

3745-14-01

**Definitions and general provisions.**

[Comment: For dates and availability of non-regulatory government publications, publications of recognized organizations and associations, federal rules, and federal statutory provisions referenced in this rule, see paragraph (F) of this rule titled "referenced materials."]

(A) This chapter establishes the provisions and requirements to implement a NO<sub>x</sub> budget, portland cement kilns, and a stationary (large) internal combustion engines program in the state of Ohio as a means of control and reduction of NO<sub>x</sub> emissions.

(B) Definitions.

(1) Except as otherwise provided in this rule, the definitions in rule 3745-15-01 of the Administrative Code shall apply to this chapter.

(2) As used in this rule and in rules 3745-14-03, 3745-14-04 and 3745-14-08 of the Administrative Code (pertaining to NO<sub>x</sub> budget program and other sources identified in paragraph (A) of this rule):

(a) "Acid Rain emissions limitation" means, as defined in 40 CFR 72.2, a limitation on emissions of sulfur dioxide or NO<sub>x</sub> under the acid rain program under Title IV of the Clean Air Act.

(b) "Administrator" means the administrator of the United States environmental protection agency or the administrator's duly authorized representative.

(c) "AP-42" means the USEPA document "Compilation of Air Pollutant Emissions Factors, Volume I: Stationary Point and Area Sources."

~~(e)~~(d) "ASTM" means the "American Society for Testing and Materials," 100 Barr Harbor Drive, West Conshohocken, Pennsylvania.

~~(d)~~(e) "Automated data acquisition and handling system" or "DAHS" means that component of the CEMS, or other emissions monitoring system approved for use under paragraphs (A) to (G) of rule 3745-14-08 of the Administrative Code, 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 paragraphs (A) to (G) of rule 3745-14-08 of the Administrative Code.

~~(e)~~(f) "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, excluding CO boilers associated with combusting CO from fluidized catalytic crackers at petroleum refineries.

~~(f)~~(g) "Btu" means British thermal unit.

~~(g)~~(h) "CAA" means the Clean Air Act as contained in 42 USC 7401 to 7671q.

~~(h)~~(i) "CO" means carbon monoxide.

~~(i)~~(j) "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.

~~(j)~~(k) "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.

~~(k)~~(l) "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. Except as provided in paragraph (C)(2) of this rule, for a unit that is a NOx budget unit under paragraph (C)(1) of this rule 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. Except as provided in paragraph (C)(2) of this rule, for a unit that is not a NOx budget unit under paragraph (C)(1) of this rule on the date the unit commences commercial operation, the date the unit becomes a NOx budget unit under paragraph (C)(1) of this rule shall be the unit's date of commencement of commercial operation.

~~(l)~~(m) "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. Except as provided in paragraph (C)(2) of this rule, for a unit that is a NOx budget unit under paragraph (C)(1) of this rule on the date of commencement of operation, such date shall remain the unit's date of commencement of operation even if the unit is

subsequently modified, reconstructed, or repowered. Except as provided in paragraph (C)(2) of this rule, for a unit that is not a NOx budget unit under paragraph (C)(1) of this rule on the date of commencement of operation, the date the unit becomes a NOx budget unit under paragraph (C)(1) of this rule shall be the unit's date of commencement of operation.

~~(n)~~(n) "Common stack" means a single flue through which emissions from two or more units are exhausted.

~~(o)~~(o) "Continuous emission monitoring system" or "CEMS" means the equipment required under paragraphs (A) to (G) of rule 3745-14-08 of the Administrative Code to sample, analyze, measure, and provide, by readings taken at least once every fifteen minutes (using an automated DAHS, a permanent record of NOx emissions, stack gas volumetric flow rate or stack gas moisture content (as applicable), in a manner consistent with paragraphs (A) to (G) of rule 3745-14-08 of the Administrative Code. The following are the principal types of continuous emission monitoring systems required under paragraphs (A) to (G) of rule 3745-14-08 of the Administrative Code and 40 CFR Part 75:

- (i) A flow monitoring system, consisting of a stack flow rate monitor and an automated DAHS. A flow monitoring system provides a permanent, continuous record of stack gas volumetric flow rate, in units of standard cubic feet per hour (scfh).
- (ii) A NOx concentration monitoring system, consisting of a NOx pollutant concentration monitor and an automated DAHS. A NOx concentration monitoring system provides a permanent, continuous record of NOx emissions in units of parts per million (ppm).
- (iii) A NOx emission rate (or NOx-diluent) monitoring system, consisting of a NOx pollutant concentration monitor, a diluent gas (carbon dioxide or oxygen) monitor, and an automated DAHS. A NOx concentration monitoring system provides a permanent, continuous record of: NOx concentration in units of parts per million, diluent gas concentration in units of percent carbon dioxide or oxygen, and NOx emission rate in units of pounds per mmBtu.
- (iv) A moisture monitoring system, as defined in 40 CFR 75.11(b)(2).

A moisture monitoring system provides a permanent, continuous record of the stack gas moisture content, in units of per cent water.

~~(p)~~(p) "Control period" means the period beginning May first of a year and ending on September thirtieth of the same year, inclusive.

~~(p)~~(q) "DAHS" means data acquisition and handling system.

~~(p)~~(r) "Designated representative" means, for a NOx budget source or NOx budget unit at the source, the natural person who is authorized by the owner and operator of the source and all NOx budget units at the source to represent and legally bind each owner and operator in matters pertaining to the NOx budget program. For Title V sources, the designated representative shall be the responsible official under paragraph (II) of rule 3745-77-01 of the Administrative Code. For non-Title V sources, the designated representative shall be the signatory authority under paragraph (B) of rule 3745-31-04 of the Administrative Code.

~~(s)~~(s) "Director" means the director of the Ohio environmental protection agency.

~~(s)~~(t) "Electricity for sale under firm contract to the grid" means electricity for sale where the capacity involved is intended to be available at all times during the period covered by a guaranteed commitment to deliver, even under adverse conditions.

~~(u)~~(u) "Emissions" means air pollutants exhausted from a unit or source into the atmosphere, as measured, recorded, and reported to the administrator by the designated representative and as determined by the administrator in accordance with paragraphs (A) to (G) of rule 3745-14-08 of the Administrative Code, or as measured, recorded and reported to the director by the designated representative in accordance with paragraph (H) of rule 3745-14-08 of the Administrative Code.

~~(u)~~(v) "Energy information administration" means the energy information administration of the United States department of energy.

~~(v)~~(w) "Fossil fuel" means natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material.

