determines significantly affects the ability of the system to accurately measure or record NO<sub>x</sub> mass emissions or heat input or to meet the requirements of 40 CFR 75.21 or Appendix B to 40 CFR Part 75, the owner or operator shall recertify the monitoring system according to 40 CFR 75.20(b). Furthermore, whenever the owner or operator makes a replacement, modification, or change to the flue gas handling system or the unit's operation that the Administrator or the Department determines to significantly change the flow or concentration profile, the owner or operator shall recertify the continuous emission monitoring system according to 40 CFR 75.20(b). Examples of changes that require recertification include: replacement of the analyzer, change in location or orientation of the sampling probe or site, or the changing of flow-rate monitor polynomial coefficients.~~
- ~~8.6.3 Certification approval process for initial certifications and recertification:~~
- ~~8.6.3.1 The NO<sub>x</sub> authorized account representative shall submit to the Department, with a copy to the EPA Region III Office, a written notice of the dates of certification testing in accordance with the requirements of 40 CFR Part 75.61. If the unit is not subject to an Acid Rain emissions limitation, the notification is required to be sent only to the Department.~~
- ~~8.6.3.2 The NO<sub>x</sub> authorized account representative shall submit to the Department not later than 45 days after completing all initial certification or recertification tests a complete certification application for each monitoring system required under Subpart H of 40 CFR Part 75. Such certification application shall be considered complete if it includes all of the information specified in 40 CFR 75.63. Any alternative monitoring system under Subpart E of 40 CFR Part 75 shall also be subject to the procedures of 40 CFR 75.20(f).~~
- ~~8.6.3.3 Except for units using the low mass emission excepted methodology under 40 CFR 75.19, a monitor shall be provisionally certified upon successful completion of the certification procedures of 8.6.3.1 and 8.6.3.2 of this regulation. A provisionally certified monitor may be used under the NO<sub>x</sub> Budget Trading Program for a period not to exceed 120 days after receipt by the Department of the complete certification application for the monitoring system or component thereof under 8.6.3.2 of this regulation. Data measured and recorded by the provisionally certified monitoring system or component thereof, in accordance with the requirements of 40 CFR Part 75, will be considered valid quality-assured data (retroactive to the date and time of provisional certification), provided that the Department does not invalidate the provisional certification by issuing a notice of disapproval of certification status under 8.6.3.4.3 of this regulation.~~
- ~~8.6.3.4 The Department shall issue a written notice of approval or disapproval of the certification application to the NO<sub>x</sub> authorized account representative within 120 days of receipt of the complete certification application under 8.6.3.2 of this regulation. In the event the Department does not issue such a notice within such 120-day period, each monitoring system that meets the applicable performance requirements of 40 CFR Part 75 and that is included in the certification application shall be deemed certified for use under the NO<sub>x</sub> Budget Trading Program.~~
- ~~8.6.3.4.1 If the certification application is complete and shows that each monitoring system meets the applicable performance requirements of 40 CFR Part 75, then the Department shall issue a written notice of approval of the certification application within 120 days of receipt.~~
- ~~8.6.3.4.2 If the certification application is not complete, then the Department shall issue a written notice of incompleteness that sets a reasonable date by which the NO<sub>x</sub> authorized account representative must submit the additional information required to complete the certification~~

application. If the NO<sub>x</sub>-authorized account representative does not comply with the notice of incompleteness by the specified date, then the Department may issue a notice of disapproval under 8.6.3.4.3 of this regulation.

8.6.3.4.3 If the certification application shows that any monitoring system or component thereof does not meet the performance requirements of this regulation, or if the certification application is incomplete and the requirement for disapproval under 8.6.3.4.2 of this regulation has been met, the Department may issue a written notice of disapproval of the certification application.

8.6.3.5 If the Department issues a notice of disapproval of a certification application under either 8.6.3.4.3 of this regulation or a notice of disapproval of certification status under 8.10 of this regulation, then the following shall apply to each monitoring system or component thereof which is disapproved for initial certification:

8.6.3.5.1 Upon issuance of such notice of disapproval, the provisional certification is invalidated and the data measured and recorded by each uncertified monitoring system or component thereof shall not be considered valid quality assured data beginning with the date and hour of provisional certification.

8.6.3.5.2 The owner or operator shall substitute the following values for any hour (or fraction of an hour) during which the unit combusts any fuel during the period of invalid data, beginning with the date and hour of provisional certification and continuing until the time, date, and hour specified under 40 CFR 75.20(a)(5)(i).

8.6.3.5.2.1 For units using or intending to monitor for NO<sub>x</sub> emission rate and heat input or for units using the low mass emission excepted methodology under 40 CFR 75.19, the maximum potential NO<sub>x</sub> emission rate and the maximum potential hourly heat input of the unit.

Maximum potential NO<sub>x</sub> emission rate means the emission rate of NO<sub>x</sub> (in lb/MMBTU) calculated in accordance with section 3 of Appendix F of 40 CFR Part 75, using the maximum potential NO<sub>x</sub> concentration as defined in section 2 of appendix A of 40 CFR Part 75, and either the maximum O<sub>2</sub> concentration (in % O<sub>2</sub>) or the minimum CO<sub>2</sub> concentration (in % CO<sub>2</sub>), under all operating conditions of the unit except for unit start up, shutdown, and upsets.

Maximum potential hourly heat input means an hourly heat input used for reporting purposes when a unit lacks certified monitors to report heat input. If the unit intends to use Appendix D of 40 CFR Part 75 to report heat input, this value should be calculated, in accordance with 40 CFR Part 75, using the maximum fuel flow rate and the maximum gross calorific value. If the unit intends to use a flow monitor and a diluent gas monitor, this value should be reported, in accordance with 40 CFR Part 75, using the maximum potential flowrate and either the maximum CO<sub>2</sub> concentration (in % CO<sub>2</sub>) or the minimum O<sub>2</sub> concentration (in % O<sub>2</sub>).

8.6.3.5.2.2 For units intending to monitor for NO<sub>x</sub> mass emissions using a NO<sub>x</sub> pollutant concentration monitor and a flow monitor, the maximum potential concentration of NO<sub>x</sub> and the maximum potential flow rate of the unit under Section 2.1 of Appendix A of 40 CFR Part 75.

8.6.3.5.3 The NO<sub>x</sub>-authorized account representative shall submit a notification of certification retest dates and a new certification application in accordance with 8.6.3.1 and 8.6.3.2 of this regulation; and

8.6.3.5.4 The owner or operator shall repeat all certification tests or other requirements that were failed by the monitoring system, as indicated in the Department's notice of disapproval, no later than 30 unit operating days after the date of issuance of the notice of disapproval. A Unit operating day means a calendar day in which a unit combusts any fuel.

8.7 The initial certification and recertification procedures referred to in 40 CFR Part 75.70(d)(2) for any gas fired or oil fired unit using the low mass emissions excepted methodology under 40 CFR 75.19, and not subject to an acid rain limitation, shall be those applicable certification and recertification requirements of 40 CFR 75.19 and 8.6 of this regulation, except that the excepted methodology shall be deemed provisionally certified for use under the NO<sub>x</sub> Budget Trading Program, as of the following dates:

8.7.1 For a unit that does not have monitoring equipment initially certified or recertified for the NO<sub>x</sub> Budget Trading Program as of the date on which the NO<sub>x</sub>-authorized account representative submits the certification application under 40 CFR 75.19 for that unit, starting on the date of such submission until the completion of the period for the Department's review.

8.7.2 For a unit that has monitoring equipment initially certified or recertified for the NO<sub>x</sub> Budget Trading Program as of the date on which the NO<sub>x</sub>-authorized account representative submits the certification

application under 40 CFR 75.19 for that unit and that reports data on an annual basis under 40 CFR 75.74(b)(2), starting January 1 of the year after the year of such submission until the completion of the period for the Department's review.

- 8.7.3 For a unit that has monitoring equipment initially certified or recertified for the NO<sub>x</sub> Budget Trading Program as of the date on which the NO<sub>x</sub> Authorized Account Representative submits the certification application under 40 CFR 75.19 for that unit and that reports on a control season basis under 40 CFR 75.74(b)(2), starting May 1 of the control period after the year of such submission until the completion of the period for the Administrator's review.
- 8.8 Approval by the Department is required for approval of any alternative requirement under 40 CFR part 75.70(h)(3)(ii).
- 8.9 The NO<sub>x</sub> authorized account representative shall submit quarterly reports required by 40 CFR Part 75.73(f) beginning with:
- 8.9.1 For any unit that commences operation prior to May 1, 2002, the earlier of the calendar quarter that includes the date of initial provisional certification under 8.6.3.3 of this regulation 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 provisional certification or the first hour on May 1, 2002.
- 8.9.2 Except as provided for in 8.9.3 of this regulation, for any unit that commenced operation on or after May 1, 2002, the calendar quarter in which the unit commences operation. Data shall be reported from the date and hour corresponding to when the unit commenced operation.
- 8.9.3 For any unit that is subject to ozone season monitoring requirements under 40 CFR 75.74(b)(2), and that commenced operation after September 30, 2002, and that did not commence operations during a control period, the earlier of the calendar quarter that includes the date of initial provisional certification under 8.6.3.3 of this regulation or, if the certification tests are not completed by May 1 immediately following the date that the unit commenced operation, May 1 immediately following the date the unit commenced operation. Data shall be reported from the earlier of the date and hour corresponding to the date and hour of provisional certification or the first hour of May 1 immediately following the date that the unit commenced operation.
- 8.10 Whenever both an audit of a monitoring system and a review of the initial certification or recertification application reveal that any system or component should not have been certified or recertified because it did not meet a particular performance specification or other requirement under 40 CFR 75.70(d) or any other applicable provision of 40 CFR Part 75, both at the time of the initial certification or recertification application submission and at the time of the audit, the Department may issue a notice of disapproval of the certification status of such system or component. For the purposes of this paragraph, an audit shall be either a field audit or an audit of any information submitted to the Department or the Administrator. By issuing the notice of disapproval, the Department revokes prospectively the certification status of the system or component. The data measured and recorded by the system or component shall not be considered valid quality-assured data from the date of issuance of the notification of the revoked certification status until the date and time that the owner or operator completes subsequently approved initial certification or recertification tests. The owner or operator shall follow the initial certification or recertification procedures in 40 CFR Part 75.70(d) for each disapproved system.

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## 9.0 NATS

- 9.1 Establishment of NATS Accounts.
- 9.1.1 Upon receipt of a complete account certificate of representation pursuant to 6.1 of this regulation, the Administrator shall establish a compliance account for each NO<sub>x</sub> Budget unit identified in that account certificate of representation, and an overdraft account for each such NO<sub>x</sub> Budget source that includes two or more NO<sub>x</sub> Budget units.
- 9.1.2 Upon receipt of a complete application to establish a general account pursuant to 15.0 of this regulation, the Administrator shall establish a general account for the person or persons for whom the application is submitted.
- 9.1.3 The Administrator shall assign a unique identifying account number to each account established under 9.1.1 or 9.1.2 of this regulation, and a unique identifying number to each associated NO<sub>x</sub> authorized account representative.
- 9.2 Recordation of Allocations and Deductions.

