Title 26 DEPARTMENT OF THE ENVIRONMENT

Subtitle 11 AIR QUALITY

Chapter 29 NOx Reduction and Trading Program

Authority: Environment Article, §§1-101, 1-404, 2-101—2-103, and 2-301—2-303, Annotated Code of Maryland

.01 Definitions.

- A. In this chapter, the following terms have the meanings indicated.
- B. Terms Defined.
- (1) "Account" means the record within the NOx allowance tracking system (NATS) where allowances are maintained.
- (2) "Administrator" means the U.S. Environmental Protection Agency that serves as the manager of the NOx allowance tracking system (NATS) and the NOx emissions tracking system (NETS).
- (3) "Affected nontrading source" means a cement manufacturing facility or any stationary internal combustion engine that:
- (a) Has emissions of 1 ton or more of NOx per day averaged over the control period; and
 - (b) Is not an affected trading source.
 - (4) "Affected trading source" means any:
- (a) Fossil fuel fired electric generating unit that serves a generator with a name plate capacity greater than 25.0 MW and sells any amount of electricity;
- (b) Nonelectric generating unit that has a maximum design heat input greater than 250 MMBtu per hour; or
- (c) Other source for which an opt-in application is submitted and approved by the Department.
- (5) "Allocation" means the assignment of allowances to an affected trading source in accordance with this chapter and COMAR 26.11.30, and recorded by the Administrator to a compliance account.

- (6) Allowance.
- (a) "Allowance" means the limited authorization to emit 1 ton of NOx for the control period.
 - (b) "Allowance" does not constitute a security or other form of property.
- (7) "Allowance transfer" means the conveyance of an allowance to either a compliance account or general account by purchase, trade, auction, gift, or other acceptable methods.
- (8) "Allowance transfer deadline" means midnight on November 30 of the year when allowances are to be transferred in the NATS, or requested to be transferred in the NATS, to a compliance account to achieve compliance with this chapter.
- (9) "Alternate account representative" means the secondary responsible individual who is authorized, in writing, to transfer and otherwise manage allowances and certify reports to the NATS and NETS.
- (10) "Authorized account representative" means the primary responsible individual who is authorized, in writing, to transfer and otherwise mange allowances and certify reports to the NATS and NETS.
- (11) "Banking" means the retention of unused allowances from one control period for use in a future control period.
- (12) "Clean air project" means a project in Maryland that:
- (a) Involves operation of a new or modified fossil fuel fired electric generator with state-of-the-art NOx controls which is demonstrated to be more efficient than existing electric generation; or
- (b) Results in emission reductions of more than 1 ton of NOx for the control period that is consistent with applicable provisions of Chapters 3 and 4, Acts of 1999.
- (13) "Compliance account" means the account in the NATS, established by the Administrator for an affected trading source under 40 CFR Part 96, Subpart F, in which NOx allowances are initially recorded and in which NOx allowances are held available for use by the affected trading source to meet its budget.
- (14) "Compliance supplement pool" means a pool of NOx allowances, not to exceed 3,840 tons, that may be distributed by the Department for compliance purposes under certain conditions or to encourage early reductions.

- (15) "Continuous emissions monitoring system (CEMS)" means the equipment required by this chapter and COMAR 26.11.30 to measure NOx emissions.
- (16) "Control period" means the period beginning May 1 and ending on September 30 of each year.
- (17) "Early reduction" means NOx reductions that are achieved during the control period in 2001 and 2002 and that are in excess of reductions required by complying with all other applicable State and federal requirements.
- (17-1) "Electric generating unit" means a fossil fuel fired stationary boiler, combustion turbine, or combined cycle system that sells any amount of electricity.
- (18) "Fossil fuel" means natural gas, petroleum, coal, and any form of solid, liquid, or gaseous fuel derived from these materials for the purpose of creating useful heat.
 - (19) "General account" means an account in the NATS that is not a compliance account.
- (20) "NOx allowance tracking system (NATS)" means the computerized system used by EPA to track the number of allowances held and used by any account.
- (21) "NOx emissions tracking system (NETS)" means the computerized system used by EPA to track NOx emissions from affected sources.
- (21-1) "Nonelectric generating unit" means a fossil fuel fired stationary boiler, combustion turbine, or combined cycle system that is not an electric generating unit.
 - (22) "Opt-in" means to voluntarily comply with this chapter and COMAR 26.11.30.
- (23) "Region" means the Northeast ozone transport region (OTR) or that area that includes all the states identified by the EPA which participate in an EPA-approved NOx banking and trading program.
 - (24) "Set-aside pool" means a reserve of NOx allowances held by the Department for distribution in accordance with Regulation .09 of this chapter.