~~(w)~~(x) "Fossil fuel-fired" means one of the following, with regard to a unit:

- (i) For units that commenced operation before January 1, 1996, the combustion of fossil fuel, alone or in combination with any other fuel, where fossil fuel actually combusted comprises more than fifty per cent of the annual heat input, on a Btu basis, during 1995, or, if a unit had no heat input in 1995, during the last year of operation of the unit prior to 1995.
- (ii) For units that commenced operation on or after January 1, 1996 and before January 1, 1997, the combustion of fossil fuel, alone or in combination with any other fuel, where fossil fuel actually combusted comprises more than fifty per cent of the annual heat input, on a Btu basis, during 1996.
- (iii) For units that commence operation on or after January 1, 1997, one of the following:

~~(A)~~(a) The combustion of fossil fuel, alone or in combination with any other fuel, where fossil fuel actually combusted comprises more than fifty per cent of the annual heat input, on a Btu basis, during any year.

~~(B)~~(b) The combustion of fossil fuel, alone or in combination with any other fuel, where fossil fuel is projected to comprise more than fifty per cent 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.

~~(x)~~(y) "Generator" means a device that produces electricity.

~~(y)~~(z) "Heat input" means the product (in mmBtu per time) of the gross calorific value of the fuel (in mmBtu per pound) and the fuel feed rate into a combustion device (in pounds of fuel per time), as measured, recorded, and reported to the director by the designated representative and as determined by the director in accordance with rule 3745-14-08 of the Administrative Code, and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust from other sources.

~~(z)~~(aa) "Heat input rate" means the amount of heat input (in mmBtu) divided

by unit operating time (in hours) or, with regard to a specific fuel, the amount of heat input attributed to the fuel (in mmBtu) divided by the unit operating time (in hours) during which the unit combusts the fuel.

~~(aa)~~(bb) "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 that meets one of the following:

(i) For the life of the unit.

(ii) For a cumulative term of no less than thirty years, including contracts that permit an election for early termination.

(iii) For a period equal to or greater than twenty-five years or seventy per cent 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.

~~(bb)~~(cc) "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.

~~(ee)~~(dd) "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 shall 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 shall be reported, in accordance with 40 CFR Part 75, using the maximum potential flow rate and either the maximum carbon dioxide concentration (in per cent carbon dioxide) or the minimum oxygen concentration (in per cent oxygen).

~~(dd)~~(ee) "Maximum potential NO<sub>x</sub> emission rate" means the emission rate of NO<sub>x</sub> (in pounds per mmBtu) calculated in accordance with Section 3 of Appendix F of 40 CFR Part 75, using the maximum potential concentration of NO<sub>x</sub> as defined in Section 2 of Appendix A of 40 CFR Part 75, and either the maximum oxygen concentration (in per cent

oxygen) or the minimum carbon dioxide concentration (in per cent carbon dioxide), under all operating conditions of the unit except for unit start up, shutdown, and upsets.

~~(ee)~~(ff) "Maximum rated hourly heat input" means a unit-specific maximum hourly heat input (mmBtu) which is the higher of the manufacturer's maximum rated hourly heat input or the highest observed hourly heat input.

~~(ff)~~(gg) "mmBtu" means million. British thermal unit.

~~(gg)~~(hh) "MWe" means megawatt electrical.

~~(hh)~~(ii) "Monitoring system" means any monitoring system that meets the requirements of rule 3745-14-08 of the Administrative Code, including a continuous emissions monitoring system, an excepted monitoring system, or an alternative monitoring system.

~~(ii)~~(jj) "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.

~~(jj)~~(kk) "Non-Title V permit" means a federally enforceable permit administered by the director pursuant to the Clean Air Act and regulatory authority under the Clean Air Act, other than Title V of the Clean Air Act and Chapter 3745-77 of the Administrative Code.

~~(kk)~~(ll) "NOx" means all oxides of nitrogen which are determined to be ozone precursors, including, but not limited to, nitrogen oxide and nitrogen dioxide, but excluding nitrous oxide.

~~(ll)~~(mm) "NOx budget source" means a source that includes one or more NOx budget units.

~~(mm)~~(nn) "NOx budget program" means a NOx air pollution control program approved by the administrator pursuant to 40 CFR 51.121 or established by the administrator pursuant to 40 CFR 52.34, as a means of mitigating the interstate transport of ozone and NOx.

~~(nn)~~(oo) "NOx budget unit" means a unit that is subject to the requirements of the NOx budget program.

~~(pp)~~(pp) "Operator" means any person who operates, controls, or supervises a NOx budget unit or a NOx budget source and shall include, but not be limited to, any holding company, utility system, or plant manager of such a unit or source.

~~(pp)~~(qq) "Owner" means any of the following persons:

(i) Any holder of any portion of the legal or equitable title in a NOx budget unit.

(ii) Any holder of a leasehold interest in a NOx budget unit.

(iii) Any purchaser of power from a NOx budget unit 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 NOx budget unit.

~~(qq)~~(rr) "Potential electrical output capacity" means thirty-three per cent of a unit's maximum design heat input.

~~(rr)~~(ss) "Receive" or "receipt of" means, when referring to the director 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 director or the administrator in the regular course of business.

~~(ss)~~(tt) "Reference method" means any direct test method of sampling and analyzing for an air pollutant as specified in Appendix A of 40 CFR Part 60.

~~(tt)~~(uu) "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 Clean Air Act. For purposes of Section 502(c) of the Clean Air Act, a source, including a source with multiple units, shall be considered a single facility.



~~(uu)~~(vv) "State" means one of the forty-eight contiguous states or a portion thereof or the District of Columbia that is subject to a NOx budget program under Section 110(c) or Section 126 of the Clean Air Act.

~~(vv)~~(ww) "State program budget" means the total number of NOx tons available to the NOx budget program, for use in a given control period.

~~(ww)~~(xx) "Submit" or "serve" means to send or transmit a document, information, or correspondence to the person specified in accordance with the applicable regulation by any of the following:

(i) In person.

(ii) By United States postal service.

(iii) By other means of dispatch or transmission and 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.

~~(xx)~~(yy) "Title V operating permit" means a permit issued under Chapter 3745-77 of the Administrative Code.

~~(yy)~~(zz) "Title V operating permit regulations" means Chapters 3745-77 and 3745-78 of the Administrative Code.

~~(zz)~~(aaa) "Ton" or "tonnage" means any "short ton" (i.e., two thousand pounds). For the purpose of determining compliance with the NOx ~~budget program~~ budget program, 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 paragraph (A) to (G) of rule 3745-14-08 of the Administrative Code, or the sum of all daily emissions in accordance with paragraph (H) of rule 3745-14-08 of the Administrative Code, 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.

~~(aaa)~~(bbb) "Unit" means a fossil fuel-fired stationary boiler, combustion turbine, or combined cycle system.