- 9.2.1 The Administrator shall record allocations for the 2003, 2004, and 2005 control periods, pursuant to 4.1 of **Appendix A** and 3.0 of **Appendix B** of this regulation. The Administrator shall record any allocations for the 2003 control period pursuant to 14.6.2 of this regulation.
- 9.2.2 Each year, starting in 2003, the Administrator shall:
- 9.2.2.1 Record in the appropriate compliance account or overdraft account all deductions made pursuant to 12.0 and 13.0 of this regulation.
- 9.2.2.2 After recording any deductions pursuant to 9.2.2.1 of this regulation:
- 9.2.2.2.1 Record allocations pursuant to 4.2 of **Appendix A** of this regulation.
- 9.2.2.2.2 Record allocations pursuant to 14.6.2 of this regulation.
- 9.2.3 When recording any allocation, the Administrator shall assign to the corresponding NO<sub>x</sub> allowance a unique identification serial number that includes digits identifying the year for which that NO<sub>x</sub> allowance is allocated.
- 9.3 **Banking.**
- 9.3.1 After recording any deductions pursuant to 9.2.2.1 of this regulation, the Administrator shall designate, as a "banked" NO<sub>x</sub> allowance, any NO<sub>x</sub> allowance that was eligible for deduction and that remains in any compliance account, overdraft account, or general account
- 9.3.2 Each year, starting in 2004, after completing the designation of banked NO<sub>x</sub> allowances under 9.3.1 of this regulation and before May 1 of that year, the Administrator shall determine the extent to which any banked NO<sub>x</sub> allowance may be used for compliance in the impending control period, as follows:
- 9.3.2.1 The Administrator shall determine the total number of banked NO<sub>x</sub> allowances held in all of the NO<sub>x</sub> Budget Trading program's compliance accounts, overdraft accounts, and general accounts.
- 9.3.2.2 The Administrator shall determine the sum of the State trading program budgets for the impending control period of all of the States participating in the NO<sub>x</sub> Budget trading program.
- 9.3.2.3 The Administrator shall determine the result of dividing the number determined under 9.3.2.1 of this regulation by the number determined under 9.3.2.2 of this regulation.
- 9.3.3 If the number determined under 9.3.2.3 of this regulation is equal to or less than 0.10, then any banked NO<sub>x</sub> allowance may be deducted for compliance in accordance with 12.0 and 13.0 of this regulation.
- 9.3.4 If the number determined under 9.3.2.3 of this regulation is greater than 0.10, then:
- 9.3.4.1 The Administrator shall determine the following ratio: 0.10 multiplied by the number determined under 9.3.2.2 of this regulation and divided by the number determined under 9.3.2.1 of this regulation.
- 9.3.4.2 The Administrator shall, in implementing the provisions of 12.2 and 13.1 of this regulation for the impending control period, multiply the number of banked NO<sub>x</sub> allowances in each compliance account or overdraft account by the ratio calculated under 9.3.4.1 of this regulation. The resulting product is the number of banked NO<sub>x</sub> allowances in the account that may be deducted for compliance in accordance with 12.0 and 13.0 of this regulation. Any banked NO<sub>x</sub> allowances in excess of the resulting product may be deducted for compliance in accordance with 12.0 and 13.0 of this regulation, except that, if any such NO<sub>x</sub> allowance is deducted, two such NO<sub>x</sub> allowances shall be deducted for each one NO<sub>x</sub> allowance required under 12.0 and 13.0 of this regulation.
- 9.4 The Administrator may, at his/her sole discretion and on his/her own motion, correct any error in any NATS account. Within 10 business days of making any such correction, the Administrator shall notify the NO<sub>x</sub> authorized account representative of the affected account of any correction made.

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#### **10.0 NO<sub>x</sub> Allowance Transfers**

- 10.1 The NO<sub>x</sub> authorized account representative seeking recordation of a NO<sub>x</sub> allowance transfer shall submit to the Administrator a transfer request that includes all of the following information in a format specified by the Administrator:
- 10.1.1 The account number of both the transferor and transferee accounts;
- 10.1.2 The serial number of each NO<sub>x</sub> allowance to be transferred; and
- 10.1.3 The printed name and signature of the NO<sub>x</sub> authorized account representative of the transferor account, and the date the transfer request was signed.

- 10.2 Provided that the transfer request meets the requirements of 10.1 of this regulation, and the transferor account holds each NO<sub>x</sub> allowance identified by serial number in the transfer request, the Administrator shall record the NO<sub>x</sub> allowance transfer by moving each NO<sub>x</sub> allowance from the transferor account to the transferee account as specified by the request.
- 10.2.1 Any NO<sub>x</sub> allowance transfer request that is submitted for recordation after a NO<sub>x</sub> allowance transfer deadline, and that includes any NO<sub>x</sub> allowance that was allocated for a control period prior to or the same as the control period associated with that NO<sub>x</sub> allowance transfer deadline, shall be recorded after the recordation of allocations under 9.2.2 of this regulation for that control period.
- 10.2.2 Any transfer request not identified in 10.2.1 of this regulation shall be recorded within five business days of receiving such request.
- 10.2.3 Within five business days of recordation of any NO<sub>x</sub> allowance transfer, the Administrator shall notify the NO<sub>x</sub> authorized account representatives of both accounts subject to the transfer that the transfer was recorded.
- 10.3 Where a NO<sub>x</sub> allowance transfer request fails to meet the requirements of 10.2 of this regulation, the Administrator shall not record that transfer.
- 10.3.1 Within 10 business days of receipt of such a request, the Administrator shall notify the NO<sub>x</sub> authorized account representatives of both the transferor and transferee accounts of the reason or reasons why the transfer was not recorded.
- 10.3.2 Nothing in this regulation shall preclude the correction and resubmission of a NO<sub>x</sub> allowance transfer request following notification under 10.3.1 of this regulation.

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#### **11.0 Compliance Certification**

- 11.1 Not later than November 30 of each year, starting in 2003, the NO<sub>x</sub> authorized account representative of each NO<sub>x</sub> Budget source shall submit to the Department and the Administrator a compliance certification report that covers the control period for that year. Such report shall include all of the following information in a format specified by the Administrator:
- 11.1.1 Identification of the NO<sub>x</sub> Budget source and each NO<sub>x</sub> Budget unit at that source.
- 11.1.2 At the NO<sub>x</sub> authorized account representative's option, for units sharing a common stack and having NO<sub>x</sub> emissions that are not monitored separately or apportioned in accordance with 8.0 of this regulation, the percentage of the number of tons of NO<sub>x</sub> emissions from the common stack to be attributed to each unit, for application under 12.2.2.1 of this regulation.
- 11.1.3 At the NO<sub>x</sub> authorized account representative's option, the serial numbers of the NO<sub>x</sub> allowances that are to be deducted from each NO<sub>x</sub> Budget unit's compliance account, for application under 12.2.2.1 or 13.1.1 of this regulation.
- 11.1.4 Certification by the NO<sub>x</sub> authorized account representative of, based on reasonable inquiry of those persons with primary responsibility for operating the source and the NO<sub>x</sub> Budget units at the source in compliance with the NO<sub>x</sub> Budget Trading Program, whether each NO<sub>x</sub> Budget unit for which the compliance certification is submitted was operated during the calendar year covered by the report in compliance with the requirements of the NO<sub>x</sub> Budget Trading Program applicable to that unit, including:
- 11.1.4.1 Whether the unit was operated in compliance with its NO<sub>x</sub> Budget emissions limitation;
- 11.1.4.2 Whether the monitoring plan that governs the unit has been maintained to reflect the actual operation and monitoring of the unit, and contains all information necessary to attribute NO<sub>x</sub> emissions to the unit, in accordance with 8.0 of this regulation;
- 11.1.4.3 Whether all the NO<sub>x</sub> emissions from the unit, or a group of units (including the unit) using a common stack, were monitored or accounted for through the missing data procedures and reported in the quarterly monitoring reports, including whether conditional data were reported in the quarterly reports in accordance with 8.0 of this regulation. If conditional data were reported, the NO<sub>x</sub> authorized account representative shall indicate whether the status of all conditional data has been resolved and all necessary quarterly report resubmissions have been made;
- 11.1.4.4 Whether the facts that form the basis for certification under 8.0 of this regulation of each monitor at the unit or a group of units (including the unit) using a common stack, or for using an excepted

monitoring method or alternative monitoring method approved under 8.0 of this regulation, if any, has changed; and

11.1.4.5 If a change is required to be reported under 11.1.4.4 of this regulation, 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 recertification.

11.2 The Department or the Administrator may review and conduct independent audits concerning any compliance certification or any other submission under the NO<sub>x</sub> Budget Trading Program and make appropriate adjustments of the information in the compliance certifications or other submissions.

11.3 The Administrator may deduct NO<sub>x</sub> allowances from or transfer NO<sub>x</sub> allowances to a unit's compliance account or a source's overdraft account based on the information in the compliance certifications or other submissions, as adjusted under 11.2 of this regulation.

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## **12.0 End of Season Reconciliation**

12.1 A NO<sub>x</sub> allowance is available to be deducted for compliance with a unit's NO<sub>x</sub> Budget emissions limitation for a particular control period only if that NO<sub>x</sub> allowance:

12.1.1 Was allocated for that control period or for a control period in a prior year; and

12.1.2 Is held in that unit's compliance account or its associated overdraft account, as of the NO<sub>x</sub> allowance transfer deadline for that control period; or

12.1.3 Is transferred into that unit's compliance account or its associated overdraft account by a NO<sub>x</sub> allowance transfer request that was correctly submitted for recordation under 10.0 of this regulation on or before the NO<sub>x</sub> allowance transfer deadline associated with that control period.

12.2 For each control period, following the recordation of NO<sub>x</sub> Allowance transfer requests that were submitted for recordation under 10.0 of this regulation on or before the associated NO<sub>x</sub> allowance transfer deadline, the Administrator shall deduct NO<sub>x</sub> allowances that meet the requirements of 12.1 of this regulation from each NO<sub>x</sub> Budget unit's account or accounts:

12.2.1 Until the number of NO<sub>x</sub> allowances deducted equals the number of tons of NO<sub>x</sub> emissions from that unit for that control period.

12.2.2 In the case of units sharing a common stack and having emissions that are not separately monitored or apportioned under 8.0 of this regulation, the Administrator shall deduct NO<sub>x</sub> allowances for each such unit until the number of NO<sub>x</sub> allowances deducted equals:

12.2.2.1 Where the NO<sub>x</sub> authorized account representative identified a percentage pursuant to 11.1.2 of this regulation, that percentage of the number of tons of NO<sub>x</sub> emissions from the common stack, or,

12.2.2.2 If no percentage is identified, an equal percentage for each such unit.

12.2.3 Where there are not sufficient NO<sub>x</sub> allowances available under 12.2.1 and 12.2.2 of this regulation, until no more NO<sub>x</sub> allowances that meet the requirements of 12.1 of this regulation remain available for deduction.

12.3 The particular allowances that the Administrator shall delete shall be:

12.3.1 Where the NO<sub>x</sub> authorized account representative identified by serial number the NO<sub>x</sub> allowances to be deducted pursuant to 11.1.3 of this regulation, the Administrator shall deduct those particular allowances.

12.3.2 In the absence of an identification or in the case of a partial identification of NO<sub>x</sub> allowances by serial number, the Administrator shall deduct NO<sub>x</sub> allowances:

12.3.2.1 From the compliance account on a first in, first out (FIFO) accounting basis in the following order:

12.3.2.1.1 Those NO<sub>x</sub> allowances that were allocated for that control period to that unit;

12.3.2.1.2 Those NO<sub>x</sub> allowances that were allocated for that control period to any unit and transferred and recorded in that unit's account, in order of their date of recordation;

12.3.2.1.3 Those NO<sub>x</sub> allowances that were allocated for a prior control period to that unit; and

12.3.2.1.4 Those NO<sub>x</sub> allowances that were allocated for a prior control period to any unit and transferred and recorded in that unit's account, in order of their date of recordation.

12.3.2.2 Only after all NO<sub>x</sub> allowances that meet the requirements of 12.1 of this regulation have been deducted from the compliance account, from the overdraft account. In deducting allowances for

units at the source from the overdraft account, the Administrator shall begin with the NO<sub>x</sub> Budget unit having the compliance account with the lowest NATS account number and end with the NO<sub>x</sub> Budget unit having the compliance account with the highest NATS account number (with account numbers sorted beginning with the left most character and ending with the right most character and the letter characters assigned values in alphabetical order and less than all numeric characters).

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### **13.0 Failure to Meet Compliance Requirements**

- 13.1 For each unit under 12.2.3 of this regulation, the Administrator shall deduct from that unit's compliance account or the associated overdraft account a number of NO<sub>x</sub> allowances equal to three times the number of that unit's excess emissions:
  - 13.1.1 Where the NO<sub>x</sub> authorized account representative identified by serial number the NO<sub>x</sub> allowances to be deducted pursuant to 11.1.3 of this regulation, the Administrator shall deduct those particular allowances.
  - 13.1.2 In the absence of an identification by serial number, or in the case of a partial identification, the Administrator shall deduct NO<sub>x</sub> allowances that were allocated for any control period after the control period in which the unit has excess emissions, until the requirement of 13.1 of this regulation is satisfied.
  - 13.1.3 If the compliance account or overdraft account does not contain sufficient NO<sub>x</sub> allowances, the Administrator shall deduct NO<sub>x</sub> allowances, regardless of the control period for which they were allocated, whenever NO<sub>x</sub> allowances are recorded in either account, until the requirement of 13.1 of this regulation is satisfied.
- 13.2 Any deduction required under 13.1 of this regulation shall not affect the liability of the owners and operators of the NO<sub>x</sub> Budget unit for any fine, penalty, or assessment, or their obligation to comply with any other remedy, for the same violation, as ordered under the CAA or applicable State law or regulation. The following guidelines shall be followed in assessing fines, penalties or other obligations:
  - 13.2.1 For purposes of determining the number of days of violation, if a NO<sub>x</sub> Budget unit has excess emissions for a control period, each day in the control period (153 days) constitutes a day in violation unless the owners and operators of the unit demonstrate that a lesser number of days should be considered.
  - 13.2.2 Each ton of excess emissions is a separate violation.