.02 Incorporation by Reference.

- A. In this chapter, the following documents are incorporated by reference.
- B. Documents Incorporated.
 - (1) 40 CFR Part 75, Subpart H.

- (2) EPA Electronic Data Reporting—Acid Rain Program/NOx Budget Program (April 1, 1999, Version 2.1).
 - (3) 40 CFR Part 96, Subparts A, B, C, D, F, G, H, and I.
- C. Except as provided in this chapter, the definitions in 40 CFR §96.2, October 27, 1998 Edition, are incorporated by reference. In the event of any conflict between the terms defined in this chapter and the terms defined in 40 CFR §96.2, the terms defined in 40 CFR §96.2 control.

.03 Scope and Applicability.

- A. Regulations .04—.14 in this chapter apply to the owner and operator of an affected trading source, and, to the extent specified in this regulation, the authorized account representative and the alternate authorized account representative of an affected trading source.
- B. Regulation .15 of this chapter applies to affected nontrading sources.
- C. A person who owns or operates an installation that does not meet the definition of an affected trading source may opt-in in accordance with the opt-in procedures in COMAR 26.11.30.
- D. On and after January 1, 2003, an affected trading source subject to the provisions in this chapter or COMAR 26.11.30 is exempt from the requirements of COMAR 26.11.27 and 26.11.28.
- E. The Department authorizes the Administrator to assist the Department in implementing the NOx Reduction and Trading Program by carrying out the functions set forth for the Administrator in this chapter and COMAR 26.11.30.

.04 General Requirements for Affected Trading Sources.

A. In addition to any other limitation that affects an affected trading source, during the control period of each year starting the later of May 1, 2003, or the date on which the affected trading source begins operation, the owner or operator of each affected trading source shall hold an account of NOx allowances available for compliance deductions in accordance with 40 CFR §96.54, as of the NOx allowance transfer deadline, at least equal to the affected trading source's NOx emissions for the control period (See COMAR 26.11.30.)

- B. An affected trading source may achieve compliance by:
 - (1) Reducing on-site NOx emissions;
- (2) Acquiring NOx allowances from any other person in the region with a compliance or overdraft account or from any person with a general account; or

- (3) Acquiring allowances from the compliance supplement or the set-aside pools.
- C. Allowances shall be held in, deducted, or transferred among NATS accounts in accordance with the procedures in COMAR 26.11.30 and 40 CFR Part 96, Subparts F, G, and I.
- D. An affected trading source that is permanently retired may obtain an exemption from the monitoring, record keeping, emission reporting, allowance holding, and compliance certification requirements in this chapter. To obtain an exemption, the authorized account representative for the affected trading source shall file a request for retirement exemption for approval by the Department in accordance with 40 CFR §96.5. The request shall include identification of the affected trading source being retired, the date of retirement, and a statement that the affected trading source meets the requirements of 40 CFR §96.5(c).
- E. An affected trading source that is retired at any time after January 1, 1995, may not emit any NOx starting on the date that the exemption takes effect and shall be allocated allowances as applicable in accordance with this chapter for the control periods in 2003 through 2005.
- F. A NOx budget source subject of the provisions in COMAR 26.11.27 and 26.11.28 that is retired at any time after January 1, 1991, shall, as provided in those provisions, receive NOx allowances for use or trade through the 2002 control period.
- G. The NOx authorized account representative shall submit:
- (1) To the Department a complete permit application under the Department's Title V requirements and 40 CFR §96.22, in accordance with the deadlines specified in 40 CFR §96.21(b) and (c); and
- (2) In a timely manner any supplemental information that the Department determines is necessary in order to review a permit application and issue or deny a permit.
- H. The owner and operator of each affected trading source shall operate the affected trading source in compliance with the permit issued in accordance with §G of this regulation. The permit shall include all of the requirements in this chapter and COMAR 26.11.30.

