



## Ohio Administrative Code

### Rule 3745-103-01 Definitions and reference to materials.

Effective: September 25, 2023

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[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 (C) of this rule titled "Referenced materials."]

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

(B) As used in this chapter:

(1) "Acid rain compliance option" means one of the methods of compliance used by an affected unit under the acid rain program as described in a compliance plan submitted and approved in accordance with rule 3745-103-09 of the Administrative Code, rules 3745-103-22 to 3745-103-54 of the Administrative Code, and 40 CFR Part 76.

(2) "Acid rain emissions limitation" means:

(a) For the purposes of sulfur dioxide emissions:

(i) The tonnage equivalent of the allowances authorized to be allocated to the affected units at a source for use in a calendar year; under paragraphs (a)(1), (a)(3), and (h) of section 404 of the Clean Air Act, 42 USC 7401, or the basic phase II allowance allocations authorized to be allocated to an affected unit for use in a calendar year, or the allowances authorized to be allocated to an opt-in source under section 410 of the Clean Air Act for use in a calendar year.

(ii) As adjusted:

(A) By allowances allocated by the USEPA pursuant to section 403, section 405 paragraphs (a)(2), (a)(3), (b)(2), (c)(4), (d)(3), and (h)(2), and section 406 of the Clean Air Act.



(B) By allowances allocated by the USEPA pursuant to 40 CFR Part 72, Subpart D.

(C) By allowance transfers to or from the compliance account for that source that were recorded or properly submitted for recordation by the allowance transfer deadline as provided in 40 CFR 73.35, after deductions and other adjustments are made pursuant to 40 CFR 73.34(c).

(b) For purposes of nitrogen oxides emissions, the applicable limitation under 40 CFR Part 76.

(3) "Acid rain emissions reduction requirement" means a requirement under the acid rain program to reduce the emissions of sulfur dioxide or nitrogen oxides from a unit to a specified level or by a specified percentage.

(4) "Acid rain permit" or "permit" means the legally binding written document or portion of such document, including any permit revision, that is issued by the director under this chapter and specifies the acid rain program requirements applicable to an affected source and to the owners and operators and the designated representative of the affected source or the affected unit.

(5) "Acid rain program" means the national sulfur dioxide and nitrogen oxides air pollution control and emissions reduction program established in accordance with Title IV of the Clean Air Act, rules 3745-103-01 to 3745-103-66 of the Administrative Code, and 40 CFR Parts 73, 74, 75, 76, 77, and 78.

(6) "Actual SO<sub>2</sub> emissions rate" means the annual average sulfur dioxide emissions rate for the unit (expressed in pound per MMBtu), for the specified calendar year; provided that, if the unit is listed in the National Allowance Data Base (NADB), the "1985 actual SO<sub>2</sub> emissions rate" for the unit is the rate specified by the USEPA in the NADB under the data field "SO2RTE."

(7) "Affected source" means a source that includes one or more affected units.

(8) "Affected states" means all states that meet one of the following:

(a) Whose air quality may be affected and that are contiguous to the state when a permit, permit



modification or permit renewal is being proposed.

(b) That are within fifty miles of the permitted source.

(9) "Affected unit" means a unit that is subject to any acid rain emissions reduction requirement or acid rain emissions limitation under rule 3745-103-02 or rules 3745-103-22 to 3745-103-54 of the Administrative Code.

(10) "Allowable SO<sub>2</sub> emissions rate" means the most stringent federally enforceable emissions limitation for sulfur dioxide (in pound per MMBtu) applicable to the unit or combustion source for the specified calendar year, or for such subsequent year as determined by the U.S. EPA where such a limitation does not exist for the specified year; provided that, if a phase I or phase II unit is listed in the NADB, the "1985 allowable SO<sub>2</sub> emission rate" for the phase I or phase II unit shall be the rate specified by the USEPA in the NADB under the data field "1985 annualized boiler SO<sub>2</sub> emission limit."

(11) "Allowance" means an authorization by the USEPA under the acid rain program to emit up to one ton of sulfur dioxide during or after a specified calendar year.

(12) "Allowance deduction," or "deduct" when referring to allowances, means the permanent withdrawal of allowances by the USEPA from an allowance tracking system compliance account, to account for the number of tons of SO<sub>2</sub> emissions from the affected units at an affected source for the calendar year, for tonnage emissions estimates calculated for periods of missing data as provided in 40 CFR Part 75, or for any other allowance surrender obligations of the acid rain program.

(13) "Allowances held" or "hold allowances" means the allowances recorded by the USEPA, or submitted to the USEPA for recordation in accordance with 40 CFR 73.50, in an allowance tracking system account.

(14) "Allowance transfer deadline" means midnight of March first (or February twenty-ninth in any leap year) or, if such day is not a business day, midnight of the first business day thereafter and is the deadline by which allowances may be submitted for recordation in an affected source's compliance account for the purposes of meeting the source's acid rain emissions limitation requirements for



sulfur dioxide for the previous calendar year.

(15) "Alternative contemporaneous annual emission limitation" means the maximum allowable NO<sub>x</sub> emission rate (on a pound per MMBtu, annual average basis) assigned to an individual unit in a NO<sub>x</sub> emissions averaging plan pursuant to rule 3745-103-63 of the Administrative Code.