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### **14.0 Individual Unit Opt-Ins**

- 14.1 Any unit located in Delaware that meets all of the following provisions may voluntarily opt into the NO<sub>x</sub> Budget Trading program by submitting to the Department an opt-in application:
  - 14.1.1 The unit is not a NO<sub>x</sub> Budget unit identified in 3.1.1 of this regulation; and
  - 14.1.2 The unit is not exempted under 3.2 of this regulation; and
  - 14.1.3 The unit can meet the emissions monitoring and reporting requirements of 8.0 of this regulation; and
  - 14.1.4 The unit has documented heat input for more than 876 hours in the six months immediately preceding the submission of an application for an initial NO<sub>x</sub> Budget permit under 14.2 of this regulation.
- 14.2 Each unit identified in 14.1 of this regulation shall submit:
  - 14.2.1 To the Department and the Administrator a complete account certificate of representation that meets all of the requirements of 6.0 of this regulation.
  - 14.2.2 To the Department a complete NO<sub>x</sub> Budget permit application that meets all of the requirements of 7.2 of this regulation, with the following additional certification statement or statements made by the NO<sub>x</sub> authorized account representative:
    - 14.2.2.1 "I certify that each unit for which this permit application is submitted under 14.0 of ~~7 DE Admin. Code 1139~~ is not a NO<sub>x</sub> Budget unit under 3.1.1 of ~~7 DE Admin. Code 1139~~, is not covered by a retired unit exemption under 3.2 of ~~7 DE Admin. Code 1139~~ that is in effect"
    - 14.2.2.2 For any application for an initial NO<sub>x</sub> Budget permit, "I certify that the unit meets the requirements of 14.1.4 of ~~7 DE Admin. Code 1139~~."
  - 14.2.3 To the Department a monitoring plan in accordance with 8.0 of this regulation.
- 14.3 The Department shall determine, on an interim basis, the sufficiency of the monitoring plan submitted pursuant to 14.2.3 of this regulation. A monitoring plan is sufficient, for purposes of this interim review, if the plan

appears to contain information demonstrating that the NO<sub>x</sub>-emissions rate and heat input of the unit are monitored and reported in accordance with 8.0 of this regulation. A determination of sufficiency shall not be construed as acceptance or approval of the unit's monitoring plan.

~~14.3.1 If the Department determines that the unit's monitoring plan is sufficient the NO<sub>x</sub>-authorized account representative shall:~~

~~14.3.1.1 Install and certify all monitoring systems required under 8.0 of this regulation, pursuant to 8.0 of this regulation.~~

~~14.3.1.2 Monitor and report the NO<sub>x</sub>-emissions rate and the heat input of the unit in accordance with 8.0 of this regulation for one full control period during which the % monitoring data availability is not less than 90% and during which the unit is in full compliance with all applicable State or Federal emissions or emissions-related requirements. Solely for purposes of applying the requirements of the prior sentence, the unit shall be treated as a "NO<sub>x</sub>-Budget unit" prior to issuance of a NO<sub>x</sub> Budget permit covering the unit.~~

~~14.3.1.3 Based on the information monitored and reported under 14.3.1.2 of this regulation, submit to the Department the unit's baseline heat input calculated as the unit's total heat input (in MMBTU) for the control period, and the unit's baseline NO<sub>x</sub>-emissions rate calculated as the unit's total NO<sub>x</sub> mass emissions (in lb) for the control period divided by the unit's baseline heat input.~~

~~14.3.2 If the Department determines that the unit's monitoring plan is not sufficient the Department shall disapprove the opt-in application.~~

~~14.4 After receipt of the baseline heat input and the baseline NO<sub>x</sub>-emissions rate for the unit under 14.3.1.3 of this regulation:~~

~~14.4.1 The Department shall issue a draft NO<sub>x</sub>-Budget permit on the NO<sub>x</sub>-authorized account representative of the unit. Such permit shall meet all of the requirements of 7.3 of this regulation.~~

~~14.4.2 Within 20 days after the issuance of the draft NO<sub>x</sub>-Budget permit, the NO<sub>x</sub>-authorized account representative of the unit shall either withdrawal its application or submit to the Department a confirmation of the intention to opt in the unit. The Department shall treat any failure to make a timely submission as a withdrawal of the NO<sub>x</sub>-Budget permit application.~~

~~14.4.3 For units where the NO<sub>x</sub>-authorized account representative confirms the intention to opt in the unit, and after considering any comments received on the draft permit, the Department shall issue a final NO<sub>x</sub> Budget permit pursuant to **7 DE Admin. Code 1102** or **7 DE Admin. Code 1130**, as applicable. The unit shall be a NO<sub>x</sub>-Budget unit upon issuance of the NO<sub>x</sub>-Budget permit, and shall be subject to all of the requirements of this regulation.~~

~~14.5 Notwithstanding 14.1 through 14.4 of this regulation, at any time before the issuance of a final NO<sub>x</sub>-Budget permit:~~

~~14.5.1 The NO<sub>x</sub>-Budget Opt in application may be withdrawn.~~

~~14.5.2 If the Department determines that the unit does not qualify as an Opt-in unit, the Department shall deny the request to opt-in to the NO<sub>x</sub>-Budget Trading Program.~~

~~14.6 Allocations to opt-in units.~~

~~14.6.1 Under no circumstances shall any allocation to any unit under 14.6 of this regulation necessitate adjustments to the allocation to any other NO<sub>x</sub>-Budget Unit.~~

~~14.6.2 By April 1 immediately before the first control period for which any NO<sub>x</sub>-Budget permit becomes effective, and April 1 of each year thereafter, the Department shall submit to the Administrator an allocation for the next control period in accordance with 14.6.3 of this regulation.~~

~~14.6.3 Except as provided for in 3.2.6 of this regulation (pertaining to retired units), each Opt-in unit shall receive an annual allocation calculated as follows:~~

~~14.6.3.1 The Department shall determine the heat input (in MMBTU) as the lesser of:~~

~~14.6.3.1.1 The Opt-in unit's baseline heat input determined pursuant to 14.3.1.2 of this regulation; or~~

~~14.6.3.1.2 The Opt-in unit's heat input for the control period in the year prior to the year of the control period for which the NO<sub>x</sub>-allocations are being calculated, as determined in accordance with 8.0 of this regulation.~~

~~14.6.3.2 The Department shall allocate NO<sub>x</sub>-allowances to the Opt-in unit in an amount equaling the heat input (in MMBTU) determined under 14.6.3.1 of this regulation multiplied by the lesser of:~~

- 14.6.3.2.1 The Opt in unit's baseline NO<sub>x</sub> emissions rate (in lb/MMBTU) calculated pursuant to 14.3.1.2 of this regulation; or
  - 14.6.3.2.2 The lowest NO<sub>x</sub> emissions limitation (in terms of lb/MMBTU) that is applicable during the control period to the Opt in unit under State or Federal law or regulation, regardless of the averaging period to which the emissions limitation applies.
- 14.7 In the event that a Opt in unit becomes a NO<sub>x</sub> Budget unit under 3.1.1 of this regulation due to modification, reconstruction, or any other reason:
- 14.7.1 The NO<sub>x</sub> authorized account representative shall, not later than 30 days after such change in the Opt in unit's regulatory status, notify in writing the Department and the Administrator of such change in the Opt in unit's regulatory status. This provision is in addition to, and does not exempt or exclude any other State or Federal requirement, including any requirement to secure or amend any construction or operation permit under 7 ~~DE Admin. Code~~ 1102, 1125, or 1130 of the State of Delaware "Regulations Governing the Control of Air Pollution."
  - 14.7.2 The Administrator shall deduct from the NO<sub>x</sub> Budget unit's compliance account, or the associated overdraft account, NO<sub>x</sub> allowances equal in number to and allocated for the same or a prior control period as:
    - 14.7.2.1 Any NO<sub>x</sub> allowances allocated to the NO<sub>x</sub> Budget unit under 14.7 of this regulation for any control period after the last control period during which the unit's NO<sub>x</sub> Budget permit was effective; and
    - 14.7.2.2 If the effective date the NO<sub>x</sub> Budget unit becomes subject to 14.7 of this regulation is during a control period, the NO<sub>x</sub> allowances allocated to the NO<sub>x</sub> Budget unit under 14.6 of this regulation for that control period multiplied by the ratio of the number of days remaining in the control period, starting with the date the NO<sub>x</sub> Budget unit becomes subject to 14.7 of this regulation, divided by 153.
    - 14.7.2.3 If the compliance account or overdraft account does not contain sufficient NO<sub>x</sub> allowances, the Administrator shall deduct the required number of NO<sub>x</sub> allowances, regardless of the control period for which they were allocated, whenever NO<sub>x</sub> allowances are recorded in either account.

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## **15.0 General Accounts**

- 15.1 Any person may apply to open a general account for the purpose of holding and transferring NO<sub>x</sub> allowances by submitting to the Administrator an application to establish a general account. Such application:
- 15.1.1 ~~Shall designate one and only one NO<sub>x</sub> authorized account representative, and may designate one and only one alternate NO<sub>x</sub> authorized account representative. Such NO<sub>x</sub> authorized account representative and any alternate NO<sub>x</sub> authorized account representative shall be selected by an agreement between all of the persons who have an ownership interest with respect to allowances held in the general account, that is binding on such persons. Such agreement shall include a procedure for authorizing any alternate NO<sub>x</sub> authorized account representative to act in lieu of the NO<sub>x</sub> authorized account representative.~~
  - 15.1.2 Shall include all of the following information in a format specified by the Administrator:
    - 15.1.2.1 At the option of the NO<sub>x</sub> authorized account representative, the organization name and the type of organization;
    - 15.1.2.2 The name, mailing address, email address (if any), telephone number, and facsimile transmission number (if any) of the NO<sub>x</sub> authorized account representative and any alternate NO<sub>x</sub> authorized account representative.
    - 15.1.2.3 A list of all persons subject to a binding agreement for the NO<sub>x</sub> authorized account representative or any alternate NO<sub>x</sub> authorized account representative to represent their ownership interest with respect to the allowances held in the general account.
    - 15.1.2.4 The following certification statement by the NO<sub>x</sub> authorized account representative and any alternate NO<sub>x</sub> authorized account representative: "I certify that I was selected as the NO<sub>x</sub> authorized account representative or the alternate NO<sub>x</sub> 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 NO<sub>x</sub> Budget 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.”