~~(bbb)~~(ccc) "Unit operating day" means a calendar day in which a unit combusts any fuel.

~~(eee)~~(ddd) "Unit operating hour" or "hour of unit operation" means any hour (or fraction of an hour) during which a unit combusts any fuel.

(3) As used in rule 3745-14-11 of the Administrative Code (pertaining to NOx budget program requirements for portland cement manufacturing):

(a) "Clinker" means the product of a portland cement kiln from which finished cement is manufactured by milling and grinding.

(b) "Long dry kiln" means a kiln fourteen feet or larger in diameter, four hundred feet or greater in length, which employs no preheating of the feed. The inlet feed to the kiln is dry.

(c) "Long wet kiln" means a kiln fourteen feet or larger in diameter, four hundred feet or greater in length, which employs no preheating of the feed. The inlet feed to the kiln is a slurry.

(d) "Low-NOx burners" means combustion equipment designed to reduce flame turbulence, delay fuel/air mixing, and establish fuel-rich zones for initial combustion.

(e) "Malfunction" means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(f) "Mid-kiln system firing" means the secondary firing in kilns by injecting solid fuel at an intermediate point in the kiln system using a specially designed feed injection mechanism for the purpose of decreasing NOx emissions through both of the following:

(i) Burning part of the fuel at a lower temperature.

(ii) Reducing conditions at the solid fuel injection point that may destroy some of the NOx formed upstream in the kiln burning zone.

- (g) "Portland cement" means a hydraulic cement produced by pulverizing clinker consisting essentially of hydraulic calcium silicates, usually containing one or more of the forms of calcium sulfate as an interground addition.
  - (h) "Portland cement kiln" means a system, including any solid, gaseous or liquid fuel combustion equipment, used to heat, calcine and fuse raw materials, including limestone and clay, to produce portland cement clinker.
  - (i) "Precalciner kiln" means a kiln system where the feed to the kiln is preheated in cyclone chambers which utilize a second burner to calcine material in a separate vessel attached to the preheater prior to the final fusion in a kiln which forms clinker.
  - (j) "Preheater kiln" means a kiln system where the feed to the kiln is preheated in cyclone chambers prior to the final fusion in a kiln which forms clinker.
  - (k) "Shutdown" means the cessation of operation of a portland cement kiln for any purpose.
  - (l) "Startup" means the setting in operation of a portland cement kiln for any purpose.
- (4) As used in rule 3745-14-12 of the Administrative Code (pertaining to NOx budget program requirements for stationary internal combustion engines):
- (a) "Affected engine" means any stationary internal combustion engine that is a large NOx SIP call engine, or other stationary internal combustion engine that is subject to NOx control under a compliance plan established pursuant to paragraph (B) of rule 3745-14-12 of the Administrative Code.
  - (b) "Engine seasonal NOx 2007 tonnage reduction" means the year 2007 control period NOx emissions reductions value for a large NOx SIP call engine which is calculated as the difference between the 2007 base NOx emissions and the 2007 budget NOx emissions contained in the NOx SIP call engine inventory. The total engine seasonal NOx 2007 tonnage reduction for all large NOx SIP call engines in Ohio is 2730 tons.

- (c) “Facility seasonal NO<sub>x</sub> 2007 tonnage reduction” means the total of the engine seasonal NO<sub>x</sub> 2007 tonnage reductions attributable to all of an owner/operator’s large NO<sub>x</sub> SIP call engines.
- (d) “Large NO<sub>x</sub> SIP call engine” means a stationary internal combustion engine identified and designated as “large” in the NO<sub>x</sub> SIP call engine inventory (as defined in paragraph (B)(4)(e) of this rule) as emitting more than one ton of NO<sub>x</sub> emissions per average control period day in 1995.
- (e) “NO<sub>x</sub> SIP call engine inventory” means the inventory of internal combustion engines compiled by the United States environmental protection agency as part of the NO<sub>x</sub> SIP call rule, including the Federal Register notice entitled “Technical Amendment to the Finding of Significant Contribution and Rulemaking for Certain States for Purposes of Reducing Regional Transport of Ozone,” and the adjustment of the 2007 budget NO<sub>x</sub> control efficiency to eighty-two per cent for large gas-fired engines discussed in the Federal Register notice entitled “Interstate Ozone Transport: Response to Court Decisions on the NO<sub>x</sub> SIP Call, NO<sub>x</sub> SIP Call Technical Amendments, and Section 126 Rules.”
- (f) “Past NO<sub>x</sub> emission rate” means the emission rate of an affected engine in grams per brake horsepower-hour as determined by performance testing consistent with the requirements of 40 CFR Part 60, Appendix A. Where such performance test data are not available, the appropriate past NO<sub>x</sub> emission rate shall be evaluated and approved or denied by the director on a case-by-case basis using, for example, appropriate emission factors or data from the NO<sub>x</sub> SIP call engine inventory. For large NO<sub>x</sub> SIP call engines, the past NO<sub>x</sub> emission rate is the uncontrolled emission rate.
- (g) “Projected operating hours” means the projected actual number of hours of operation per control period for an affected engine.
- (h) “Projected NO<sub>x</sub> emission rate” means the projected emission rate in grams per brake horsepower-hour after installation of controls on an affected engine.
- (i) “Stationary internal combustion engine” means any internal combustion engine of the reciprocating type that is either attached to a foundation at a facility or is designed to be capable of being carried or moved from

one location to another and remains at a single site at a building, structure, facility, or installation for more than twelve consecutive months. Any engine (or engines) that replaces an engine at a site that is intended to perform the same or similar function as the engine replaced is included in calculating the consecutive time period.

(C) Applicability.

(1) All of the following units shall be NO<sub>x</sub> budget units, and any source that includes one or more such units shall be a NO<sub>x</sub> budget source, subject to the requirements of this chapter:

(a) For EGUs:

(i) For units, other than cogeneration units, that commenced operation before January 1, 1997, a unit serving during 1995 or 1996 a generator that had a nameplate capacity greater than twenty-five MWe and produced electricity for sale under a firm contract to the electric grid.

(ii) For units, other than cogeneration units, that commenced operation on or after January 1, 1997 and before January 1, 1999, a unit serving during 1997 or 1998 a generator that had a nameplate capacity greater than twenty-five MWe and produced electricity for sale under a firm contract to the electric grid.

(iii) For units, other than cogeneration units, that commence operation on or after January 1, 1999, a unit serving at any time a generator that has a nameplate capacity greater than twenty-five MWe and produces electricity for sale.

(iv) For cogeneration units:

~~(A)~~(a) For units commencing operation before January 1, 1997, a unit serving during 1995 or 1996 a generator with a nameplate capacity greater than twenty-five MWe and failing to qualify as an unaffected unit under 40 CFR 72.6(b)(4) for 1995 or 1996 under the "Acid Rain Program."

