

3745-109-17

CAIR NO_x ozone season allowance allocations.

[Comment: For dates of non-regulatory government publications, publications of recognized organizations and associations, federal rules, and federal statutory provisions referenced in this rule, see ~~the last~~ paragraph (H) of rule 3745-109-01 of the Administrative Code titled "Incorporation by Reference."]

(A) State trading budget.

The state trading budget in Ohio for annual allocations of CAIR NO_x ozone season allowances for the control periods in 2009 to 2014 is forty-five thousand six hundred sixty four tons and in 2015 and thereafter is thirty-nine thousand nine hundred forty-five tons for units under paragraphs (C)(1), (C)(2), (C)(3) and (C)(5) of rule 3745-109-01 of the Administrative Code (EGUs); for units under paragraph (C)(4) of rule 3745-109-01 of the Administrative Code, CAIR NO_x ozone season allowances for control periods 2009 and thereafter are four thousand thirty tons (non-EGUs).

(B) Timing requirements for CAIR NO_x ozone season allowance allocations.

(1) ~~Within thirty days of the effective date of this rule but no later than~~ No later than September 30, 2007, the director shall submit to the administrator the CAIR NO_x ozone season allowance allocations, in a format prescribed by the administrator and in accordance with paragraphs (C)(1) and (C)(2) of this rule, for the control periods in 2009, 2010, 2011, 2012, 2013 and 2014.

(2) Existing units.

(a) By October 31, 2009 and October thirty-first every six years thereafter, the director shall submit to the administrator the CAIR NO_x ozone season allowance allocations, in a format prescribed by the administrator and in accordance with paragraphs (C)(1) and (C)(2) of this rule, for the control periods six years, seven years, eight years, nine years, ten years and eleven years after the year of the applicable deadline for submission under this paragraph.

(3) New units.

(a) By July 31, 2009 and July thirty-first of each year thereafter, the director shall submit to the administrator the CAIR NO_x ozone season allowance allocations, in a format prescribed by the administrator and in accordance with paragraphs (C)(1), (C)(3) and (C)(4) of this rule, for the control period in the year of the applicable deadline for submission under this paragraph.

(C) CAIR NO_x ozone season allowance allocations.

(1) Heat inputs to be used for existing units.

(a) The baseline heat input (in mmBtu) used with respect to CAIR NO_x ozone season allowance allocations under paragraph (C)(2) of this rule for each CAIR NO_x ozone season unit shall be:

(i) For units commencing operation before January 1, 2001 the average of the three highest amounts of the unit's adjusted control period heat input for 1998 to 2005, with the adjusted control period heat input for each year calculated as follows:

(a) If the unit is coal-fired during the year, the unit's control period heat input for such year is multiplied by ~~one hundred~~ one hundred per cent;

(b) If the unit is oil-fired during the year, the unit's control period heat input for such year is multiplied by sixty per cent; and

(c) If the unit is not subject to paragraph (C)(1)(a)(i)(a) or (C)(1)(a)(i)(b) of this rule, the unit's control period heat input for such year is multiplied by forty per cent.

(d) If the unit is a non-EGU, as applicable to units identified by paragraph (C)(4) of rule 3745-109-01 of the Administrative Code, the baseline heat input (in mmBtu) determination in paragraph (C)(1)(a)(i) or (C)(1)(a)(ii) shall not include any adjustments for heat inputs as described in paragraphs (C)(1)(a)(i)(a) ~~through~~ to (C)(1)(a)(i)(c) and (C)(1)(b) of this rule.

(ii) For units commencing operation on or after January 1, 2001 and operating each calendar year during a period of three or more consecutive calendar years the average of the three highest amounts of the unit's total converted control period heat input.

(b) Adjusted heat inputs.

(i) A unit's control period heat input, and a unit's status as coal-fired or oil-fired, for a calendar year under paragraph (C)(1)(a)(i) of this

rule, and a unit's total tons of NO_x emissions during a control period in a calendar year under paragraph (C)(3)(c) of this rule, shall be determined in accordance with 40 CFR Part 75, to the extent the unit was otherwise subject to the requirements of 40 CFR Part 75 for the year, or shall be based on the best available data reported to the director for the unit, to the extent the unit was not otherwise subject to the requirements of 40 CFR Part 75 for the year.