- ~~15.1.2.5 The signature of the NO<sub>x</sub>-authorized account representative and any alternate NO<sub>x</sub>-authorized account representative, and the date or dates the account certificate of representation was signed.~~
- ~~15.1.3 Shall not include, unless otherwise required by the Administrator, documents of agreement referred to in the application to establish a general account. If submitted, the Administrator shall not be under any obligation to review or evaluate the sufficiency of such documents.~~
- ~~15.2 Upon receipt by the Administrator of a complete application for a general account under 15.1 of this regulation:~~
  - ~~15.2.1 The NO<sub>x</sub>-authorized account representative for the general account shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each person who has an ownership interest with respect to NO<sub>x</sub> allowances held in the general account in all matters pertaining to the NO<sub>x</sub> Budget Trading Program, notwithstanding any agreement between the NO<sub>x</sub>-authorized account representative and such person. Any such person shall be bound by any order or decision issued to the NO<sub>x</sub>-authorized account representative by the Administrator or a court regarding the general account~~
  - ~~15.2.2 Any representation, action, inaction, or submission by the alternate NO<sub>x</sub>-authorized account representative shall be deemed to be a representation, action, inaction, or submission by the NO<sub>x</sub> authorized account representative.~~
  - ~~15.2.3 The Administrator shall rely on the application submitted pursuant to 15.1 of this regulation unless and until the Administrator receives a superseding complete application for a general account changing the NO<sub>x</sub> authorized account representative or alternate NO<sub>x</sub> authorized account representative. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous NO<sub>x</sub>-authorized account representative or alternate NO<sub>x</sub>-authorized account representative prior to the time and date when the Administrator receives the superseding application for a general account shall be binding on the new NO<sub>x</sub>-authorized account representative and alternate NO<sub>x</sub>-authorized account representative and the persons with an ownership interest with respect to the allowances in the general account.~~
  - ~~15.2.4 Except as provided in 15.2.3 of this regulation, no objection or other communication submitted to the Administrator concerning the authorization, or any representation, action, inaction, or submission of the NO<sub>x</sub>-authorized account representative or the alternate NO<sub>x</sub>-authorized account representative for a general account shall affect any representation, action, inaction, or submission of the NO<sub>x</sub>-authorized account representative or the alternate NO<sub>x</sub>-authorized account representative, or the finality of any decision or order by the Administrator under the NO<sub>x</sub> Budget Trading Program.~~
  - ~~15.2.5 The Administrator will not adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of any NO<sub>x</sub>-authorized account representative or the alternate NO<sub>x</sub>-authorized account representative for a general account.~~
- ~~15.3 Changes in Persons having Ownership Interest in any General Account~~
  - ~~15.3.1 Within 30 days following any change in the persons having an ownership interest with respect to NO<sub>x</sub> allowances in the general account, including the addition of persons, the NO<sub>x</sub>-authorized account representative or any alternate NO<sub>x</sub>-authorized account representative shall submit a revision to the application for a general account amending the list of persons having an ownership interest with respect to the NO<sub>x</sub> allowances in the general account to include the change.~~
  - ~~15.3.2 In the event a new person having an ownership interest with respect to NO<sub>x</sub> allowances in the general account is not included in the list of such persons in the account certificate of representation, such new person shall be deemed to be subject to and bound by the account certificate of representation, the representation, actions, inactions, and submissions of the NO<sub>x</sub> authorized account representative and any alternate NO<sub>x</sub> authorized account representative of the source or unit, and the decisions, orders, actions, and inactions of the Administrator, as if the new person were included in such list.~~
- ~~15.4 Submissions/Certifications~~
  - ~~15.4.1 The NO<sub>x</sub>-authorized account representative or the alternate NO<sub>x</sub>-authorized account representative shall sign and certify all submissions under the NO<sub>x</sub> Budget trading program with the following certification statement “I am authorized to make this submission on behalf of the persons having an ownership interest with respect to the NO<sub>x</sub> 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.”

15.4.2 The Administrator shall accept or act on any submission made under the NO<sub>x</sub> Budget Trading program only if that submission has been made, signed, and certified in accordance with 15.4.1 of this regulation.

#### 15.5 Closing of general accounts

15.5.1 The NO<sub>x</sub> authorized account representative of a general account may instruct the Administrator to close the account by submitting a statement requesting deletion of the account from the NATS and by correctly submitting for recordation under 10.0 of this regulation a request to transfer all NO<sub>x</sub> allowances held in the account to one or more other NATS accounts.

15.5.2 If a general account shows no activity for a period of a year or more and does not contain any NO<sub>x</sub> allowances, the Administrator may notify the NO<sub>x</sub> authorized account representative for the account that the account will be closed and deleted from the NATS following 20 business days after the notice is sent. The account will be closed after the 20 day period unless before the end of the 20 day period the Administrator receives a correctly submitted transfer of NO<sub>x</sub> allowances into the account under 10.0 of this regulation or a statement submitted by the NO<sub>x</sub> authorized account representative demonstrating to the satisfaction of the Administrator good cause as to why the account should not be closed.

~~4 DE Reg. 1019 (12/01/00)~~

~~12 DE Reg. 347 (09/01/09)~~

## Appendix A

### ~~Allowance Allocations to NO<sub>x</sub> Budget Units under 3.1.1.1 and 3.1.1.2 of 7 DE Admin. Code 1139~~

~~1.0~~ The State trading program budget allocated by the Department to NO<sub>x</sub> Budget units identified in 3.1.1 of 7 ~~DE Admin. Code 1139~~ shall equal 5,227 tons of NO<sub>x</sub> emissions for each NO<sub>x</sub> control period, beginning with the year 2003 control period. Table A-1 of this appendix identifies the NO<sub>x</sub> Budget units that receive an allocation, and the size of that allocation. NO<sub>x</sub> Budget units identified in 3.1.1 of 7 ~~DE Admin. Code 1139~~ that are not identified in Table A-1 do not receive an allocation.

~~2.0~~ Individual unit allocations identified in Table A-1 of this appendix were determined as follows:

~~2.1~~ The unit's base heat input was determined as the average of the units two highest heat inputs for May through September of any of the four years 1995, 1996, 1997, and 1998. Where a unit had heat input during May through September in only one of the years 1995 through 1998, and had zero heat input during May through September of the other three years, that unit's base heat input was determined as the heat input during the non zero year.

~~2.2~~ The unit's base heat input determined in 2.1 of this appendix was multiplied by a NO<sub>x</sub> emissions rate factor, and divided by 2000 lb/ton. NO<sub>x</sub> emissions rate factor's used were:

~~2.2.1~~ For any unit that serves a generator with a nameplate capacity of 15 MWe or greater, but less than 25 MWe, the unit's actual average 1996 ozone season NO<sub>x</sub> emission rate, in lb/MMBTU.

~~2.2.2~~ For any unit that serves a generator with a nameplate capacity of 25 MWe or greater, 0.15 lb/MMBTU.

~~2.2.3~~ For any unit that does not serve a generator, 0.17 lb/MMBTU.

~~2.3~~ The tonnage determined in 2.2 of this appendix for all subject units were added together.

~~2.4~~ For each subject unit, the tonnage determined in 2.2 of this appendix was divided by the tonnage determined in 2.3 of this appendix.

~~2.5~~ The allocation to each subject unit was determined as the product of the factor determined in 2.4 of this appendix and the state trading program budget identified in 1.0 of this appendix, rounded to the nearest whole ton.

~~3.0~~ Any NO<sub>x</sub> Budget unit that receives an allocation under this appendix shall continue to receive that allocation for each control period unless and until such time as the Department revises this appendix pursuant to 7 ~~Del.C.~~, Chapter 60, and submits that revision to the Administrator as a revision to Delaware's State Implementation Plan.

**4.0** Timing requirements for allocations:

- 4.1 No later than 60 days after the effective date of ~~7 DE Admin. Code 1139~~, the Department shall submit to the Administrator allocations in accordance with this appendix for the 2003, 2004, and 2005 control periods.
- 4.2 By April 1, 2003 and April 1 of each year thereafter, the Department shall submit to the Administrator allocations in accordance with this appendix for the control period in the year that is three years after the year of the applicable deadline for submission under 4.2 of this appendix. If the Department fails to submit to the Administrator the allocations in accordance with this 4.2 of this appendix, the Administrator shall allocate, for the applicable control period, the same number of allocations as were allocated for the preceding control period.

**Table A-1—Individual Unit Allocations**

**Appendix B**

**~~7 DE Admin. Code 1137—7 DE Admin. Code 1139 Program Transition~~**

**1.0** Individual Unit Opt-ins. The Department may require any unit that is an opt-in unit under ~~7 DE Admin. Code 1137~~ of Delaware's "Regulations Governing the Control of Air Pollution" to be an opt-in unit under ~~14.0 of 7 DE Admin. Code 1139~~ of Delaware's "Regulations Governing the Control of Air Pollution."

**2.0** Penalties. For any ~~NO<sub>x</sub> Budget~~ unit under ~~7 DE Admin. Code 1137~~ of Delaware's "Regulations Governing the Control of Air Pollution" that has excess emissions following the year 2002 control period, the Administrator shall deduct from the unit's compliance account or the overdraft account of the source where the unit is located a number of ~~NO<sub>x</sub>~~ allowances, allocated for the 2003 or subsequent control periods, equal to three times the number of the unit's excess emissions in the 2002 control period.

**3.0** ~~7 DE Admin. Code 1137~~ transition allocation. Any Delaware source that holds, in its ~~7 DE Admin. Code 1137~~ compliance account, ~~NO<sub>x</sub>~~ allowances that were allocated for the year 2000, 2001, or 2002 control periods under the ~~OTC NO<sub>x</sub> Budget~~ program (i.e., ~~7 DE Admin. Code 1137~~ of Delaware's "Regulations Governing the Control of Air Pollution") and that were not used or required to be used for compliance with the requirements of ~~7 DE Admin. Code 1137~~ for the 2002 or prior control period, may be eligible for a special, one-time "transition allocation."

3.1 An application for a transition allocation under 3.0 of this appendix shall be submitted to the Department no later than March 1, 2003, and shall include all of the following information:

- 3.1.1 Identification of the affected ~~NO<sub>x</sub> Budget~~ source and ~~NO<sub>x</sub> Budget~~ unit;
- 3.1.2 Identification of the quantity of ~~NO<sub>x</sub>~~ allowances remaining in the unit's ~~7 DE Admin. Code 1137~~ compliance account as of February 1, 2003;
- 3.1.3 Identification by serial number of all ~~NO<sub>x</sub>~~ allowances remaining in the unit's ~~7 DE Admin. Code 1137~~ compliance account as of February 1, 2003; and
- 3.1.4 Certification by the ~~NO<sub>x</sub>~~ authorized account representative consistent with 6.4 of ~~7 DE Admin. Code 1139~~.

3.2 Not later than April 1, 2003, the Department shall approve or deny any request received under 3.1 of this appendix:

- 3.2.1 For any request that is approved, the Department shall notify the ~~NO<sub>x</sub>~~ authorized account representative, and shall submit to the Administrator an allocation to the ~~NO<sub>x</sub> Budget~~ unit's compliance account in accordance with the provisions of 3.3 of this appendix.
- 3.2.2 For any request that is not accurate or submitted in accordance with 3.1 of this appendix, the Department shall notify the ~~NO<sub>x</sub>~~ authorized account representative that the request is denied, including the reason or reasons for any denial.

3.3 Any ~~NO<sub>x</sub>~~ authorized account representative whose request is approved under 3.2.1 of this appendix shall receive a transition allocation as follows:

- 3.3.1 If the total number of allocations requested, and as approved by the Department, totaled among all Delaware ~~NO<sub>x</sub> Budget~~ units is 168 or less the Department shall allocate to each subject unit their requested allocation.

3.3.2 If the total number of allocations requested, and as approved by the Department, totaled among all Delaware NO<sub>x</sub> Budget units is greater than 168, the Department shall allocate to each subject unit according to the following formula:

$$\text{Unit's allocation} = \left[ \frac{\text{Unit's requested and approved allocation}}{\text{Total number of requested and approved allocations among all Delaware sources}} \right] \times (168)$$

where: "Unit's requested and approved allocation" is the number allocations requested by the unit's NO<sub>x</sub> authorized account representative and approved by the Department in accordance 3.2.1 of this appendix.

"Total number of requested and approved allocations among all Delaware sources" is the sum total of all allocations requested in accordance with 3.1 of this appendix, and approved by the Department in accordance with 3.2.1 of this appendix, among all Delaware sources.

"Unit's allocation" shall be whole number, with all fractional allocations rounded down to the next whole number.

3.4 No later than May 1, 2003, the Department shall submit to the Administrator for recordation the allocations determined under 3.0 of this appendix.

3.5 Allocations recorded under 3.4 of this appendix may be deducted for compliance under 12.0 of this regulation for the control periods in 2003 or 2004. The Administrator shall deduct as retired any NO<sub>x</sub> allowance that is recorded under 3.4 of this appendix and is not deducted for compliance in accordance with 12.0 of 7 DE Admin. Code 1139 for the 2003 or 2004 control period.

3.6 NO<sub>x</sub> allowances recorded under 3.4 of this appendix shall be treated as banked allowances in 2004.

~~4.0 To provide for the transition from the program established under 7 DE Admin. Code 1137 to the program established under 7 DE Admin. Code 1139; for any NO<sub>x</sub> Budget unit that is subject to both 7 DE Admin. Code 1137 and 7 DE Admin. Code 1139, the Department may allow that unit to comply with any requirement of 7 DE Admin. Code 1139 in lieu of any substantially equivalent requirement of 7 DE Admin. Code 1137. Such requirements may include, but are not limited to permitting, record keeping, monitoring, and reporting requirements.~~

17 DE Reg. (11/01/13) (Final)

## Revision to Delaware's State Implementation Plan

To Sunset the Requirements of 7 DE Admin. Code 1139, and Demonstrate the Requirements of 40 CFR 51.121  
Continue to be Met

June 12, 2013 Proposal

### 1.0 Introduction

A State Implementation Plan ("SIP") is a state plan that identifies how that state will attain and maintain air quality that conforms to each primary and secondary National Ambient Air Quality Standard ("NAAQS"). The SIP is a complex, fluid document containing regulations, source-specific requirements, and non-regulatory items such as plans and emission inventories.

