

#### **401 KAR 51:210. CAIR NO<sub>x</sub> annual trading program.**

RELATES TO: KRS 224.10-100, 224.20-100, 224.20-110, 224.20-120, 40 C.F.R. 51.121, 51.122, 72.2, 75.1, 75.2, 75.4, 75.11-75.13, 75.17, 75.19, 75.20, 75.24, 75.70, 75.72, 75.74, 75.75, Part 96, 42 U.S.C. 7410

STATUTORY AUTHORITY: KRS 224.10-100(5), 42 U.S.C. 7410

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100(5) requires the Environmental and Public Protection Cabinet to promulgate administrative regulations for the prevention, abatement, and control of air pollution. This administrative regulation establishes requirements for the control of nitrogen oxides (NO<sub>x</sub>) emissions from large boilers and turbines used in power plants, pursuant to the federal mandate published under the Clean Air Interstate Rule (CAIR), 40 C.F.R. 96.101 to 96.188. This administrative regulation is not more stringent than the provisions allowed under the federal mandate.

Section 1. Applicability. This administrative regulation shall apply to CAIR NO<sub>x</sub> units in Kentucky that are subject to 40 C.F.R. 96.104.

Section 2. Compliance Requirements. CAIR NO<sub>x</sub> units shall comply with the following requirements:

- (1) 40 C.F.R. 96.101 to 96.108 (Subpart AA), "CAIR NO<sub>x</sub> Annual Trading Program General Provisions";
- (2) 40 C.F.R. 96.110 to 96.115 (Subpart BB), "CAIR Designated Representative for CAIR NO<sub>x</sub> Sources";
- (3) 40 C.F.R. 96.120 to 96.124 (Subpart CC), "Permits";
- (4) 40 C.F.R. 96.150 to 96.157 (Subpart FF), "CAIR NO<sub>x</sub> Allowance Tracking System";
- (5) 40 C.F.R. 96.160 to 96.162 (Subpart GG), "CAIR NO<sub>x</sub> Allowance Transfers";
- (6) 40 C.F.R. 96.170 to 96.175 (Subpart HH), "Monitoring and Reporting"; and
- (7) 40 C.F.R. 96.180 to 96.188 (Subpart II), "CAIR NO<sub>x</sub> Opt-in Units".

Section 3. Methodology for the Allocation and Sale of CAIR NO<sub>x</sub> Annual Allowances. The number of CAIR NO<sub>x</sub> allowances to be allocated to each CAIR NO<sub>x</sub> unit by the cabinet and to be sold by the Commonwealth of Kentucky shall be determined pursuant to this section.

- (1) The total number of CAIR NO<sub>x</sub> allowances shall be:
  - (a) For the 2009 through 2014 control periods, 83,205 tons, as specified in 40 C.F.R. 96.140; and
  - (b) For the 2015 control periods and thereafter, 69,337 tons, as specified in 40 C.F.R. 96.140.
- (2) The total number of CAIR NO<sub>x</sub> allowances assigned to Kentucky shall be divided into separate pools as follows:
  - (a) Ninety-eight (98) percent of this amount allocated for each control period to units that commence commercial operation before:
    1. January 1, 2006, for the control periods 2009, 2010, 2011, 2012, 2013, and 2014;
    2. January 1, 2009, for the control period 2015; and
    3. Thereafter, January 1 of the year that is six (6) years before the first year of the next control period; and
  - (b) Two (2) percent of this amount for each control period sold by the Commonwealth of Kentucky with the proceeds deposited into Kentucky's general fund.
- (3) For each CAIR NO<sub>x</sub> unit, the baseline heat input or adjusted control period heat input in mmBtu shall be determined and shall be used to determine CAIR NO<sub>x</sub> allowances for the pool specified in subsection (2)(a) of this section as follows:
  - (a) For CAIR NO<sub>x</sub> units commencing operation before January 1, 2001, and