.05 NOx Allowance Allocations.

A. Initial Allocations. Allowances shall be allocated to the affected trading sources listed in COMAR 26.11.30 for the control periods in 2003, 2004, and 2005.

B. Future Allocations.

(1) On or before April 1, 2003, the Department shall submit to the Administrator the allowance allocations for each affected trading source for the control periods in 2006 and 2007.

- (2) On or before April 1, 2005, and biannually after that, the Department shall submit to the Administrator the allowance allocations for each affected trading source for each 2-year period beginning with the years 2008 and 2009.
- (3) If the NOx allowance allocations are not submitted, the Administrator shall allocate for the applicable control period the same number of NOx allowances that were allocated to each affected trading source for the preceding control period.
- C. NOx allowances shall be allocated in accordance with 40 CFR Part 96, Subpart E, unless the Department requires, and the Administrator approves, a different methodology for allocating NOx allowances.

D. Emission Reduction Credits.

- (1) This section applies if an affected trading source reduces emissions or shuts down and transfers all or some of its surplus reductions to a new or modified source as an emission reduction credit for use as offsets.
- (2) If the emission reduction credits are transferred to another affected trading source, the new or modified affected trading source may use the emission reduction credit as offsets and allowances. Future allowances for the affected trading source that created the emission reduction credit shall be reduced by an amount equivalent to the emission reduction credits transferred.
- (3) If the emission reduction credit is transferred to any other source or unit, future allowances for the affected trading source shall be reduced by an amount equivalent to the quantity of emission reduction credits transferred.
- (4) For the purpose of this section, a new or modified source or unit is any source or unit or modified source or unit that is subject to COMAR 26.11.17.
- E. The Administrator shall be notified of any emission reduction credit transfers authorized by the Department.

.06 Compliance Supplement Pool.

- A. The Department, upon request, may distribute allowances in the compliance supplement pool to affected trading sources that achieve early reductions or to affected trading sources that are unable to meet the May 1, 2003 or 2004, compliance date. Early emission reduction allowances shall be acquired in accordance with COMAR 26.11.30.07.
- B. Allowances in the compliance supplement pool that are not used by the end of the 2004 control period shall be retired.

- C. Upon requesting allowances from the compliance supplement pool that are not early reductions, an affected trading source shall demonstrate to the Department that an undue risk will be created if allowances are not granted. The undue risk demonstration shall be as required in 40 CFR §51.121(e)(iv)B.
- D. If the demonstration is approved by the Department, allowances may not be granted until the public has an opportunity to comment on the proposal.
- E. Allowances granted to an affected trading source under §D of this regulation shall be distributed during the period from September 30, 2002, to May 1, 2003, and from September 30, 2003, to May 1, 2004.
- F. Allowances from the compliance supplement pool may be distributed to an affected trading source only to the extent that an insufficient number of early reduction allowances are available.

.07 Allowance Banking.

- A. Except as provided in Regulations .05E and .06B of this chapter, unused allowances at the end of the allowance transfer deadline shall be retained in the compliance account or general account and designated as "banked" allowances.
- B. Following the allowance transfer deadline, the Department and the Administrator shall announce any conditions or restrictions that will apply to the use of banked allowances in the following control period. See COMAR 26.11.30.

.08 Emission Monitoring.

- A. An affected trading source shall install, operate, maintain, and certify a NOx CEM or other approved monitoring method in accordance with 40 CFR Part 75, Subpart H.
- B. An affected trading source subject to this chapter shall comply with the monitoring requirements in 40 CFR Part 96, Subpart H.