Delaware's initial SIP was approved by the US Environmental Protection Agency (EPA) on May 31, 1972. Since this initial approval the Delaware SIP has been revised numerous times to address air quality non-attainment and maintenance issues. The revisions consisted of updated plans and inventories, and new and revised regulatory control requirements. Delaware's SIP is compiled at 40 C.F.R. Part 52 Subpart I.

### 2.0 Background

Ground-level ozone is a pollutant formed when nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOC) react in heat and sunlight. Ozone is an air pollutant that causes respiratory illness, eye irritation, and plant damage.

The primary reason many mid-Atlantic and north-east States, including Delaware, have unhealthy air quality relative to the pollutant ozone is because ozone and its precursors, VOC and NO<sub>x</sub>, are transported into the region from upwind areas. Because of the pollution transport problem, a group was formed to perform a study of the ozone transport problem and to propose efficient and cost-effective solutions. This group was the Ozone Transport Assessment Group (OTAG) and was comprised of representatives of the USEPA, the Environmental Council of States (ECOS), and various industry and environmental groups. The OTAG study found that the principal contributor to the ozone transport problem is transport of NO<sub>x</sub> emissions.

Based on the findings of the OTAG study, in the November 7, 1997 Federal Register (62 FR 60318) the USEPA

proposed a finding that NO<sub>x</sub> emissions from sources and activities in 23 jurisdictions (including Delaware) significantly contribute to non-attainment of the 1-hour and 1997 8-hour ozone NAAQS, or will interfere with the maintenance of the 1997 8-hour NAAQS, in one or more downwind states. In the September 24, 1998 Federal Register (63 FR 57396), the EPA finalized its rule "Finding of Significant Contribution and Rulemaking for Certain States in the Ozone Transport Assessment Group Region for Purposes of Reducing Regional Transport of Ozone." This rule, along with later technical amendments, is commonly referred to as the NO<sub>x</sub> SIP Call. The purpose of the NO<sub>x</sub> SIP Call was to require the subject jurisdictions to reduce NO<sub>x</sub> emissions, thereby reducing NO<sub>x</sub> transport into downwind non-attainment areas.

A March 3, 2000 ruling of the D.C. Circuit Court of Appeals had the effect of eliminating three states from the original group of jurisdictions identified in the NO<sub>x</sub> SIP call. The final group of jurisdictions subject to the NO<sub>x</sub> SIP Call after the court ruling include Alabama, Connecticut, Delaware, District of Columbia, Illinois, Indiana, Kentucky, Massachusetts, Maryland, Michigan, North Carolina, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Virginia, and West Virginia.

The NO<sub>x</sub> SIP Call required the affected jurisdictions, including Delaware, to adopt and submit SIP revisions requiring sources in the jurisdiction to reduce NO<sub>x</sub> emissions sufficiently to eliminate the amount of NO<sub>x</sub> emissions that contribute significantly to non-attainment in, or interfere with maintenance by, a downwind state. It was EPA's position that by eliminating those amounts of NO<sub>x</sub> emissions, the control measures would assure that remaining NO<sub>x</sub> emissions would meet jurisdiction-specific ozone season NO<sub>x</sub> emissions budgets, as specified in the NO<sub>x</sub> SIP Call (40 CFR 51.121(e)(2)(i)). Each jurisdiction's ozone season NO<sub>x</sub> emissions budget was determined based on forecasted base-2007 jurisdiction-wide ozone season NO<sub>x</sub> inventories. The USEPA applied growth factors to baseline emission inventories for the source sectors of electric generating units (EGU), non-EGU point sources, stationary area sources, on-road mobile sources, and off-road mobile sources to calculate the base-2007 inventories. These base-2007 inventories also reflected then-existing controls and controls required to be implemented by 2007. For the stationary area, on-road-mobile, and off-road mobile source sectors, the base-2007 inventories became the 2007 budgets because the USEPA applied no additional controls to the sectors in deriving the 2007 budgets.

Point source sectors were handled differently, in that for the EGU and non-EGU point source sectors the 2007 budgets were derived from the base-2007 inventory by applying additional controls to those sectors. This was done by assuming an EGU NO<sub>x</sub> control level of 0.15 lb/MMBTU emission rate on units with a nameplate rating of 25 MW or greater, and by assuming a non-EGU NO<sub>x</sub> emissions control of 60% from uncontrolled levels for boilers and combustion turbines with heat input ratings of 250 MMTU/hr or greater.

The procedures for deriving the base and budget values were described in the USEPA document "Development of Emission Budget Inventories for Regional Transport NO<sub>x</sub> SIP Call Technical Amendment Version" (A-96-56:X-B-11), December, 1999. The USEPA revised the baseline and budget numbers several times and released the final values in the April 3, 2000 rule "Technical Amendment to the Finding of Significant Contribution and Rulemaking for Certain States for the Purposes of Reducing Regional Transport of Ozone."

Delaware's overall ozone season NO<sub>x</sub> budget was identified in 40 CFR 51.121(e)(2)(i) as 22,862 tons/season. 40 CFR 51.121(g)(2)(ii) identified Delaware's related ozone season NO<sub>x</sub> budget sub-inventories as follows: EGU sector as 5,250 tons of NO<sub>x</sub>, the non-EGU sector as 2,473 tons of NO<sub>x</sub>, the area source sector as 1,129 tons of NO<sub>x</sub>, the non-road sector as 5,651 tons of NO<sub>x</sub>, and the on-road sector as 8,358 tons of NO<sub>x</sub>.

The NO<sub>x</sub> SIP Call did not require NO<sub>x</sub> reductions from specific sources, but rather set overall jurisdiction ozone season NO<sub>x</sub> mass emissions budgets for each of the affected jurisdictions as documented in 40 CFR Part 51.121(e). Each jurisdiction had the option to choose to reduce ozone season NO<sub>x</sub> emissions from point sources, stationary area sources, on-road mobile sources, and/or off-road mobile sources. Jurisdictions were also afforded compliance flexibility through 40 CFR 51.121(b)(2): "*The requirements of paragraph (b)(1)(i) of this section shall be deemed satisfied, for the portion of the budget covered by an interstate trading program....*" Through 40 CFR Part 96, the USEPA established a market-based interstate NO<sub>x</sub> emissions trading program to facilitate meeting the requirements of 40 CFR 51.121(b).

### **3.0 Delaware's NO<sub>x</sub> SIP Call Compliance Action**

In compliance with the requirements of 40 CFR 51.121, in August 2000 Delaware submitted to the USEPA as a SIP revision, "Delaware Plan for Meeting the Nitrogen Oxide (NO<sub>x</sub>) Budget Requirements Contained in the EPA NO<sub>x</sub> SIP Call." In this document, Delaware indicated that it accepted the USEPA's ozone season NO<sub>x</sub> emissions budget values for each Delaware source sector, and also indicated it would promulgate and implement a regulation to facilitate participation of Delaware EGU and non-EGU point sources in the EPA's interstate emissions trading program. This regulation was promulgated as Regulation 39, Nitrogen Oxides (NO<sub>x</sub>) Budget Trading Program, in December 2000 (Regulation 39 was later re-numbered to 7 **DE Admin. Code** 1139 for administrative purposes with no substantive changes, and will be referred to as 7 **DE Admin. Code** 1139 throughout this document). The participation of Delaware's EGU and non-EGU source sectors in the EPA's 40 CFR Part 96 interstate NO<sub>x</sub> emissions trading program met the NO<sub>x</sub> SIP Call requirements for those source sectors in accordance with 40 CFR 51.121(b)(2). The 40 CFR 51(g)(2)(ii) NO<sub>x</sub> budget for these two Delaware source sectors totaled 7,723 tons/season.

7 **DE Admin. Code** 1139 held each of Delaware's EGUs with a nameplate capacity rating of 25 MW or greater to an

allocation that was determined by multiplying each unit's base heat input by a NOx emissions factor of 0.15 lb/MMBTU. Each non-EGU with a maximum design heat input capacity of 250 MMBTU/hr or greater was held to an allocation that was determined by multiplying each unit's base heat input by a NOx emissions rate factor of 0.17 lb/MMBTU. This methodology was that recommended in USEPA's NOx Budget Trading Program model rule (40 CFR Part 96).

In addition, 7 DE Admin. Code 1139 went beyond the requirements of the NOx SIP Call by requiring that every EGU and process heater with a design capacity between 15 MW and 25 MW be held to an allocation based on historic operation. That allocation was determined by multiplying each unit's base heat input by the unit's actual average 1996 ozone season NOx emissions rate. Allocations under 7 DE Admin. Code 1139 totaled 5,227 NOx emissions allowances per ozone season.

#### 4.0 NOx SIP Call Emission Trading Program Transition to CAIR

On May 12, 2005, the USEPA published its final rule entitled "Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone (Clean Air Interstate Rule); Revisions to Acid Rain Program; Revisions to NOx SIP Call" (70 FR 25162). This rule and subsequent amendments are commonly referred to as CAIR. In part CAIR requires affected jurisdictions to reduce NOx emissions that contribute significantly to non-attainment and maintenance problems in downwind jurisdictions with respect to the national ambient air quality standards for 8-hour ozone. Among other things, CAIR established a model ozone season NOx emissions cap-and-trade program as a control option for states to choose as a possible compliance option for CAIR's ozone season NOx emissions requirements. This portion of CAIR is similar to the ozone season NOx SIP Call Budget Trading Program.

On April 28, 2006 the USEPA published federal implementation plans (FIPs) for CAIR as part of a final rule entitled "Rulemaking on Section 126 Petition From North Carolina to Reduce Interstate Transport of Fine Particulate Matter and Ozone; Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone; Revisions to the Clean Air Interstate Rule; Revisions to the Acid Rain Program" (71 FR 25328). The USEPA indicated that the CAIR FIPs would be implemented to achieve attainment of air quality standards when a jurisdiction does not or is unable to develop an adequate state implementation program. As its control strategy, the CAIR FIPs adopted the model cap-and-trade programs (including the ozone season NOx emission cap-and-trade program) that were provided in CAIR, with the exception that USEPA would implement and administer the programs rather than the subject jurisdiction. The FIPs require EGUs in subject jurisdictions to participate in the appropriate emissions cap-and-trade programs, which for Delaware included the CAIR ozone season NOx cap-and-trade program. As opposed to establishing a state run compliance strategy, Delaware decided to accept a full federal FIP with the USEPA administering the program for Delaware. Therefore, Delaware's EGU point sources that were subject to the NOx SIP Call Budget Trading program then became subject to the requirements of the USEPA CAIR FIP Ozone Season NOx Trading Program administered by the USEPA.