(ii) A unit's converted control period heat input for a calendar year specified under paragraph (C)(1)(a)(ii) of this rule equals:

(a) Except as provided in paragraph (C)(1)(b)(ii)(b) or (C)(1)(b)(ii)(c) of this rule, the control period gross electrical output of the generator or generators served by the unit multiplied by seven thousand nine hundred Btu per kWh, if the unit is coal-fired for the year, or six thousand six hundred seventy-five Btu per kWh, if the unit is not coal-fired for the year, and divided by one million Btu per mmBtu, provided that if a generator is served by two or more units, then the gross electrical output of the generator will be attributed to each unit in proportion to the unit's share of the total control period heat input of such units for the year;

(b) For a unit that is a boiler and has equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy, the total heat energy (in Btu) of the steam produced by the boiler during the control period, divided by 0.8 and by one million Btu per mmBtu; or

(c) For a unit that is a combustion turbine and has equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy, the control period gross electrical output of the enclosed device comprising the compressor, combustor, and turbine multiplied by three thousand four hundred thirteen Btu per kWh, plus the total heat energy of the steam produced by any associated heat recovery steam generator during the control period divided by 0.8, and with the sum divided by one million Btu per mmBtu.

(2) Adjusted allocations.

(a) For each control period in 2009 and thereafter, the director shall allocate to all CAIR NO_x ozone season units in the state that have a baseline heat input (as determined under paragraph (C)(1) of this rule) a total amount of CAIR NO_x ozone season allowances equal to ninety-three per cent for a control period during 2009 to 2014, and ninety-five per cent for a control period during 2015 and thereafter, of the tons of NO_x emissions in the state trading budget under paragraph (A) of this rule (except as provided in paragraph (C)(4) of this rule) for units under paragraph (C)(1) of rule 3745-109-01 of the Administrative Code (EGUs).

(b) For each control period in 2009 and thereafter, the director shall allocate to all CAIR NO_x ozone season units in the state that have a baseline heat input (as determined under paragraph (C)(1) of this rule) a total amount of CAIR NO_x ozone season allowances equal to ninety-five per cent for a control period during 2009 to 2014, and ninety-seven per cent for a control period during 2015 and thereafter, of the tons of NO_x emissions in the state trading budget under paragraph (A) of this rule (except as provided in paragraph (C)(4) of this rule) for units under paragraph (C)(4) of rule 3745-109-01 of the Administrative Code (non-EGUs).

The director shall allocate separately, the available allowances for the above control periods, each portion of the state trading budget under paragraph (A) of this rule for EGUs and non-EGUs.

(c) The director shall allocate CAIR NO_x ozone season allowances to each CAIR NO_x ozone season unit under paragraph (C)(2)(a) of this rule in an amount determined by multiplying the total amount of CAIR NO_x ozone season allowances allocated under paragraph (C)(2)(a) of this rule by the ratio of the baseline heat input of such CAIR NO_x ozone season unit to the total amount of baseline heat input of all such CAIR NO_x ozone season units in the state and rounding to the nearest whole allowance as appropriate.

(d) The director shall allocate CAIR NO_x ozone season allowances to each CAIR NO_x ozone season unit under paragraph (C)(2)(b) of this rule in an amount equaling the lesser of 0.17 pound per mmBtu or the unit's most stringent state or federal NO_x emission limitation multiplied by the baseline heat input of such CAIR NO_x ozone season unit determined under paragraph ~~(C)(1)(a)(d)~~ (C)(1)(a)(i)(d) of this rule,

divided by two thousand pounds per ton, and rounding to the nearest whole allowance as appropriate.