~~(B)~~(b) For units commencing operation in 1997 or 1998, a unit serving during 1997 or 1998 a generator with a nameplate

capacity greater than twenty-five MWe and failing to qualify as an unaffected unit under 40 CFR 72.6(b)(4) for 1997 or 1998 under the "Acid Rain Program."

~~(E)~~(c) For units commencing operation on or after January 1, 1999, a unit serving at any time a generator with a nameplate capacity greater than twenty-five MWe and failing to qualify as an unaffected unit under 40 CFR 72.6(b)(4) under the "Acid Rain Program" for any year.

(b) For non-EGUs:

(i) For units, other than cogeneration units, that commenced operation before January 1, 1997, a unit that has a maximum design heat input greater than two hundred fifty mmBtu per hour and that did not serve during 1995 or 1996 a generator producing electricity for sale under a firm contract to the electric grid.

(ii) For units, other than cogeneration units, that commenced operation on or after January 1, 1997 and before January 1, 1999, a unit that has a maximum design heat input greater than two hundred fifty mmBtu per hour and that did not serve during 1997 or 1998 a generator producing electricity for sale under a firm contract to the electric grid.

(iii) For units, other than cogeneration units, that commence operation on or after January 1, 1999, a unit with a maximum design heat input greater than two hundred fifty mmBtu per hour that:

~~(A)~~(a) At no time serves a generator producing electricity for sale.

~~(B)~~(b) At any time serves a generator producing electricity for sale, if any such generator has a nameplate capacity of twenty-five MWe or less and has the potential to use no more than fifty per cent of the potential electrical output capacity of the unit.

(iv) For cogeneration units:

~~(A)~~(a) For units commencing operation before January 1, 1997, a unit with a maximum design heat input greater than two hundred fifty mmBtu per hour and qualifying as an

unaffected unit under 40 CFR 72.6(b)(4) under the "Acid Rain Program" for 1995 and 1996.

~~(B)~~(b) For units commencing operation in 1997 or 1998, a unit with a maximum design heat input greater than two hundred fifty mmBtu per hour and qualifying as an unaffected unit under 40 CFR 72.6(b)(4) under the "Acid Rain Program" for 1997 and 1998.

~~(C)~~(c) For units commencing on or after January 1, 1999, a unit with a maximum design heat input greater than two hundred fifty mmBtu per hour and qualifying as an unaffected unit under 40 CFR 72.6(b)(4) under the "Acid Rain Program" for each year.

(2) The following units shall be exempt from the requirements of the NOx budget program:

(a) Any unit under paragraph (C)(1) of this rule that is subject to the federal Cross-State Air Pollution Rule (CSAPR) program under 40 CFR 52.38 or a replacement established to address transport under Section 110(c) or Section 126 of the CAA.

[Comment: The above exemption applies to units under paragraph (C)(1) of this rule , for any ozone season to which 40 CFR 52.38 applies. Ohio EPA is inserting this language because the United States environmental protection agency will not administer the NOx SIP Call trading program after 2008 (see 40 CFR 51.121(r) or the Clean Air Interstate Rule (CAIR) program after 2014 (see 40 CFR 51.123(ff)). Ohio will meet the NOx SIP Call obligations for these units through the CSAPR program under 40 CFR 52.38.

Should the United States environmental protection agency eliminate or suspend the CSAPR program, units previously exempted under this paragraph would need to meet the requirements of this chapter following the elimination or suspension of the federal CSAPR program unless replacement is established to address transport under Section 110(c) or Section 126 of the CAA.]

(b) A unit under paragraph (C)(1) of this rule that has a federally enforceable permit that includes a NOx emission limitation restricting NOx emissions during a control period to twenty-five tons or less and restricts the unit to burning only natural gas or fuel oil during a control period in 2004 or later and that includes the special provisions in

paragraph (C)(2)(e) of this rule shall be exempt from the requirements of this chapter, except for the provisions of this paragraph and paragraphs (B), (C)(1) and (E) of this rule. The NO<sub>x</sub> emission limitation under this paragraph shall restrict NO<sub>x</sub> emissions during the control period by one of the following methods:

- (i) A restriction on unit operating hours calculated by dividing the federally enforceable emission limitation, in tons, determined in accordance with paragraph (C)(2)(b) of this rule, by the unit's maximum potential hourly NO<sub>x</sub> mass emissions, which shall equal the unit's maximum rated hourly heat input multiplied by the highest default NO<sub>x</sub> emission rate applicable to the unit under 40 CFR 75.19(c), Table LM-2.
  - (ii) A restriction on unit fuel usage calculated by dividing the federally enforceable emission limitation, in tons, determined in accordance with paragraph (C)(2)(b) of this rule, by the product of the heat value of the fuel to be used multiplied by the default NO<sub>x</sub> emission rate for the fuel to be used as specified in 40 CFR 75.19(c), Table LM-2.
- (c) The exemption under paragraph (C)(2)(b) of this rule shall become effective upon one of the following:
- (i) The exemption shall become effective on the date on which the NO<sub>x</sub> emission limitation and the special provisions in the permit under paragraph (C)(2)(b) of this rule become final; or
  - (ii) If the NO<sub>x</sub> emission limitation and the special provisions in the permit under paragraph (C)(2)(b) of this rule become final during a control period and after the first date on which the unit operates during such control period, then the exemption shall become effective on May first of such control period, provided that such NO<sub>x</sub> emission limitation and the special provisions apply to the unit as of such first date of operation. If such NO<sub>x</sub> emission limitation and special provisions do not apply to the unit as of such first date of operation, then the exemption under paragraph (C)(2)(b) of this rule shall become effective on October first of the year during which such NO<sub>x</sub> emission limitation and the special provisions become final.
- (d) The director shall provide the administrator written notice of the issuance



of any permit under paragraph (C)(2)(b) of this rule and, upon request, a copy of the permit.

(e) The following special provisions apply to units exempt under paragraph (C)(2)(b) of this rule.

(i) A unit exempt under paragraph (C)(2)(b) of this rule shall comply with the restriction on unit operating hours and fuel use described in paragraph (C)(2)(b) of this rule during the control period in each year.

(ii) A unit exempt under paragraph (C)(2)(b) of this rule shall report hours of unit operation or fuel usage during the control period in each year to the director by November first of that year.