As indicated above, under a full federal FIP, only EGUs in subject jurisdictions are required to participate in the USEPA administered ozone season NOx cap-and-trade program. (One exception to this general rule for Delaware was EPA's inclusion of the Delaware City Refinery unit DCPP4 in the CAIR annual and ozone season NOx cap-and-trade programs. For this reason the Delaware City Refinery unit DCPP4 is considered to be an "EGU" meeting the applicable CAIR requirements for the purposes of this evaluation.) Of the 35 units that 7 DE Admin. Code 1139 required to participate in the NOx SIP Call Budget Trading Program, the FIP only required and facilitated 21 of those units to participate in the FIP's CAIR ozone season NOx cap-and-trade program. Under the CAIR FIP, these units are required to monitor and report NOx ozone season emissions and hold allowances sufficient to balance actual NOx emissions in accordance with the requirements of the CAIR FIP ozone season NOx trading program. The following table lists the 22 units that were subject to 7 DE Admin. Code 1139 and subsequently are subject to the CAIR ozone season NOx trading program under the CAIR FIP:

<u>Facility</u>	<u>Oris Code</u>	<u>Unit</u>	<u>Unit Type</u>
Christiana Substation	591	11	Combustion turbine
Christiana Substation	591	14	Combustion turbine
Edge Moor	593	3	Tangentially-fired
Edge Moor	593	4	Tangentially-fired
Edge Moor	593	5	Dry bottom wall-fired boiler
Indian River	594	1	Dry bottom wall-fired boiler
Indian River	594	2	Dry bottom wall-fired boiler
Indian River	594	3	Dry bottom wall-fired boiler
Indian River	594	4	Dry bottom turbo-fired boiler
McKee Run	599	3	Dry bottom wall-fired boiler
Hay Road	7153	1	Combined cycle
Hay Road	7153	2	Combined cycle
Hay Road	7153	5	Combined cycle
Hay Road	7153	6	Combined cycle
Hay Road	7153	7	Combined cycle
Hay Road	7153	**3	Combined cycle
Van Sant	7318	**11	Combustion turbine
Warren F. Sam Beasley Pwr Station	7962	1	Combustion turbine
Warren F. Sam Beasley Pwr Station	7962	2	Combustion turbine
NRG Energy Center Dover	10030	2	Combustion turbine
NRG Energy Center Dover	10030	3	Combustion turbine
Delaware City Refinery	52193	DCPP4	Dry bottom wall-fired boiler

Under the EPA's CAIR FIP, Delaware's non-EGUs (co-generation units, large process boilers and heaters, and EGUs with nameplate capacities 15 MW or greater but less than 25 MW) were not included in the CAIR FIP ozone season NOx trading program. The following table lists the 21 units that were subject to Delaware's 7 **DE Admin. Code** 1139 and subsequently not subject to the CAIR ozone season NOx trading program under the CAIR FIP:

<u>Facility</u>	<u>ORIS Code</u>	<u>Unit</u>	<u>Unit Type</u>	<u>Heat Input Capacity (MMBTU/hr)</u>
Delaware City	592	10	Combustion turbine	270
Delaware City Refinery	52193	21H1	Other boiler	340
Delaware City Refinery	52193	21H701	Other boiler	525
Delaware City Refinery	52193	25H1A	Other boiler	287
Delaware City Refinery	52193	37H1	Other boiler	517
Delaware City Refinery	52193	41H1	Other boiler	991
Delaware City Refinery	52193	42H123	Other boiler	596
Delaware City Refinery	52193	CATCOB	Other boiler	680
Delaware City Refinery	52193	COKCOB	Other boiler	675
Delaware City Refinery	52193	DCPP1	Dry bottom wall-fired boiler	965
Delaware City Refinery	52193	DCPP2	Dry bottom wall-fired boiler	882
Delaware City Refinery	52193	DCPP3	Dry bottom wall-fired boiler	618
Delaware City Refinery	52193	MECCU1	Combined cycle	1093
Delaware City Refinery	52193	MECCU2	Combined cycle	1093
Edge Moor	593	10	Combustion turbine	264
Indian River	594	10	Combustion turbine	366
Madison Street	596	10	Combustion turbine	242
McKee Run	599	1	Dry bottom wall-fired boiler	225
McKee Run	599	2	Dry bottom wall-fired boiler	225
NRG Energy Center Dover	10030	1	Dry bottom wall-fired boiler	400
West Substation	597	10	Combustion turbine	264

## 5.0 Delaware NOx Controls Applicable to NOx SIP Call Non-EGUs

The non-EGUs that were allocated NOx SIP Call Budget Trading Program allowances under Delaware's 7 DE Admin. Code 1139 and that did not transition to the CAIR FIP NOx Ozone Season Trading Program include boilers and combustion turbines that are connected to electric generators that have nameplate rating of 15MW or greater but less than 25 MW, and co-generation units, process heaters and boilers that have heat input ratings of 250 MMBTU/hr or greater. In addition to the requirement of Delaware's 7 DE Admin. Code 1139 to participate in the SIP Call's NOx Budget Trading Program, these units' NOx emissions are controlled by other applicable State of Delaware air emissions regulations. Delaware's NOx emissions regulations that continue to be applicable to these non-EGU sources include the following:

- **7 DE Admin. Code 1112, Control of Nitrogen Oxides Emissions:** This regulation was promulgated in 1993, and its NOx emissions rate limitations became effective in May, 1995. This regulation is applicable to major stationary NOx sources in Delaware, including fuel burning sources. 7 DE Admin. Code 1112 prohibits NOx emissions in excess of those obtainable incorporating reasonably available control technology (RACT). 7 DE Admin. Code 1112 requires NOx emissions to be monitored using the provisions of 40 CFR Part 60.
- **7 DE Admin. Code 1142, Specific Emission Control Requirements, Section 1, Control of NOx Emissions from Industrial Boilers:** This regulation was promulgated in 2001, and its NOx emissions rate limitations became effective in May, 2004. 7 DE Admin. Code 1142, Section 1 is applicable to any combustion unit with a heat input rating of 100 MMBTU/hr or greater that did not attain the presumptive NOx RACT emission rate of Table 3.1 of Delaware's 7 DE Admin. Code 1112 and also did not install specific NOx controls. 7 DE Admin. Code 1142, Section 1, effectively regulated sources that remained high NOx emitters after the application of NOx RACT and post-RACT requirements and that had not committed substantial capital funds to reduce NOx emissions. 7 DE Admin. Code 1142 requires NOx emissions to be monitored using the provisions of 40 CFR Part 60.
- **7 DE Admin. Code 1142, Specific Emissions Control Requirements, Section 2, Control of NOx Emissions from Industrial Boilers and Process Heaters at Petroleum Refineries:** This regulation was promulgated in July, 2007, and revised in April, 2011. 7 DE Admin. Code 1142, Section 2 is applicable to industrial boilers and process heaters located within a petroleum refinery facility that have a heat input rating of 200 MMBTU/hr or greater. The regulation establishes very low NOx emissions rate limits for subject units, or a low overall NOx mass emission cap, and requires NOx emissions to be monitored using the provisions of 40 CFR Part 60.
- **7 DE Admin. Code, Control of Stationary Combustion Turbine Electric Generating Unit Emission:** 7 DE Admin. Code 1148 was promulgated in 2007 and its NOx emissions rate limitations became effective in May, 2009. This

regulation is applicable to existing stationary combustion turbine electric generating units in Delaware with a nameplate rating of 1 MW or greater. 7 DE Admin. Code 1148 requires subject units (that were otherwise exempt from attaining RACT NOx emissions limitations of 7 DE Admin. Code 1112 due to very low operating capacity factors) to emit NOx at a rate no higher than presumptive RACT levels or install NOx emission controls designed to attain the regulation's NOx emission rate limits. (Note: all combustion turbine EGUs subject to 7 DE Admin. Code 1148 have installed water injection for NOx control in response to the requirements of this regulation and operated those controls beginning with the 2009 ozone season for compliance with 7 DE Admin. Code 1148.)

The above referenced Delaware NOx control regulations are applicable to the individual Delaware NOx SIP Call units not transitioning to the CAIR FIP ozone season NOx trading program as shown in the following table:

<u>Facility</u>	<u>ORIS</u>	<u>Unit</u>	<u>Unit Type</u>	<u>Applicable DE NOx Control Regulations</u>
Delaware City	592	10	Combustion turbine	Reg 1112, 1125, 1148
Delaware City Refinery	52193	21H1	Other boiler	Not in Service
Delaware City Refinery	52193	21H701	Other boiler	Reg 1112, 1125, 1142-2
Delaware City Refinery	52193	25H1A	Other boiler	Retired
Delaware City Refinery	52193	37H1	Other boiler	Reg 1112, 1125, 1142-2
Delaware City Refinery	52193	41H1	Other boiler	Retired
Delaware City Refinery	52193	42H123	Other boiler	Reg 1112, 1125, 1142-2
Delaware City Refinery	52193	CATCOB	Other boiler	Reg 1125, Consent Order
Delaware City Refinery	52193	COKCOB	Other boiler	Reg 1125, 1142-2
Delaware City Refinery	52193	DCPP1	Dry bottom wall-fired boiler	Reg 1112, 1125, 1142-2
Delaware City Refinery	52193	DCPP2	Dry bottom wall-fired boiler	Reg 1112, 1125, 1142-2
Delaware City Refinery	52193	DCPP3	Dry bottom wall-fired boiler	Reg 1112, 1125, 1142-2
Delaware City Refinery	52193	MECCU1	Combined cycle	Reg 1112, 1120, 1125
Delaware City Refinery	52193	MECCU2	Combined cycle	Reg 1112, 1120, 1125
Edge Moor	593	10	Combustion turbine	Reg 1112, 1125, 1148
Indian River	594	10	Combustion turbine	Reg 1112, 1125, 1148
Madison Street	596	10	Combustion turbine	Retired
McKee Run	599	1	Dry bottom wall-fired boiler	Reg 1112, 1125
McKee Run	599	2	Dry bottom wall-fired boiler	Reg 1112, 1125
NRG Energy Center Dover	10030	1	Dry bottom wall-fired boiler	Reg 1112, 1125
West Substation	597	10	Combustion turbine	Reg 1112, 1125, 1148

## 6.0 Current Emissions from NOx SIP Call Non-EGUs

Delaware's regulatory NOx controls have helped Delaware achieve significant ozone season NOx emissions reductions from this group of NOx SIP Call non-EGU sources. In order to fully assess the effect of Delaware's NOx emissions control requirements on the NOx SIP Call non-EGU sources, an estimate was performed for the ozone season NOx emissions potential to emit (PTE) for this group of sources. For this estimation, the EPA's Air Monitoring Program Data (AMPD) database was accessed for the individual Delaware NOx SIP Call non-EGUs to obtain representative ozone season NOx mass emissions and hours of operation. The individual Delaware NOx SIP Call non-EGU's ozone season hourly NOx emissions rate was determined by dividing the AMPD's ozone season NOx mass emissions by the AMPD's ozone season hours of operation. Each individual Delaware NOx SIP Call non-EGU's ozone season potential to emit was then calculated by multiplying that source's ozone season hourly NOx emissions rate by 3,672 hours per ozone season. The individual Delaware NOx SIP Call non-EGU ozone season potential to emit values were then added together to obtain a total Delaware NOx SIP Call non-EGU fleet ozone season NOx emissions potential to emit. The resulting Delaware NOx SIP Call non-EGU fleet ozone season NOx potential to emit was estimated to 1,702 tons of NOx per ozone season.

It should be noted that the value estimated above for the Delaware NOx SIP Call non-EGU sources is a very conservative value. Six of the sources included in the estimate are small electric generating units that serve a "peaking" function and historically operate only a few hours per ozone season. For the ozone seasons during the period of 2007 through 2012 the operating hours per ozone season for these non-EGU sources ranged from a high of 163 hours to less than 2 hours, with an overall average of 36 hours per ozone season. Therefore, a PTE calculation that includes 100% operating capacity factor for those sources greatly overestimates the realistically expected NOx emissions from those units

individually and as a group.

Regardless, the estimated ozone season NO<sub>x</sub> mass PTE for the Delaware NO<sub>x</sub> SIP Call non-EGU provides a value significantly lower than the EPA's NO<sub>x</sub> SIP Call non-EGU source sector 2007 NO<sub>x</sub> budget of 2,473 tons per season, as identified in 40 CFR 51.121(g)(2)(ii). This provides a clear indication that Delaware's NO<sub>x</sub> emissions regulations have effectively served to control the NO<sub>x</sub> emissions from Delaware's NO<sub>x</sub> SIP Call non-EGU sources.