- (e) If the initial total number of CAIR NO_x ozone season allowances allocated to all CAIR NO_x ozone season units under paragraph (C)(4) of rule 3745-109-01 of the Administrative Code (non-EGUs) for a control period under paragraph (C)(2)(b) of this rule exceeds the total amount of the CAIR NO_x ozone season allowances available under paragraph (C)(2)(b) of this rule covering such units, the director shall adjust the total number of CAIR NO_x ozone season allowances allocated to all such CAIR NO_x ozone season units for the control period under paragraph (C)(2)(b) of this rule so that the total number of CAIR NO_x ozone season allowances allocated equals the total amount of the CAIR NO_x ozone season allowances available under paragraph (C)(2)(b) of this rule covering such units. This adjustment shall be made by multiplying each unit's allocation by the amount of the CAIR NO_x ozone season allowances available under paragraph (C)(2)(b) of this rule covering such units, dividing by the total number of CAIR NO_x ozone season allowances allocated under paragraph (C)(2)(d) of this rule, and rounding to the nearest whole CAIR NO_x ozone season allowance as appropriate.
 - (f) If the initial total number of CAIR NO_x ozone season allowances allocated to all CAIR NO_x ozone season units under paragraph (C)(4) of rule 3745-109-01 of the Administrative Code (non-EGUs) for a control period under paragraph (C)(2)(b) of this rule is less than the total amount of the CAIR NO_x ozone season allowances available under paragraph (C)(2)(b) of this rule covering such units, any such unallocated CAIR NO_x ozone season allowances will be placed into an account controlled by the state of Ohio. The director of Ohio EPA shall determine if any such unallocated CAIR NO_x ozone season allowances will be retired, distributed, stored or used for whatever purpose the director deems necessary.
- (3) For each control period in 2009 and thereafter, the director shall allocate CAIR NO_x ozone season allowances to CAIR NO_x ozone season units in the state that are not allocated CAIR NO_x Ozone Season allowances under paragraph (C)(2)(a) of this rule because the units do not yet have a baseline heat input under paragraph (C)(1)(a) of this rule or because the units have a baseline heat input but all CAIR NO_x ozone season allowances available under paragraph (C)(2)(a) of this rule for the control period are already allocated, in accordance with the following procedures:
- (a) The director shall establish a separate new unit set-aside for each control

period. Each new unit set-aside shall be allocated CAIR NO_x ozone season allowances equal to five per cent for the control periods in 2009 to 2014, and three per cent for control periods in 2015 and thereafter, of the amount of tons of NO_x emissions in the state trading budget for both EGUs and non-EGUs under paragraph (A) of this rule (EGUs and non-EGUs will have separate new unit set-asides established using the amount of tons of NO_x emissions available in their respective portions of the state trading budgets under paragraph (A) of this rule).

- (b) The CAIR designated representative of such a CAIR NO_x ozone season unit may submit to the director a request, in a format specified by the director, to be allocated CAIR NO_x ozone season allowances, starting with the later of the control period in 2009 or the first control period after the control period in which the CAIR NO_x ozone season unit commences commercial operation and until the first control period for which the unit is allocated CAIR NO_x ozone season allowances under paragraph (C)(2) of this rule. A separate CAIR NO_x ozone season allowance allocation request for each control period for which CAIR NO_x ozone season allowances are sought must be submitted on or before February first before such control period and after the date on which the CAIR NO_x ozone season unit commences commercial operation.
- (c) In a CAIR NO_x ozone season allowance allocation request under paragraph (C)(3)(b) of this rule, the CAIR designated representative may request for a control period CAIR NO_x ozone season allowances in an amount not exceeding the CAIR NO_x ozone season unit's total tons of NO_x emissions during the control period immediately before such control period.
- (d) The director shall review each CAIR NO_x ozone season allowance allocation request under paragraph (C)(3)(b) of this rule and shall allocate CAIR NO_x ozone season allowances for each control period pursuant to such request as follows:
 - (i) The director shall accept an allowance allocation request only if the request meets, or is adjusted by the director as necessary to meet, the requirements of paragraphs (C)(3)(b) and (C)(3)(c) of this rule.
 - (ii) On or after February first before the control period, the director shall determine the sum of the CAIR NO_x ozone season allowances requested (as adjusted under paragraph (C)(3)(d)(i) of this rule) in all allowance allocation requests accepted under

paragraph (C)(3)(d)(i) of this rule for the control period.