.09 Requirements for New Sources and Set-Aside Pool.

- A. A person who constructs a new or modified affected trading source that has not been allocated allowances under COMAR 26.11.30 shall:
 - (1) Secure allowances for each ton of NOx emissions;
- (2) Secure the necessary allowances by November 30 of each year the source operates; and

- (3) Acquire the necessary allowances from the allowance market if allowances are not available from the set-aside pool.
- B. The Department shall maintain a set-aside pool for each control period consisting of 5 percent of the total budget for affected trading sources to be used as follows:
 - (1) 3 percent for clean air projects; and
 - (2) 2 percent for new or modified affected trading sources.
- C. The owner or operator of a new or modified affected trading source is responsible through its authorized account representative for acquiring all necessary allowances from other compliance or general accounts or, at the discretion of the Department, from the set-aside pool to the extent that allowances are available to accommodate new affected trading sources.
- D. Allowances for New or Modified Affected Trading Sources.
- (1) Allowances in the set-aside pool that are made available by the Department to accommodate new or modified affected trading sources, or clean air projects as defined in Regulation .01B(12)(a) of this chapter, may be distributed for projected actual, permitted, or increased emissions occurring during any control period.
- (2) Unused allowances in the set-aside pool following each control period shall remain in the set-aside pool for future use as determined by the Department.
- E. For the purpose of this regulation, a new or modified affected trading source is an affected trading source that has not previously been allocated allowances under COMAR 26.11.30.09.

.10 Reporting.

- A. The authorized account representative for each affected trading source shall submit reports on emissions and operations information to the Administrator in accordance with 40 CFR Part 75, Subpart H, and 40 CFR Part 96, Subpart H. Affected trading sources not subject to 40 CFR Part 75, Subpart H, shall submit quarterly reports. The reports shall be submitted by the 30th day of the month following each calendar quarter for which reports are required. When the 30th day of the month falls on a weekend or holiday, the authorized account representative shall submit the reports not later than the next business day.
- B. The reports required in §A of this regulation shall include:
 - (1) NOx emissions in pounds per hour for each hour during the control period; and
 - (2) Total quarterly and control period NOx emissions in tons.

C. An affected trading source subject to 40 CFR Part 75 shall submit this data to the EPA as part of the quarterly reports required by 40 CFR Part 75.

.11 Record Keeping.

An affected trading source shall maintain, and make available to the Department, all measurements, data, reports, and other information required by this chapter in accordance with 40 CFR Part 96, Subpart H, for a period of not less than 5 years.

.12 End-of-Season Reconciliation.

- A. The owner or operator of each affected trading source shall hold an account of NOx allowances available for compliance deductions in accordance with 40 CFR §96.54, as of the NOx allowance transfer deadline, at least equal to the affected trading source's NOx emissions for the control period (See COMAR 26.11.30).
- B. Beginning in 2003, by November 30 of each year, the Administrator, in accordance with 40 CFR §96.54, will automatically make the deductions of NOx allowances from the compliance account that are equivalent to the NOx emissions from the affected trading source for the current control period.

.13 Compliance Certification.

- A. For each control period, the authorized account representative for the affected trading source shall submit an annual compliance certification to the Department and the Administrator.
- B. The compliance certification shall be submitted not later than the allowance transfer deadline of each year.
- C. The compliance certification shall be prepared in accordance with 40 CFR Part 96, Subpart D, and contain, at a minimum:
- (1) Identification of the affected trading source, including name, address, name of authorized account representative, and NATS account number;
- (2) A statement as to whether NOx emissions data have been submitted to the Administrator in accordance with Regulation.10 of this chapter and in conformance with the requirements of the Administrator;
- (3) A statement as to whether the affected trading source's emissions exceeded the allowances held in the compliance account for the control period, including those obtained through transfer by the allowance transfer deadline and available for compliance deductions in accordance with 40 CFR §96.54;

- (4) A statement certifying that the monitoring plan, which governs the affected trading source, was or was not maintained to reflect the actual operation of the affected trading source;
- (5) A statement certifying that all emissions from the affected trading source were or were not accounted for through the applicable monitoring or application of the appropriate missing data procedures; and
- (6) A statement to indicate whether there were any changes in the method of operation of the affected trading source or the method of monitoring the affected trading source during the control period.