## 7.0 Delaware EGU and non-EGU NO<sub>x</sub> Emissions Post-NO<sub>x</sub> SIP Call

While Delaware promulgated its regulation 7 **DE Admin. Code** 1139 to implement the EPA's NO<sub>x</sub> SIP Call NO<sub>x</sub> cap-and-trade program model rule for compliance with the NO<sub>x</sub> SIP Call's NO<sub>x</sub> mass emissions caps for EGUs and other large boilers and combustion turbines, Delaware also determined that it was appropriate to address the NO<sub>x</sub> emissions rates of these same units. As a result, existing Delaware regulations that addressed EGU NO<sub>x</sub> emissions were supplemented with additional regulations in order to fully address the Delaware's fleet of EGUs, both existing and new EGUs. This group of regulations include the following:

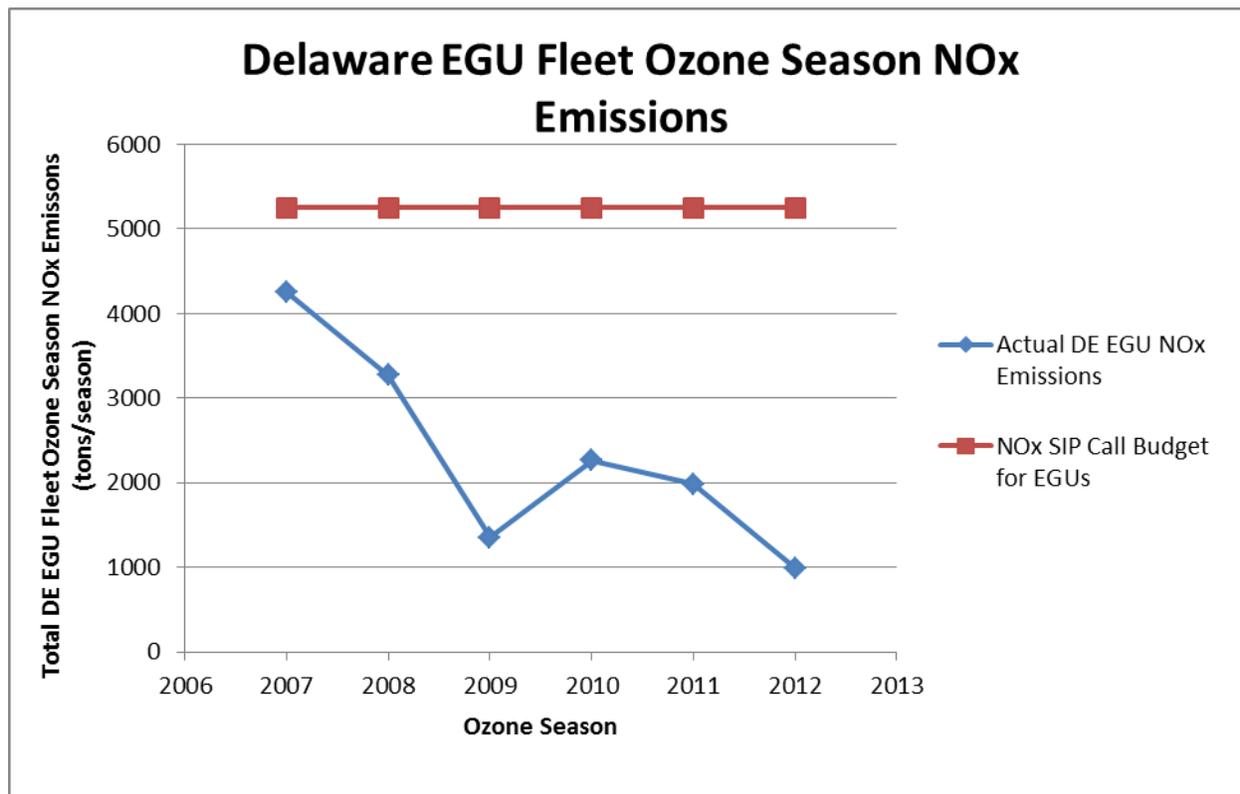
- **7 DE Admin. Code 1112, Control of Nitrogen Oxides Emissions**, effective November 1993: This regulation established NO<sub>x</sub> emission rate limits for major sources of NO<sub>x</sub> emissions, including boilers and combustion turbines used to power EGUs.
- **7 DE Admin. Code 1120, New Source Performance Standards**, effective December 1988: This regulation includes NO<sub>x</sub> emission rate limits for new fuel burning units with a rated heat input capacity of 250 MMBTU/hr or greater.
- **7 DE Admin. Code 1125, Requirements for Preconstruction Review**, effective August 2005: This regulation includes requirements for preconstruction review of proposed new sources of NO<sub>x</sub> emissions, and includes requirements of prevention of significant deterioration (PSD) and emissions offset provisions (EOP). These requirements also include provisions for selection of best available control technology (BACT) and lowest achievable emission rate (LAER) for NO<sub>x</sub> emission sources.
- **7 DE Admin. Code 1136, Acid Rain Program**, effective September 1996: This regulation adopted by reference the requirements of Parts 72 through 78, of Title 40 of the Code of Federal Regulations.
- **7 DE Admin. Code 1146, Electric Generating Unit (EGU) Multi-Pollutant Regulation**, effective 2006: This regulation established NO<sub>x</sub> emission rate limits and annual NO<sub>x</sub> mass emission limits for coal-fired and residual fuel oil-fired EGUs with nameplate ratings of 25MW or greater. The regulation established a NO<sub>x</sub> emissions rate limit of 0.15 lb/MMBTU beginning with the ozone season in 2009, and established a NO<sub>x</sub> emissions rate limit of 0.125 lb/MMBTU beginning in January 2012. Both the 0.15 lb/MMBTU NO<sub>x</sub> emission rate limit and the 0.125 lb/MMBTU NO<sub>x</sub> emission rate limit are based on a rolling 24-hr compliance period.
- **7 DE Admin. Code 1148 Control of Stationary Combustion Turbine Electric Generating Unit Emissions**, effective 2007: This regulation established NO<sub>x</sub> emission rate limits (and presumptive control requirements) for combustion turbines with a nameplate rating of 1MW or greater, except: 1) existing stationary combustion turbine electric generating units that are subject to 7 **DE Admin. Code** 1112 and meet the NO<sub>x</sub> emissions limitations identified in Table 3-2 of 7 **DE Admin. Code** 1112, and are not otherwise exempt from the NO<sub>x</sub> emissions limitations of Table 3-2 of 7 **DE Admin. Code** 1112, or; 2) existing stationary combustion turbine electric generating units that have undergone New Source Review in accordance with 7 **DE Admin. Code** 1125 and are covered by a permit which imposes NO<sub>x</sub> emissions limitations established to meet Best Available Control Technology or Lowest Achievable Emission Rate technology standards.

Delaware's regulations concerning NO<sub>x</sub> emissions from EGUs, and related consent decrees, have effectively required Delaware's fleet of EGUs to be well controlled from a NO<sub>x</sub> emissions standpoint. Delaware's requirements have resulted in the addition of effective NO<sub>x</sub> controls and/or modifications to existing EGUs to reduce NO<sub>x</sub> emission rates. Delaware's regulations also require any new EGU in Delaware to be well controlled, requiring start-of-the-art controls to meet NO<sub>x</sub> emissions limitations. A summary of the NO<sub>x</sub> emissions controls installed on Delaware's EGUs is shown in the following table:

Facility	Unit	NOx Control(s)	Comments
Christiana Substation	11	Water Injection	W.I. installed 2009
Christiana Substation	14	Water Injection	W.I. installed 2009
Delaware City Refinery	DCPP4		
Edge Moor	3	LNB, OFA, SNCR	Primary fuel switched from coal to nat. gas
Edge Moor	4	LNB, OFA, SNCR	Primary fuel switched from coal to nat. gas
Edge Moor	5	LNB, OFA, SNCR	
Hay Road	**3	Water Injection	
Hay Road	1	Water Injection	
Hay Road	2	Water Injection	
Hay Road	5	Water Injection, SCR	
Hay Road	6	Water Injection, SCR	
Hay Road	7	Water Injection, SCR	
Indian River	1	LNB, OFA, SNCR	Unit was mothballed April 2011
Indian River	2	LNB, OFA, SNCR	Unit was mothballed April 2010
Indian River	3	LNB, OFA, SNCR	Unit will be mothballed December 2013
Indian River	4	LNB, OFA, SNCR, SCR	SCR operational December 2011
McKee Run	3	LNB, Overfire Air	Primary fuel switched from resid oil to nat. gas
NRG Energy Center Dover	2	Water Injection	
NRG Energy Center Dover	3	Water Injection	
Van Sant	**11	Water Injection	
Warren F. Sam Beasley Pwr Station	1	Water Injection, SCR	
Warren F. Sam Beasley Pwr Station	2	Water Injection, SCR	Unit began operation April, 2012

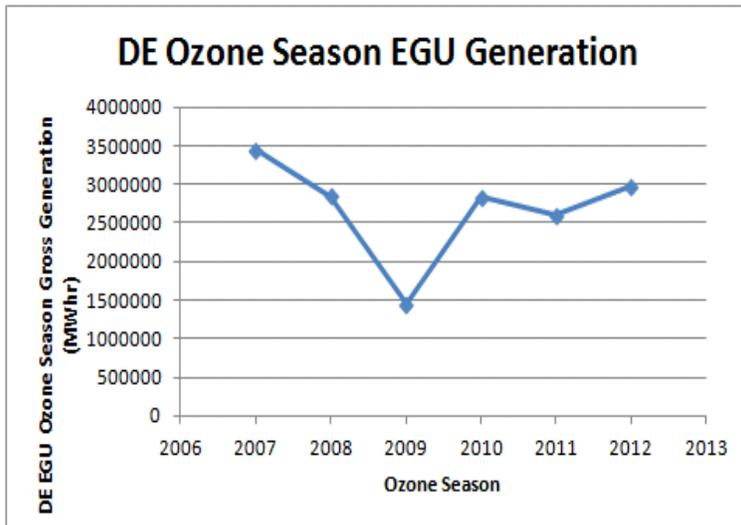
As noted earlier in this document, the Delaware City Refinery unit DCPP4 is categorized as an EGU for the purposes of this document since the EPA has included DCPP4 in the CAIR annual and ozone season NOx cap-and-trade programs. However, the Delaware City Refinery DCPP4 is a refinery boiler, and this source is subject to all of Delaware's NOx emissions regulations specified for non-EGUs in this document, including 7 DE Admin. Code 1112, Control of Nitrogen Oxides Emissions, and 7 DE Admin. Code 1142, Specific Emissions Control Requirements, Section 2, Control of NOx Emissions from Industrial Boilers and Process Heaters at Petroleum Refineries.

The addition of NOx emissions rate controls to Delaware's EGUs have resulted in significant reductions in ozone season NOx mass emissions from those Delaware EGUs. The following graph exhibits data from the EPA's Air Markets Program Data (AMPD) database, and shows the ozone season NOx emissions from Delaware's EGUs for the period of 2007 through 2012:



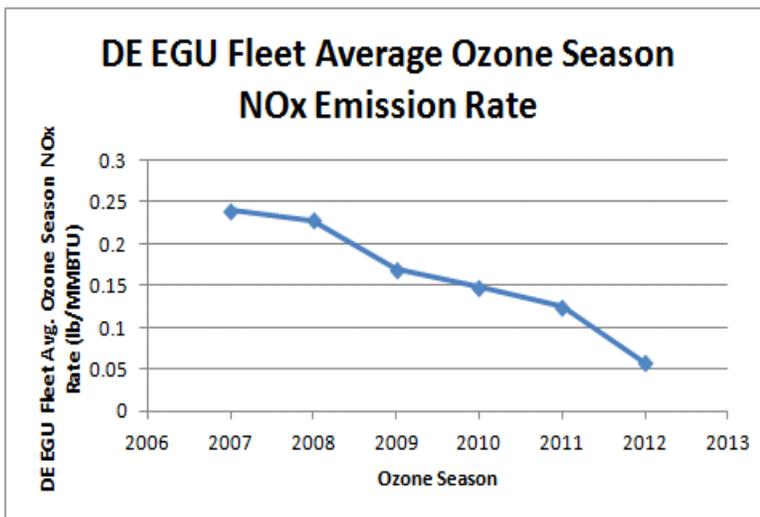
The EPA's AMPD information depicted in the above graph indicates that between the 2007 ozone season and the 2012 ozone season there was a reduction of approximately 3,262 tons of NOx emissions (an approximate 77% reduction) from DE's fleet of EGUs. The Delaware EGU NOx emissions of the 2012 ozone season, which was first ozone season to reflect full implementation of Delaware EGU NOx control regulations, also represents a NOx emissions reduction of 4,259 tons of NOx below the Delaware NOx SIP Call ozone season EGU NOx allowance allocation of 5,250 tons of NOx per ozone season, as identified in 40 CFR 51.121(g)(2)(ii). This represents an approximate 81% reduction below the allocation level. Further, the Delaware EGU 2012 ozone season NOx emissions represent a seasonal NOx emissions reduction of 4,847 tons below the NOx SIP Call's 2007 base NOx emissions for the Delaware EGUs of 5,838 tons of NOx per ozone season (representing an approximate reduction of 83% below the base level). The NOx SIP Call ozone season NOx emissions allocation for Delaware's EGUs reflected a required reduction of 588 tons per season below the 2007 base value whereas the actual 2012 ozone season Delaware EGU NOx emissions were more than 8 times that amount. This indicates that the actual NOx emissions reduction achieved through Delaware's SIP approved EGU control strategy was far in excess of those anticipated by EPA under the NOx SIP Call.