(iii) For a period of five years from the date the records are created, the owners and operators of a unit exempt under paragraph (C)(2)(b) of this rule shall retain, at the source that includes the unit, records demonstrating that the conditions of the federally enforceable permit under paragraph (C)(2)(b) of this rule were met, including the restrictions on unit operating hours and fuel usage. The five-year period for keeping records may be extended for cause, at any time prior to the end of the period, in writing by the director or the administrator. The owners and operators bear the burden of proof that the unit met the restriction on unit operating hours and fuel use.

(iv) The owners and operators and, to the extent applicable, the designated representative of a unit exempt under paragraph (C)(2)(b) of this rule shall comply with the requirements of the NOx budget program concerning all periods for which the exemption is not in effect, even if such requirements arise, or shall be complied with, after the exemption takes effect.

(v) On the earlier of the following dates, a unit exempt under paragraph (C)(2)(b) of this rule shall lose its exemption:

~~(A)~~(a) The date on which the restriction on unit operating hours and fuel use described in paragraph (C)(2)(b) of this rule is removed from the unit's federally enforceable permit or otherwise becomes no longer applicable to any control period starting in 2004.

~~(B)~~(b) The first date on which the unit fails to comply, or with regard to which the owners and operators fail to meet their burden of proving that the unit is complying, with the restriction on unit operating hours and fuel use described in paragraph (C)(2)(b) of this rule during any control period starting in 2004.

(vi) A unit that loses its exemption in accordance with paragraph (C)(2)(e)(v) of this rule shall be subject to the requirements of this chapter. For the purpose of applying permitting requirements under rule 3745-14-03 of the Administrative Code and applying monitoring requirements under rule 3745-14-08 of the Administrative Code, the unit shall be treated as commencing operation and, if the unit is covered by paragraph (C)(1)(b) of this rule, commencing commercial operation on the date the unit loses its exemption.

(D) Standard requirements.

(1) State program budget.

(a) For EGUs: Ohio's state program budget for EGUs is forty-five thousand four hundred thirty-two tons of NOx for each control period for units under paragraph (C)(1)(a) of this rule. The sum of the total number of tons of NOx emitted from the NOx budget units under paragraph (C)(1)(a) for the control period plus the sum of the NOx emission limitations (in tons) for each unit exempt under paragraph (C)(2) of this rule shall be less than or equal to the state program budget for EGUs.

(b) For non-EGUs: Ohio's state program budget for non-EGUs is four thousand twenty-eight tons of NOx for each control period for units under paragraph (C)(1)(b) of this rule. The sum of the total number of tons of NOx emitted from the NOx budget units under paragraph (C)(1)(b) of this rule for the control period plus the sum of the NOx emission limitations (in tons) for each unit exempt under paragraph (C)(2) of this rule shall be less than or equal to the state program budget for non-EGUs.

(i) Unless all NOx budget units under paragraph (C)(1)(b) of this rule are exempt under paragraph (C)(2) of this rule, by May 1 of each year, Ohio EPA will conduct an annual review of actual NOx emissions during the previous control period from all NOx budget

units under paragraph (C)(1)(b) of this rule, including any new units, to ensure the total emissions remain below the state program budget for non-EGUs.

- (ii) Should the total emissions for the control period exceed the state program budget for non-EGUs, Ohio EPA will, within one year of determining the exceedance of the state program budget, submit a revised state implementation plan to the United States Environmental Protection Agency which compensates for the budget shortfall and ensures the state program budget is met in future years.

(2) Permit requirements.

The owners or operators and, to the extent applicable, the designated representative of each NO<sub>x</sub> budget unit or NO<sub>x</sub> budget source shall meet the permit requirements in rule 3745-14-03 of the Administrative Code.

(3) Monitoring requirements.

- (a) The owners and operators and, to the extent applicable, the designated representative of each NO<sub>x</sub> budget source and each NO<sub>x</sub> budget unit at the source shall comply with the monitoring requirements of rule 3745-14-08 of the Administrative Code.
- (b) The emissions measurements recorded and reported in accordance with rule 3745-14-08 of the Administrative Code shall be used to determine compliance with the NO<sub>x</sub> state program budget under paragraph (D)(1) of this rule.

(4) Record keeping and reporting requirements.

- (a) Unless otherwise provided, the owners and operators of a NO<sub>x</sub> budget source and each NO<sub>x</sub> budget unit at the source shall keep on site at the source, or at a central location in Ohio for unattended sources, each of the following documents for a period of five years from the date the document is created: (This period may be extended for cause, at any time prior to the end of five years, in writing by the director or the administrator. Records for unattended sources retained at a central location shall be available immediately at the central location upon the request of the director or administrator and within three days following receipt of a written request from the director or administrator.)

- (i) Documents demonstrating the designated representative's authority necessary to carry out his or her duties and responsibilities under the NOx budget program on behalf of the owners and operators of the NOx budget source and of each NOx budget unit at the source and certifying that each such owner and operator shall be fully bound by the designated representative's representations, actions, inactions, or submissions and by any decision or order issued to the designated representative by the director, the Administrator, or a court regarding the source or unit, provided that the documents shall be retained on site at the source beyond such five-year period until such documents are superseded because of the selection of a new designated representative.
  - (ii) All emissions monitoring information, in accordance with rule 3745-14-08 of the Administrative Code.
  - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the NOx budget program.
  - (iv) Copies of all documents used to complete a permit application and any other submission under the NOx budget program or to demonstrate compliance with the requirements of the NOx budget program.
- (b) The designated representative of a NOx budget source and each NOx budget unit at the source shall submit the reports and compliance certifications required under the NOx budget program, including those under rule 3745-14-04 and rule 3745-14-08 of the Administrative Code.

(5) Liability.

- (a) Any person who knowingly violates any requirement or prohibition of the NOx budget program, a permit, or an exemption under paragraph (C)(2) of this rule shall be subject to enforcement pursuant to applicable state and federal law.
- (b) Any person who knowingly makes a false material statement in any record, submission, or report under the NOx budget program shall be subject to criminal enforcement pursuant to applicable state and federal law.

- (c) No permit revision shall excuse any violation of the requirements of the NOx budget program that occurs prior to the date that the revision takes effect.
  - (d) Each NOx budget source and each NOx budget unit shall meet the requirements of the NOx budget program.
  - (e) Any provision of the NOx budget program that applies to a NOx budget source (including a provision applicable to the designated representative of a NOx budget source) shall also apply to the owners and operators of such source and of the NOx budget units at the source.
  - (f) Any provision of the NOx budget program that applies to a NOx budget unit (including a provision applicable to the designated representative of a NOx budget unit) shall also apply to the owners and operators of such unit. Except with regard to the requirements applicable to units with a common stack under rule 3745-14-08 of the Administrative Code, the owners and operators and the designated representative of one NOx budget unit shall not be liable for any violation by any other NOx budget unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
- (6) No provision of the NOx budget program, a permit application, a permit, or an exemption under paragraph (C)(2) of this rule shall be construed as exempting or excluding the owners and operators and, to the extent applicable, the designated representative of a NOx budget source or NOx budget unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

(E) Computation of time.