- (iii) If the amount of CAIR NO_x ozone season allowances in the new unit set-aside for the control period is greater than or equal to the sum under paragraph (C)(3)(d)(ii) of this rule, then the director shall allocate the amount of CAIR NO_x ozone season allowances requested (as adjusted under paragraph (C)(3)(d)(i) of this rule) to each CAIR NO_x ozone season unit covered by an allowance allocation request accepted under paragraph (C)(3)(d)(i) of this rule.
- (iv) If the amount of CAIR NO_x ozone season allowances in the new unit set-aside for the control period is less than the sum under paragraph (C)(3)(d)(ii) of this rule, then the director shall allocate to each CAIR NO_x ozone season unit covered by an allowance allocation request accepted under paragraph (C)(3)(d)(i) of this rule the amount of the CAIR NO_x ozone season allowances requested (as adjusted under paragraph (C)(3)(d)(i) of this rule), multiplied by the number of CAIR NO_x ozone season allowances in the new unit set-aside for the control period, divided by the sum determined under paragraph (C)(3)(d)(ii) of this rule, and rounded to the nearest whole allowance as appropriate.
- (v) The director shall notify each CAIR designated representative that submitted an allowance allocation request of the amount of CAIR NO_x ozone season allowances (if any) allocated for the control period to the CAIR NO_x ozone season unit covered by the request.

[Comment: As stated in paragraph (C)(3) of this rule, units commencing operation on or after January 1, 2001 and lacking a baseline heat input because of insufficient heat input data availability, as stated in paragraph (C)(1)(a)(ii) of this rule, shall be allocated allowances from the new unit set-aside. The unit will continue to be allocated allowances from the new unit set-aside, even if the unit has sufficient heat input data for determination of a baseline until such time as the director has determined new allowance allocations from the state trading budget under paragraph (A) of this rule, for all units in the state with a baseline heat input based on the timing requirements in paragraph (B) of this rule.]

- (4) If, after completion of the procedures under paragraph (C)(3)(d) of this rule for a control period, any unallocated CAIR NO_x ozone season allowances remain

in the new unit set-aside for the control period, the director shall allocate to each CAIR NO_x ozone season unit that was allocated CAIR NO_x ozone season allowances under paragraph (C)(2) of this rule an amount of CAIR NO_x ozone season allowances equal to the total amount of such remaining unallocated CAIR NO_x ozone season allowances, multiplied by the unit's allocation under paragraph (C)(2) of this rule, divided by ninety-five per cent for a control period during 2009 to 2014, and ninety-seven per cent for a control period during 2015 and thereafter, of the amount of tons of NO_x emissions in the state trading budget under paragraph (A) of rule 3745-109-17 of the Administrative Code, and rounded to the nearest whole allowance as appropriate.

- (5) The director shall establish an allocation set-aside for each control period beginning in 2009 for energy efficiency/renewable energy projects. Each energy efficiency/renewable energy project set-aside shall be allocated CAIR NO_x ozone season allowances equal to one per cent of the tons of NO_x emissions in the state trading budget under paragraph (A) of this rule, as applicable to units identified by paragraph (C)(1) of rule 3745-109-01 of the Administrative Code (EGUs only), rounded to the nearest whole NO_x allowance as appropriate.
 - (a) Applicants may submit a proposal to the director for an energy efficiency/renewable energy project and request allocations from the energy efficiency/renewable energy project set-aside for energy reductions obtained as a result of the project. The director shall review proposals based on criteria determined by the director, and notify applicants of approved projects. Proposals must contain the following:
 - (i) A detailed description of the project; and
 - (ii) An estimate of the number of allocations that will be requested.
 - (iii) The director will calculate the number of NO_x allowances requested for each approved project based on the energy savings or NO_x emissions reduced by the project. By March first of each year, the director will determine the total number of NO_x allowances to be reserved for approved projects. If the total number of NO_x allowances requested for approved projects is less than or equal to the number of NO_x allowances in the designated set-aside, the number of allowances requested will be reserved for each approved project. If more NO_x allowances are requested than exist in the set-aside, allowances will be reserved on a pro-rated basis based on the number of allowances available. Approved projects requesting only one NO_x allowance will not

be pro-rated.