Data from the EPA's Air Markets Program Data indicates that two factors have contributed to the reduction in Delaware's EGU ozone season NOx emissions in the years 2007 through 2012. Those two factors are a reduction in ozone season electric generation and a reduction in the Delaware EGU fleet average NOx emissions rate. The following graph shows the change in Delaware EGU generation from 2007 ozone season through the 2012 ozone season:

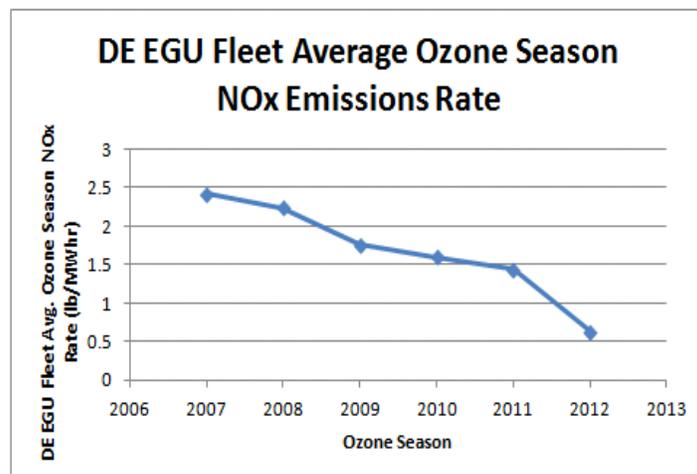


It can be seen in the above graph that there was a reduction in electric generation from Delaware's fleet of EGUs between the ozone seasons of 2007 and 2012. The EPA AMPD information indicates that the generation reduction between the ozone seasons of 2007 and 2012 was approximately 14% of the 2007 total. Based upon the 2012 Delaware EGU fleet average ozone season NOx emissions rate, the reduction in generation between the 2007 and 2012 ozone seasons would account for an approximate 148 tons of NOx per ozone season (at the 2012 Delaware EGU fleet ozone season average NOx emissions rate), or approximately 5% of the total reduction in seasonal NOx emissions that occurred between the individual 2007 and 2012 ozone seasons.

The second factor in the reduction in Delaware EGU 2007 to 2012 ozone season NOx emissions is the reduction in Delaware's EGU fleet average NOx emissions rate. The following graph shows the reduction in Delaware's EGU fleet average NOx emissions rate from the 2007 ozone season through the 2012 ozone season, in terms of lb/MMBTU:



The following graph shows the reduction in Delaware's EGU fleet average NOx emissions rate from the 2007 ozone season through the 2012 ozone season, in terms of lb/MWhr:



The EPA AMPD data for the above two graphs indicate that between the 2007 ozone season and the 2012 ozone season Delaware's EGU fleet average NOx emission rate was reduced approximately 76% in terms of lb/MMBTU, and approximately 74% in terms of lb/MWhr. This reduction in ozone season average NOx emission rate accounts for the bulk of Delaware's ozone season NOx mass emissions reduction between the 2007 ozone season actual NOx mass emissions and the 2012 ozone season NOx mass emissions; approximately 3,080 tons. The relatively large reductions in the Delaware EGU fleet average NOx emissions rates shown in the above graphs between the 2008 and 2009 ozone seasons and the 2011 and 2012 ozone seasons correspond to the increasing stringency of the EGU NOx emissions control requirements associated with Delaware's SIP approved regulations.

As discussed above, the actual 2012 ozone season NOx emissions are the most representative of the current Delaware NOx emissions regulation for EGUs. In order to further document the effectiveness of Delaware's EGU NOx control regulations, a calculation was performed to estimate the Delaware EGUs' ozone season potential to emit NOx. For this calculation, the EPA's AMPD database was accessed for the individual Delaware EGUs to obtain the 2012 ozone season NOx mass emissions and hours of operation. The individual Delaware EGU's ozone season hourly NOx emissions rate was determined by dividing the AMPD's ozone season NOx mass emissions by the AMPD's ozone season hours of operation. Each individual Delaware EGU's ozone season potential to emit was then calculated by multiplying that EGU's ozone season hourly NOx emissions rate by 3,672 hours per ozone season. The individual Delaware EGU ozone season potential to emit values were then added together to obtain a Delaware EGU fleet ozone season NOx emissions potential to emit. The resulting Delaware EGU fleet ozone season NOx potential to emit was 2,635 tons per season.

The above calculated Delaware EGU fleet ozone season NOx potential to emit value of 2,635 tons per season represents a reduction of 2,615 tons per ozone season (representing an approximate 49% reduction) from the NOx SIP Call EGU category allocation of 5,250 tons per ozone season for Delaware. The calculated 2,635 to per season potential to emit value also represents a reduction of 3,203 tons per ozone season (representing an approximate 55% reduction) from the NOx SIP Call's 2007 base value 5,838 tons per ozone season for Delaware.

Of greater significance is that both the actual Delaware EGU fleet actual ozone season NOx emissions and the calculated Delaware EGU fleet ozone season potential to emit values represent ozone season NOx emissions reductions in excess of those specified in the EPA's NOx SIP Call for the combined Delaware EGU and Non-EGU source sectors. The following table indicates the EPA's NOx SIP Call seasonal NOx emissions reduction requirements for Delaware's EGU and Non-EGU source sectors:

<u>Source Category</u>	<u>NOx SIP Call 2007 Base Ozone Season NOx Emissions (tons/season)</u>	<u>NOx SIP Call 2007 Ozone Season NOx Budget (tons/season)</u>	<u>NOx SIP Call Required Reduction (tons/season)</u>	<u>Actual 2012 Ozone Season NOx Emissions (tons/season)</u>	<u>Calculated Ozone Season NOx Potential to Emit (tons/season)</u>
EGU	5838	5250	588	991	2635
Non-EGU	2821	2473	348	N/A	N/A
Total	8659	7723	936		

It can be seen in the above table that the NOx SIP Call's combined NOx reduction requirement for Delaware's EGUs and Non-EGUs was 936 tons per ozone season, relative to the 2007 base ozone season values. The actual 2012 Delaware EGU fleet ozone season NOx emissions discussed earlier in this document represents a reduction of 4,847 tons

per season from the 2007 EGU ozone season base value. And also as discussed earlier in this document, the calculated Delaware EGU ozone season NOx potential to emit value of 2,635 tons per season represents a reduction of 3,203 tons per ozone season from the 2007 EGU ozone season base value.

Each of those Delaware EGU ozone season NOx emissions reductions are in excess of the total EPA's NOx SIP Call NOx emissions reduction requirements for Delaware's combined EGU and Non-EGU source sectors, by 3,911 tons per season for the actual 2012 ozone season and by 1,699 tons per season for the calculated EGU fleet ozone season potential to emit. From these values it is apparent that the ozone season NOx emission reductions from Delaware's EGU source sector alone meet and exceed those NOx SIP Call seasonal NOx emission reduction requirements of the combined Delaware EGU and Non-EGU source sectors. Therefore, Delaware's existing rules serving to regulate the ozone season NOx emissions from Delaware's EGU fleet are sufficient to meet the EPA' NOx SIP Call obligations for the State of Delaware without any need to rely upon cap-and-trade controls on Delaware's Non-EGU source sector.

## **8.0 Resolution of 7 DE Admin 1139 Post-CAIR FIP**

In the transition of certain NOx SIP Call requirements to CAIR, the USEPA determined that it would no longer administer the NOx SIP Call Budget Trading Program that it had put in place to support the NOx SIP Call. 40 CFR 51.121(r)(1) indicates, "Notwithstanding any provisions of paragraph (p) of this section, subparts A through I of part 96 of this chapter, and any State's SIP to the contrary, the Administrator will not carry out any of the functions set forth for the Administrator in subparts A through I of part 96 of this chapter, or in any emissions trading program in a State's SIP approved under paragraph (p) of this section, with regard to any ozone season that occurs after September 30, 2008."

Delaware's **7 DE Admin. Code 1139** was specifically promulgated to implement the provisions of the USEPA's NOx SIP Call and facilitate the participation of the subject sources in the USEPA's NOx SIP Call Budget Trading Program. As the USEPA determined that it would not administer the NOx SIP Call Budget Trading Program after the 2008 ozone season, the sources subject to Delaware's **7 DE Admin. Code 1139** can no longer report ozone season emissions or trade allowances to meet the requirements of Delaware's **7 DE Admin. Code 1139**. Therefore sources subject to **7 DE Admin. Code 1139** cannot comply with the requirements of **7 DE Admin. Code 1139** and the regulation must be sunset.

In 40 CFR 51.121(r)(2) the USEPA indicates, "Except as provided in 51.123(bb), a State whose SIP is approved as meeting the requirements of this section and that includes an emission trading program approved under paragraph (p) of this section must revise the SIP to adopt control measures that satisfy the same portion of the State's NOx reduction requirements under this section as the State projected such emissions trading program would satisfy."

As discussed earlier in this document, Delaware has promulgated a series of regulations that have stringently controlled the NOx emissions from EGUs and non-EGU point sources located in the State of Delaware. Those regulations included the following:

- **7 DE Admin. Code 1112, Control of Nitrogen Oxides Emissions**, effective November 1993
- **7 DE Admin. Code 1120, New Source Performance Standards**, effective December 1988
- **7 DE Admin. Code 1125, Requirements for Preconstruction Review**, effective August 2005
- **7 DE Admin. Code 1136, Acid Rain Program**, effective September 1996
- **7 DE Admin. Code 1142, Section 1, Control of NOx Emissions from Industrial Boilers**, effective December 2001
- **7 DE Admin. Code 1142, Section 2, Control of NOx Emissions from Industrial Boilers and Process Heaters at Petroleum Refineries**, effective July 2007
- **7 DE Admin. Code 1144, Control of Stationary Generator Emissions**, effective January 2006
- **7 DE Admin. Code 1146, Electric Generating Unit (EGU) Multi-Pollutant Regulation**, effective January 2007
- **7 DE Admin. Code 1148, Control of Stationary Combustion Turbine Electric Generating Unit Emissions**, effective July 2007

Additionally, Delaware's air permitting regulations (**7 DE Admin. Code 1102, Permits** and **7 DE Admin. Code 1130, Title V State Operating Permit Program**) and Delaware state law (**7 Del.C., Chapter 60**) provide Delaware's Secretary of the Department of Natural Resources and Environmental Control (DNREC) with the authority to take enforcement action, and to issue orders to any person violating any rule, regulation, or order or permit condition or provision of the statute to cease and desist from such violation.

Delaware's existing rules and regulations, identified above, have resulted in significant ozone season NOx reductions from Delaware's fleet of EGUs. As discussed in Section 7.0 of this document, the EGU ozone season NOx emissions were conservatively estimated on a potential to emit basis at 2,635 tons per ozone season, which represents a reduction of 3,203 tons of NOx per ozone season below the NOx SIP Call's 2007 EGU base value of 5,838 tons per ozone season. (The actual 2012 Delaware EGU fleet ozone season NOx emissions totaled 991 tons, which represents a 4,847 tons of NOx per ozone season reduction below the NOx SIP Call's 2007 EGU base value.) EPA's NOx SIP Call required a NOx reduction of 538 tons per ozone season from Delaware's EGU sector and 348 tons per ozone season from Delaware's non-EGU sector, for a combined EGU and non-EGU sector NOx reduction requirement of 936 tons per ozone season.

These values indicate that the ozone season NOx emissions reduction resulting from Delaware's regulation of the EGU sector greatly exceeds the NOx SIP Call's combined NOx emissions reductions from the EGU and non-EGU sectors. This demonstrates that the overall reductions achieved by Delaware's regulation of the EGU source sector have exceeded the

overall ozone season NOx emissions reduction requirements of the NOx SIP Call without relying on any ozone season NOx emissions reductions from non-EGUs.

## **9.0 Conclusion**

Delaware has promulgated regulations that have resulted in significant ozone season NOx emissions reductions from both its EGU and non-EGU source sectors. This document demonstrates that the resulting ozone season NOx emissions reductions from Delaware's EGU source sector exceed the ozone season NOx emissions reductions required by the EPA's NOx SIP call for both the EGU and non-EGU source sectors, as identified in 40 CFR 51.121(g)(2)(ii), without relying on any ozone season NOx emissions reductions from non-EGUs. This document also demonstrates that Delaware has adopted control measures that satisfy the EGU and non-EGU point source NOx reductions and budgets previously addressed by Delaware's 7 **DE Admin. Code** 1139 and participation in the NOx SIP Call emissions trading program, satisfying those requirements of 40 CFR 51.121(r)(2). Therefore, 7 **DE Admin. Code** 1139 will be sunset and Delaware's obligation under 40 CFR 51.121(r)(2) will continue to be met through Delaware's existing SIP approved regulations that serve to control ozone season NOx emissions, as described in this document.

**17 DE Reg. 539 (11/01/13) (Final)**