- (1) Unless otherwise stated, any time period scheduled, under the NOx budget program, to begin on the occurrence of an act or event shall begin on the day the act or event occurs.
- (2) Unless otherwise stated, any time period scheduled, under the NOx budget program, to begin before the occurrence of an act or event shall be computed so that the period ends the day before the act or event occurs.
- (3) Unless otherwise stated, if the final day of any time period under the NOx

budget program, except for the control period defined in paragraph (B)(2)(o) of this rule, falls on a weekend or a state or federal holiday, the time period shall be extended to the next business day.

(F) Referenced materials. This chapter includes references to certain subject matter or materials. The text of the referenced materials is not included in the rules contained in this chapter. Information on the availability of the referenced materials as well as the date of and the particular edition or version of the material is included in this rule. For materials subject to change, only the specific version specified in this rule are referenced. Material is referenced as it exists on the effective date of this rule. Except for subsequent annual publication of existing (unmodified) Code of Federal Regulation compilations, any amendment or revision to a referenced document is not referenced unless and until this rule has been amended to specify the new dates.

(1) Availability. The materials incorporated by reference are available as follows:

(a) Clean Air Act as defined in this rule. Information and copies may be obtained by writing to: "Superintendent of Documents, Attn: New Orders, PO Box 371954, Pittsburgh, PA 15250-7954." The full text of the Act as amended in 1990 is also available in electronic format at [www.epa.gov/oar/caa/](http://www.epa.gov/oar/caa/). A copy of the Act is also available for inspection and use at most public libraries and "The State Library of Ohio."

(b) Code of Federal Regulations. Information and copies may be obtained by writing to: "Superintendent of Documents, Attn: New Orders, PO Box 371954, Pittsburgh, PA 15250-7954." The full text of the CFR is also available in electronic format at <http://www.ecfr.gov/>. The CFR compilations are also available for inspection and use at most Ohio public libraries and "The State Library of Ohio."

(c) "Compilation of Air Pollutant Emission Factors, Volume I: Stationary Point and Area Sources" (AP-42). Information and copies may be obtained by writing to: "U.S. Government Printing Office, P.O. Box 979050, St. Louis, MO 63197-9000." The full text of AP-42 is also available in electronic format at <https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-compilation-air-emission-factors>. AP-42 is also available for inspection and copying at most public libraries and "The State Library of Ohio."

~~(e)~~(d) Ohio EPA weekly review. Information and copies may be obtained by writing to: "Ohio EPA Legal Department, 50 W. Town Street, Columbus, Ohio, 43125." The full text of the Ohio EPA Weekly

Review is also available in electronic format at <http://epa.ohio.gov/Actions.aspx>. The Ohio EPA Weekly Review compilations are also available for inspection and use at most Ohio public libraries and "The State Library of Ohio."

~~(d)~~(e) Federal Registrar. Information and copies may be obtained by writing to: "Superintendent of Documents, Attn: New Orders, PO Box 371954, Pittsburgh, PA 15250-7954." Text of the Federal Register is also available in electronic format at [www.gpoaccess.gov/fr/index.html](http://www.gpoaccess.gov/fr/index.html). The Federal Register is also available for inspection and use at most Ohio public libraries and "The State Library of Ohio."

~~(e)~~(f) American Society for Testing Materials (ASTM). Information and copies may be obtained by writing to: "ASTM International, 100 Bar Harbor Drive, P.O. Box C700, West Conshohocken, Pennsylvania 19428-2959." These documents are available for purchase at [www.astm.org](http://www.astm.org). ASTM documents are also generally available at local public libraries and "The State Library of Ohio."

(2) Referenced materials.

(a) 40 CFR 51.121; "Findings and requirements for submission of State implementation plan revisions relating to emissions of oxides of nitrogen;" 63 FR 57491, Oct. 27, 1998, as amended at 63 FR 71225, Dec. 24, 1998; 64 FR 26305, May 14, 1999; 65 FR 11230, Mar. 2, 2000; 65 FR 56251, Sept. 18, 2000; 69 FR 21642, Apr. 21, 2004; 70 FR 25317, May 12, 2005; 70 FR 51597, Aug. 31, 2005; 73 FR 21538, Apr. 22, 2008; 76 FR 48353, Aug. 8, 2011; 79 FR 71671, Dec. 3, 2014.

(b) 40 CFR 51.123; "Findings and requirements for submission of State implementation plan revisions relating to emissions of oxides of nitrogen pursuant to the Clean Air Interstate Rule;" 70 FR 25319, May 12, 2005, as amended at 71 FR 25301, 25370, Apr. 28, 2006; 71 FR 74793, Dec. 13, 2006; 72 FR 59203, Oct. 19, 2007; 74 FR 56726, Nov. 3, 2009; 76 FR 48353, Aug. 8, 2011; 79 FR 71671, Dec. 3, 2014.

(c) 40 CFR 52.34; "Action on petitions submitted under section 126 relating to emissions of nitrogen oxides;" 64 FR 28318, May 25, 1999, as amended at 64 FR 33961, June 24, 1999; 65 FR 2042, Jan. 13, 2000; 65 FR 2726, Jan. 18, 2000; 69 FR 31505, June 3, 2004.

(d) 40 CFR 52.38; "What are the requirements of the Federal Implementation Plans (FIPs) for the Cross-State Air Pollution Rule (CSAPR) relating to

emissions of nitrogen oxides?" 76 FR 48354, Aug. 8, 2011, as amended at 76 FR 80774, Dec. 27, 2011; 79 FR 71671, Dec. 3, 2014; 81 FR 74586, Oct. 26, 2016.