- (b) To receive allocations for the energy efficiency/renewable energy projects approved by the director, the applicant must submit a completed project report that verifies that the project was completed as proposed and that proposed energy reductions were obtained.
 - (c) Upon verification of the project's success, the director shall award the required allocations to the applicant.
 - (d) Allocations shall be awarded on an annual basis and for no more than five consecutive years for each approved energy efficiency/renewable energy project.
- (6) The director shall establish an allocation set-aside for each control period beginning in 2009 for innovative technology projects. Each innovative technology project set-aside shall be allocated CAIR NOx ozone season allowances equal to one per cent of the tons of NOx emissions in the state trading budget under paragraph (A) of this rule, as applicable to units identified by paragraph (C)(1) of rule 3745-109-01 of the Administrative Code (EGUs only), rounded to the nearest whole NOx allowance as appropriate.
- (a) Applicants may submit a proposal to the director for an innovative technology project and request allocations from the innovative technology project set-aside for NOx emissions reductions or energy reductions obtained. The director shall review proposals based on criteria determined by the director, and notify applicants of approved projects. Proposals must contain the following:
 - (i) A detailed description of the project; and
 - (ii) An estimate of the number of allocations that will be requested.
 - (iii) The director will calculate the number of NOx allowances requested for each approved project based on the energy savings or NOx emissions reduced by the project. By March first of each year, the director will determine the total number of NOx allowances to be reserved for approved projects. If the total number of NOx allowances requested for approved projects is less than or equal to the number of NOx allowances in the designated set-aside, the number of allowances requested will be reserved for each approved project. If more NOx allowances are

requested than exist in the set-aside, allowances will be reserved on a pro-rated basis based on the number of allowances available. Approved projects requesting only one NOx allowance will not be pro-rated.

- (b) To receive allocations for the innovative technology projects approved by the director, the applicant shall submit a completed project report that verifies that the project was completed as proposed and that proposed NOx emissions reductions or energy reductions were obtained.
 - (c) Upon verification of the project's success, the director shall award the required allocations to the applicant.
 - (d) Allocations shall be awarded on an annual basis and for no more than five consecutive years for each approved innovative technology project.
- (7) Allowances remaining at the end of each year in the energy efficiency/renewable energy allocation set-aside or in the innovative technology project allocation set-aside, shall be allocated to CAIR NOx ozone season units under paragraph (C)(1) of rule 3745-109-01 of the Administrative Code (EGUs) in the following year, prorated on the basis of each unit's previous year allocations.
- (8) The director, beginning with the end of the 2009 CAIR NOx ozone season control period and every three years thereafter, will review the number of the allowances requested for approved projects ~~awarded~~ for the control period from both the energy efficiency/renewable energy allocation set-aside and the innovative technology project allocation set-aside, and compare that number to each currently available set-aside. If the number of allowances requested for approved projects ~~awarded~~ exceeds the available allowance set-aside by more than twenty-five per cent for either set-aside, the director shall adjust each set-aside upward as necessary at the first control period available after such time as the director has determined new allowance allocations from the state trading budget under paragraph (A) of this rule, as applicable to units identified by paragraph (C)(1) of rule 3745-109-01 of the Administrative Code (EGUs), in the state with a baseline heat input based on the timing requirements in paragraph (B) of this rule, but up to a maximum of five per cent for the energy efficiency/renewable energy set-aside or the innovative technology project set aside.

[Comment: If the energy efficiency/renewable energy or the innovative technology project set-aside(s) are proposed to be increased, as outlined above, during a new allowance allocation cycle based on the timing requirements in paragraph (B) of this rule as applicable to units identified by

paragraph (C)(1) of rule 3745-109-01 of the Administrative Code (EGUs), then the available allowances from the state budget for allocation to units identified by paragraph (C)(1) of rule 3745-109-01 of the Administrative Code, will be reduced by an amount equal to the difference between the existing set-aside amount and the new set-aside amount. In 2015 and beyond, the new unit side aside for EGUs is fixed at three per cent, so any increase in the energy efficiency/renewable energy or innovative technology set-aside, should that occur, is the only variable that could decrease the existing unit's allocation amount.]

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