1. Operating each calendar year during a period of five (5) or more consecutive years, the baseline heat input shall be the average of the three (3) highest amounts of the unit's adjusted control period heat input for 2001 through 2005; or
2. For units not having operated each calendar year for a period of five (5) or more consecutive years, the baseline heat input shall be established during the next allocation period when the unit has five (5) consecutive years of operation, using the average of the three (3) highest amounts of the unit's adjusted control period heat input for the most recent five (5) consecutive years of operation;
- (b) For units commencing operation on or after January 1, 2001, and operating each calendar year during a period of five (5) or more consecutive years, the baseline heat input shall be the average of the three (3) highest amounts of the unit's adjusted control period heat input for the most recent five (5) consecutive years of operation; or
- (c) For units that have not operated each calendar year during a period of five (5) or more consecutive years, the baseline heat input shall not be established. For purposes of allocations, the heat input shall be the average of the three (3) highest amounts of the unit's adjusted control period heat input for the previous five (5) years of operation, the:
  1. Adjusted control period heat input for a control period of not operating shall equal zero; and
  2. Cabinet shall allocate CAIR NOx allowances for the unit.
- (4) The adjusted control period heat input for each year shall be calculated as follows:
  - (a) If the unit is coal-fired during the year, the unit's control period heat input for that year shall be multiplied by 100 percent;
  - (b) If the unit is oil-fired during the year, the unit's control period heat input for that year shall be multiplied by sixty (60) percent; and
  - (c) If the unit is not subject to paragraphs (a) or (b) of this subsection, the unit's control period heat input for that year shall be multiplied by forty (40) percent.
- (5) For a calendar year, the unit's control period heat input and the unit's status as coal-fired or oil-fired shall be determined:
  - (a) In accordance with 40 C.F.R. Part 75, if the unit is subject to 40 C.F.R. Part 75;
  - (b) By the best available data reported to the cabinet for the unit if the unit is not otherwise subject to 40 C.F.R. Part 75; or
  - (c) By the best available data obtained by the cabinet.
- (6) For CAIR NOx units included in the pool specified in subsection (2)(a) of this section, the cabinet shall allocate CAIR NOx allowances to each CAIR NOx unit in an amount equal to the result obtained by:
  - (a) Multiplying the total amount of CAIR NOx allowances specified in subsection (2) of this section by the baseline heat input for each unit or the heat input established under subsection (3)(c) of this section;
  - (b) Dividing by the total amount of baseline heat input and the heat input established under subsection (3)(c) of this section for all applicable CAIR NOx units; and
  - (c) Rounding to the nearest whole CAIR NOx allowance, as appropriate.
- (7) The cabinet shall submit to the U.S. EPA and CAIR NOx sources the CAIR NOx allowances to be allocated and sold from the pools specified in subsection (2) of this section in a format prescribed by the U.S. EPA by:
  - (a) October 31, 2006, for the control periods in 2009, 2010, 2011, 2012, 2013, and 2014;
  - (b) October 31, 2009, for control period 2015; and
  - (c) October 31 of each year thereafter, for the control period in the sixth year after the year of the applicable deadline for submission under this paragraph.

Section 4. Compliance Supplement Pool. The CAIR designated representative may request early reduction credits and the allocation of CAIR NO<sub>x</sub> allowances from the compliance supplement pool established under 40 C.F.R. 96.143(a) for any CAIR NO<sub>x</sub> unit in the Commonwealth that achieves emission reductions in 2007 or 2008 or in both years when compared to the unit's NO<sub>x</sub> emission rate during the 2005 control period. Only emission reductions achieved in 2007 or 2008 or in both years that are not necessary to comply with any state or federal emissions limitation applicable during 2007 and 2008 may be used to request early reduction credits as specified in this section.