- (e) 40 CFR Part 60; "Standards of Performance for New Stationary Sources;" as published in the July 1, 2016 Code of Federal Regulations.
- (f) 40 CFR Part 60, Appendix A; "Test Methods 1 through 29;" as published in the July 1, 2016 Code of Federal Regulations.
- (g) 40 CFR Part 72; "Permits Regulation;" as published in the July 1, 2016 Code of Federal Regulations.
- (h) 40 CFR 72.2; "Definitions;" as published in the July 1, 2016 Code of Federal Regulations.
- (i) 40 CFR 72.6; "Applicability;" 58 FR 3650, Jan. 11, 1993, as amended at 58 FR 15648, Mar. 23, 1993; 62 FR 55475, Oct. 24, 1997; 64 FR 28588, May 26, 1999; 66 FR 12978, Mar. 1, 2001.
- (j) 40 CFR Part 75; "Continuous Emission Monitoring;" as published in the July 1, 2016 Code of Federal Regulations.
- (k) 40 CFR 75.10; "General operating requirements;" 58 FR 3701, Jan. 11, 1993, as amended at 60 FR 26519, May 17, 1995; 64 FR 28590, May 26, 1999; 67 FR 40422, June 12, 2002; 70 FR 28678, May 18, 2005; 76 FR 17308, Mar. 28, 2011.
- (l) 40 CFR 75.11; "Specific provisions for monitoring SO<sub>2</sub> emissions (SO<sub>2</sub> and flow monitors);" 58 FR 3701, Jan. 11, 1993, as amended at 60 FR 26520, 26566, May 17, 1995; 61 FR 59157, Nov. 20, 1996; 63 FR 57499, Oct. 27, 1998; 64 FR 28590, May 26, 1999; 67 FR 40423, June 12, 2002, 73 FR 4342, Jan. 24, 2008.
- (m) 40 CFR 75.17; "Specific provisions for monitoring emissions from common, bypass, and multiple stacks for NO<sub>x</sub> emission rate;" 58 FR 3701, Jan. 11, 1993, as amended at 60 FR 26523, May 17, 1995; 63 FR 57499, Oct. 27, 1998; 64 FR 28592, May 26, 1999; 67 FR 40424, June 12, 2002, 73 FR 4343, Jan. 24, 2008.
- (n) 40 CFR 75.19; "Optional SO<sub>2</sub>, NO<sub>x</sub>, and CO<sub>2</sub> emissions calculation for



low mass emissions (LME) units;" 63 FR 57500, Oct. 27, 1998, as amended at 64 FR 28592, May 26, 1999; 64 FR 37582, July 12, 1999; 67 FR 40424, 40425, June 12, 2002; 67 FR 53504, Aug. 16, 2002, 73 FR 4344, Jan. 24, 2008.

- (o) 40 CFR 75.20; "Initial certification and recertification procedures;" 58 FR 3701, Jan. 11, 1993, as amended at 60 FR 26524, May 17, 1995; 60 FR 40296, Aug. 8, 1995; 61 FR 59158, Nov. 20, 1996; 63 FR 57506, Oct. 27, 1998; 64 FR 28592, May 26, 1999; 67 FR 40431, June 12, 2002; 70 FR 28678, May 18, 2005, 72 FR 51527, Sept. 7, 2007; 73 FR 4345, Jan. 24, 2008; 76 FR 17308, Mar. 28, 2011.
- (p) 40 CFR 75.21; "Quality assurance and quality control requirements;" 58 FR 3701, Jan. 11, 1993, as amended at 60 FR 26527, 26566, May 17, 1995; 61 FR 25582, May 22, 1996; 61 FR 59159, Nov. 20, 1996; 64 FR 28599, May 26, 1999; 67 FR 40433, June 12, 2002; 67 FR 53505, Aug. 16, 2002; 70 FR 28679, May 18, 2005, 73 FR 4345, Jan. 24, 2008; 76 FR 17308, Mar. 28, 2011.
- (q) 40 CFR 75.34; "Units with add-on emission controls;" 60 FR 26567, May 17, 1995, as amended at 61 FR 59160, Nov. 20, 1996; 64 FR 28604, May 26, 1999; 67 FR 40438, June 12, 2002, 73 FR 4348, Jan. 24, 2008; 76 FR 17312, Mar. 28, 2011.
- (r) 40 CFR 75.61; "Notifications;" 60 FR 26538, May 17, 1995, as amended at 61 FR 25582, May 22, 1996; 61 FR 59162, Nov. 22, 1996; 64 FR 28620, May 26, 1999; 67 FR 40442, 40443, June 12, 2002, 73 FR 4356, Jan. 24, 2008; 76 FR 17316, Mar. 28, 2011.
- (s) 40 CFR 75.62; "Monitoring plan submittals;" 58 FR 3701, Jan. 11, 1993, as amended at 60 FR 26539, May 17, 1995; 64 FR 28621, May 26, 1999; 67 FR 40443, June 12, 2002, 73 FR 4356, Jan. 24, 2008; 76 FR 17316, Mar. 28, 2011.
- (t) 40 CFR 75.64; "Quarterly Reports;" 64 FR 28622, May 26, 1999, as amended at 67 FR 40444, June 12, 2002, 73 FR 4357, Jan. 24, 2008; 76 FR 17317, Mar. 28, 2011.
- (u) 40 CFR 75.66; "Petitions to the Administrator;" 58 FR 3701, Jan. 11, 1993, as amended at 60 FR 26540, 26569, May 17, 1995; 61 FR 59162, Nov. 20, 1996; 64 FR 28623, May 26, 1999; 67 FR 40444, June 12, 2002, 73 FR 4358, Jan. 24, 2008.

- (v) 40 CFR 75.70; “NOX mass emissions provisions;” 63 FR 57507, Oct. 27, 1998, as amended at 64 FR 28624, May 26, 1999; 67 FR 40444, June 12, 2002.
- (w) 40 CFR 75.71; “Specific provisions for monitoring NOX and heat input for the purpose of calculating NOX mass emissions;” 63 FR 57508, Oct. 27, 1998, as amended at 64 FR 28624, May 26, 1999; 67 FR 40444, 40445, June 12, 2002; 67 FR 53505, Aug. 16, 2002, 73 FR 4358, Jan. 24, 2008.
- (x) 40 CFR 75.72; “Determination of NOX mass emissions;” 63 FR 57507, Oct. 27, 1998, as amended at 67 FR 40445, June 12, 2002, 73 FR 4358, Jan. 24, 2008.
- (y) 40 CFR 75.74; "Annual and ozone season monitoring and reporting requirements;" 63 FR 57507, Oct. 27, 1998, as amended at 64 FR 28627, May 26, 1999; 67 FR 40446, 40447, June 12, 2002; 67 FR 57274, Sept. 9, 2002, 73 FR 4360, Jan. 24, 2008.
- (z) 40 CFR Part 75, Appendix A; “Specifications and Test Procedures;” as published in the July 1, 2016 Code of Federal Regulations.
- (aa) 40 CFR Part 75, Appendix B; “Quality Assurance and Quality Control Procedures;” 58 FR 3701, Jan. 11, 1993, as amended at 60 FR 26546, 26571, May 17, 1995; 61 FR 59165, Nov. 20, 1996; 64 FR 28644, May 26, 1999; 64 FR 37582, July 12, 1999; 67 FR 40456, 40457, June 12, 2002; 67 FR 53505, Aug. 16, 2002; 67 FR 57274, Sept. 9, 2002; 70 FR 28693, May 18, 2005, 72 FR 51528, Sept. 7, 2007; 73 FR 4367, Jan. 24, 2008; 76 FR 17321, Mar. 28, 2011.
- (bb) 40 CFR Part 75, Appendix D; “Optional SO2 Emissions Data Protocol for Gas-Fired and Oil-Fired Units;” 58 FR 3701, Jan. 11, 1993, as amended at 60 FR 26548, 26551, May 17, 1995; 61 FR 25585, May 22, 1996; 61 FR 59166, Nov. 20, 1996; 63 FR 57513, Oct. 27, 1998; 64 FR 28652-28663, May 26, 1999; 64 FR 37582, July 12, 1999; 67 FR 40460, 40472, June 12, 2002; 67 FR 53505, Aug. 16, 2002, 73 FR 4369, Jan. 24, 2008; 76 FR 17324, Mar. 28, 2011; 76 FR 20536, Apr. 13, 2011; 77 FR 2460, Jan. 18, 2012.
- (cc) 40 CFR Part 75, Appendix E; “Optional NOX Emissions Estimation Protocol for Gas-Fired Peaking Units and Oil-Fired Peaking Units;” 58 FR 3701, Jan. 11, 1993, as amended at 60 FR 26551-26553, May 17,