.14 Penalties.

A. In addition to any other penalties allowed by law, if NOx emissions from an affected trading source exceed allowances available for compliance deductions in accordance with 40 CFR §96.54, as of the allowance transfer deadline, allowances from the affected trading source's compliance account for the following control period shall be automatically deducted at a rate of three allowances for each ton of excess NOx emissions.

- B. In addition to the penalty provisions in §A of this regulation, the following conditions apply for the purpose of determining penalties:
- (1) If NOx emissions for the control period exceed allowances held on the transfer deadline, each day in the control period (153 days) shall constitute a separate violation unless the affected trading source demonstrates to the Department's satisfaction that a lesser number of days should be considered; and
 - (2) Each ton of excess emissions may be considered a separate violation.

.15 Requirements for Affected Nontrading Sources.

- A. Applicability. This regulation applies to affected nontrading sources.
- B. Monitoring Requirements.
- (1) A person who owns or operates an affected nontrading source subject to this regulation shall:
- (a) Continuously monitor NOx emissions with a CEM certified in accordance with 40 CFR Part 60 or use an alternative method approved by the Department and the EPA;
 - (b) Begin collecting emissions data on or before May 1, 2002; and

- (c) Submit emissions data to the Department for each control period by November 30 beginning with the 2002 control period.
- (2) The approved NOx emissions measuring method shall be used to demonstrate compliance with the emission reduction requirements in §§C and D of this regulation.
- C. Emission Reduction Requirements for Cement Manufacturing Facilities.
- (1) A person who owns or operates a cement manufacturing facility subject to this regulation shall, on or before May 1, 2003, either meet the applicable NOx emission standards in §C(2) of this regulation or implement one of the following control measures:
 - (a) Install low NOx burners on each kiln; or
 - (b) Modify each kiln to implement mid-kiln firing.
- (2) Emission Standards for Cement Manufacturing Facilities. Emission standards applicable to cement manufacturing facilities are as follows:
- (a) For long wet kilns, maximum emissions of 6.0 pounds of NOx per ton of clinker produced;
- (b) For long dry kilns, maximum emissions of 5.1 pounds of NOx per ton of clinker produced; and
- (c) For pre-heater/pre-calciner or pre-calciner kilns, maximum emissions of 2.8 pounds of NOx per ton of clinker produced.
- (3) Compliance with the standards in C(2) of this regulation are determined on a 30-day rolling average.
- (4) A person who owns or operates a cement manufacturing facility subject to this regulation may submit an alternative control proposal for approval by the Departme nt.
- (5) The alternative control method shall be submitted to the Department on or before May 1, 2001, and shall include a demonstration that the alternative control method will achieve an emission reduction equivalent to or greater than the reduction that would be achieved by complying with §C(1) of this regulation.
- D. Emission Reduction Requirements for Stationary Internal Combustion Engines.
 - (1) A person who owns or operates a stationary internal combustion engine that has an

output equal to or greater than the engine sizes with corresponding fuel types in §D(2) of this regulation and had average daily emissions of 1 ton or more per day for the 1995 or 1996 control periods shall:

- (a) On or before May 1, 2003, meet the NOx emission standards in $\ensuremath{\$D(2)}$ of this regulation; or
- (b) On or before May 1, 2001, submit to the Department, for approval, a proposal to reduce NOx emissions by not less than 90 percent from the 1995 base year emissions.

(2) Emission Standards.

Type Engine	Size (brake HP)	Standard (15 percent oxygen)
Spark ignited rich burn	2400 HP	110 ppmv
Spark ignited lean burn	2400 HP	125 ppmv
Diesel engines	3100 HP	175 ppmv
Dual fuel engines	4400 HP	125 ppmv