(1) The owners and operators of the CAIR NO<sub>x</sub> unit shall monitor and report the NO<sub>x</sub> emissions rate and the heat input of the unit in accordance with 40 C.F.R. 96.170 to 96.175 in each control period for which the early reduction is requested and for the 2005 control period. The difference resulting from subtracting the applicable 2007 or 2008 control period NO<sub>x</sub> emission rate from the 2005 control period NO<sub>x</sub> emission rate multiplied by the applicable 2007 or 2008 control period heat input divided by 2000, shall provide the amount in tons of the early reduction credit request.

(2) The CAIR designated representative shall submit to the cabinet by July 1, 2009, a request for allocation of an amount of CAIR NO<sub>x</sub> allowances from the compliance supplement pool:

(a) Not exceeding the sum of the amounts, in tons, of the unit's NO<sub>x</sub> emission reductions in 2007 and 2008 that are not necessary to comply with any state or federal emissions limitation applicable during the years, determined in accordance with 40 C.F.R. 96.170 to 96.175; or

(b) Not exceeding the minimum amount of CAIR NO<sub>x</sub> allowances necessary to remove undue risk to the reliability of electricity supply.

(3) To request allocations pursuant to subsection (2)(b) of this section, the CAIR designated representative shall demonstrate that, in the absence of allocation of an amount of CAIR NO<sub>x</sub> allowances requested, the unit's compliance with CAIR NO<sub>x</sub> emissions limitation for the control period in 2009 would create an undue risk to the reliability of electricity supply during the control period. This demonstration shall include a showing that the owners and operators cannot feasibly obtain a sufficient amount of:

(a) Electricity from other electricity generating facilities during the installation of control technology at the unit for compliance with the CAIR NO<sub>x</sub> emissions limitation to prevent undue risk; or

(b) CAIR NO<sub>x</sub> allowances in accordance with this section, or otherwise, to prevent undue risk.

(4) Early reduction credits shall be rounded to the nearest whole number and distributed in the form of one (1) NO<sub>x</sub> allowance for one (1) ton of NO<sub>x</sub> emission reduction.

(5) The cabinet shall distribute the early reduction credits on a proportional basis.

(a) The total amount of early reduction credit available to a CAIR NO<sub>x</sub> unit shall be determined by the following calculation:

1. The unit's baseline heat input determined in Section 3(3)(a)1 of this administrative regulation;

2. Divided by the total amount baseline heat input from all sources pursuant to Section 3(3)(a)1 of this administrative regulation; and

3. Multiplied by the early reduction credits available pursuant to 40 C.F.R. 96.143(a).

(b) The unused early reduction credits shall be combined together and distributed pro rata to those CAIR NO<sub>x</sub> units with early reduction credits that exceeded the amount of credits made available by the cabinet pursuant to paragraph (a) of this subsection by the following calculation:

1. The applicable unit's emission reductions that exceeded the credits made available pursuant to paragraph (a) of this subsection;

2. Divided by the total NO<sub>x</sub> emission reductions that exceeded the credits provided under paragraph (a) of this subsection from all applicable units;

3. Multiplied by the total number of unused early reduction credits.

(c) Early reduction credits provided under paragraph (b) of this subsection shall not cause the early reduction credits allocated to the source to exceed the number of early reduction credits requested.

(6) By November 30, 2009, the cabinet shall determine and submit to the U.S. EPA the allocations under this section.

(7) By January 1, 2010, the U.S. EPA shall record the allocations submitted under subsection (6) of this section.

#### Section 5. Sale of CAIR NO<sub>x</sub> Allowances by the Commonwealth of Kentucky.

(1) The Commonwealth of Kentucky shall establish an account pursuant to 40 C.F.R. 96.151(b) for the purpose of selling the CAIR NO<sub>x</sub> allowances in the pool specified in Section 3(2)(b) of this administrative regulation.

(2) The proceeds from the sale of the CAIR NO<sub>x</sub> allowances shall be deposited in the general fund of the Commonwealth of Kentucky.

(33 Ky.R. 1015; 1611; 1798; eff. 2-2-2007; Crt eff. 7-30-2018.)