1995; 64 FR 28665, May 26, 1999; 67 FR 40473, 40474, June 12, 2002; 67 FR 53505, Aug. 16, 2002, 73 FR 4372, Jan. 24, 2008; 76 FR 17325, Mar. 28, 2011.

- (dd) 40 CFR Part 75, Appendix F; "Conversion Procedures;" 58 FR 3701, Jan. 11, 1993; Redesignated and amended at 60 FR 26553-26556, 26571, May 17, 1995; 61 FR 25585, May 22, 1996; 61 FR 59166, Nov. 20, 1996; 63 FR 57513, Oct. 27, 1998; 64 FR 28666-28671, May 26, 1999; 64 FR 37582, July 12, 1999; 67 FR 40474, 40475, June 12, 2002; 67 FR 53505, Aug. 16, 2002, 70 FR 28695, May 18, 2005; 73 FR 4372, Jan. 24, 2008; 76 FR 17325, Mar. 28, 2011; 77 FR 2460, Jan. 18, 2012.
- (ee) 40 CFR Part 75, Subpart D; "Missing Data Substitution Procedures;" as published in the July 1, 2016 Code of Federal Regulations.
- (ff) 40 CFR Part 75, Subpart E; "Alternative Monitoring Systems;" as published in the July 1, 2016 Code of Federal regulations.
- (gg) 40 CFR Part 75, Subpart F; "Recordkeeping Requirements;" as published in the July 1, 2016 Code of Federal Regulations.
- (hh) 40 CFR Part 75, Subpart G; "Reporting Requirements;" as published in the July 1, 2016 Code of Federal Regulations.
- (ii) 40 CFR Part 75, Subpart H; "NOX mass emissions provisions;" as published in the July 1, 2016 Code of Federal Regulations.
- (jj) ASTM D6522-11; "Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers;" approved December 1, 2011.
- (kk) Clean Air Act, as contained in 42 USC 7401 to 7671q; "Air Pollution Prevention and Control;" published January 3, 2017 in Supplement III of the 2012 edition of the United States Code.
- (ll) "Interstate Ozone Transport: Response to Court Decisions on the NOX SIP Call, NOX SIP Call Technical Amendments, and Section 126 Rules;" 69 FR 21603 to 69 FR 21648, April 21, 2004.

- (mm) Section 110 of the Clean Air Act; contained in 42 USC 7410; "State implementation plans for national primary and secondary ambient air quality standards;" published January 3, 2017 in Supplement III of the 2012 Edition of the United States Code.
- (nn) Section 126 of the Clean Air Act; contained in 42 USC 7426; "Interstate pollution abatement;" published January 3, 2017 in Supplement III of the 2012 Edition of the United States Code.
- (oo) Section 502 of the Clean Air Act; contained in 42 USC 7661a; "Permit programs;" published January 3, 2017 in Supplement III of the 2012 Edition of the United States Code.
- (pp) "Technical Amendment to the Finding of Significant Contribution and Rulemaking for Certain States for Purposes of Reducing Regional Transport of Ozone;" 65 FR 11222 to 65 FR 11231, March 2, 2000.
- (qq) Title IV of the Clean Air Act, contained in 42 USC 7651 to 7651o; "Acid deposition control;" published January 3, 2017 in Supplement III of the 2012 Edition of the United States Code.
- (rr) Title V of the Clean Air Act, contained in 42 USC 7661 to 7661f; "Permits;" published January 3, 2017 in Supplement III of the 2012 Edition of the United States Code.
- (ss) USEPA Method 1; contained in 40 CFR Part 60, Appendix A; "Sample and velocity traverses for stationary sources;" as published in the July 1, 2016 Code of Federal Regulations.
- (tt) USEPA Method 2; contained in 40 CFR Part 60, Appendix A; "Determination of stack gas velocity and volumetric flow rate (Type S pitot tube);" as published in the July 1, 2016 Code of Federal Regulations.
- (uu) USEPA Method 3; contained in 40 CFR Part 60, Appendix A; "Gas analysis for the determination of dry molecular weight;" as published in the July 1, 2016 Code of Federal Regulations.
- (vv) USEPA Method 4; contained in 40 CFR Part 60, Appendix A; "Determination of moisture content in stack gases;" as published in the July 1, 2016 Code of Federal Regulations.

- (ww) USEPA Method 7; contained in 40 CFR Part 60, Appendix A; "Determination of nitrogen oxide emissions from stationary sources;" as published in the July 1, 2016 Code of Federal Regulations.
- (xx) USEPA Method 7a; contained in 40 CFR Part 60, Appendix A; "Determination of nitrogen oxide emissions from stationary sources-Ion chromatographic method;" as published in the July 1, 2016 Code of Federal Regulations.
- (yy) USEPA Method 7c; contained in 40 CFR Part 60, Appendix A; "Determination of nitrogen oxide emissions from stationary sources-Alkaline-permanganate/colorimetric method;" as published in the July 1, 2016 Code of Federal Regulations.
- (zz) USEPA Method 7e; contained in 40 CFR Part 60, Appendix A; "Determination of Nitrogen Oxides Emissions From Stationary Sources (Instrumental Analyzer Procedure);" as published in the July 1, 2016 Code of Federal Regulations.
- (aaa) USEPA Method 19; contained in 40 CFR Part 60, Appendix A; "Determination of sulfur dioxide removal efficiency and particulate, sulfur dioxide and nitrogen oxides emission rates" as published in the July 1, 2016 Code of Federal Regulations.