(16) "Alternative technology" means a control technology for reducing NO<sub>x</sub> emissions that is outside the scope of the definition of low NO<sub>x</sub> burner technology. Alternative technology does not include overfire air as applied to wall-fired boilers or separated overfire air as applied to tangentially fired boilers.

(17) "Approved clean coal technology demonstration project" means a project using funds appropriated under the United States department of energy's "Clean Coal Technology Demonstration Program," up to a total amount of two billion five hundred million dollars for commercial demonstration of clean coal technology, or similar projects funded through appropriations for USEPA. The federal contribution for a qualifying project shall be at least twenty per cent of the total cost of the demonstration project.

(18) "Arch-fired boiler" means a dry bottom boiler with circular burners, or coal and air pipes, oriented downward and mounted on waterwalls that are at an angle significantly different from the horizontal axis and the vertical axis. This definition shall include only the following units: Holtwood unit 17, Hunlock unit 6, and Sunbury units 1a, 1b, 2a, and 2b. This definition shall exclude dry bottom turbo fired boilers.

(19) "Authorized account representative" means a responsible natural person who is authorized, in accordance with 40 CFR Part 73, to transfer and otherwise dispose of allowances held in an allowance tracking system general account; or in the case of a compliance account, the designated representative of the owners or operators of the affected source and the affected units at the source.

(20) "Basic Phase II allowance allocations" means:

(a) For calendar years 2000 through 2009 inclusive, allocations of allowances made by the USEPA pursuant to section 403, and paragraphs (b)(1), (b)(3), (b)(4), (c)(1), (c)(2), (c)(3), (c)(5), (d)(1),



(d)(2), (d)(4), (d)(5), (e), (f), (g)(1), (g)(2), (g)(3), (g)(4), (g)(5), (h)(1), (i), and (j) of section 405 of the Clean Air Act.

(b) For each calendar year beginning in 2010, allocations of allowances made by the U.S. EPA pursuant to section 403 and paragraphs (b)(1), (b)(3), (b)(4), (c)(1), (c)(2), (c)(3), (c)(5), (d)(1), (d)(2), (d)(4), (d)(5), (e), (f), (g)(1), (g)(2), (g)(3), (g)(4), (g)(5), (h)(1), (h)(3), (i), and (j) of section 405 of the Clean Air Act.

(21) "Boiler" means an enclosed fossil or other fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or any other medium.

(22) "Btu" means British thermal unit.

(23) "Cell burner boiler" means a wall-fired boiler that utilizes two or three circular burners combined into a single vertically oriented assembly that results in a compact, intense flame. Any low NO<sub>x</sub> retrofit of a cell burner boiler that reuses the existing cell burner, close-coupled wall opening configuration would not change the designation of the unit as a cell burner boiler.

(24) "CEMS" means continuous emission monitoring system.

(25) "Clean Air Act" means the Clean Air Act Amendments of 1990 contained in 42 USC 7401 to 7671q.

(26) "CO<sub>2</sub>" means carbon dioxide.

(27) "Coal" means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American society for testing and materials designation ASTM D388 (Standard Classification of Coals by Rank).

(28) "Coal-derived fuel" means any fuel, whether in a solid, liquid, or gaseous state, produced by the mechanical, thermal, or chemical processing of coal (including, but not limited to, pulverized coal, coal refuse, liquefied or gasified coal, washed coal, chemically cleaned coal, coal-oil mixtures, and coke).



(29) "Coal-fired" means for all purposes under the acid rain program, except for purposes of applying rules 3745-103-55 to 3745-103-66 of the Administrative Code, the combustion of fuel consisting of coal or any coal-derived fuel (except a coal-derived gaseous fuel that meets the definition of very low sulfur fuel in this rule), alone or in combination with any other fuel, where a unit is coal-fired if it uses coal or coal-derived fuel as its primary fuel (expressed in MMBtu); provided that, if the unit is listed in the NADB, the primary fuel is the fuel listed in the NADB under the data field PRIMEFUEL.

(30) "Coal-fired utility unit" means a utility unit in which the combustion of coal (or any coal-derived fuel) on a Btu basis exceeds 50.0 per cent of its annual heat input during the following calendar year: for phase I units, in calendar year 1990; and, for phase II units, in calendar year 1995 or, for a phase II unit that did not combust any fuel that resulted in the generation of electricity in calendar year 1995, in any calendar year during the period 1990-1995. For purposes of applying rules 3745-103-55 to 3745-103-66 of the Administrative Code, this definition shall apply notwithstanding any other definition in this rule.

(31) "Combustion controls" means technology that minimizes NO<sub>x</sub> formation by staging fuel and combustion air flows in a boiler. This definition shall include low NO<sub>x</sub> burners, overfire air, or low NO<sub>x</sub> burners with overfire air.

(32) "Combustion source" means a stationary fossil fuel-fired boiler, turbine, or internal combustion engine where the designated representative has submitted or intends to submit an opt-in permit application under rule 3745-103-28 of the Administrative Code to enter into the "opt-in program."

(33) "Cogeneration unit" means a unit that has equipment used to produce electric energy and forms of useful thermal energy (such as heat or steam) for industrial, commercial, heating, or cooling purposes, through sequential use of energy.

(34) "Commence commercial operation" means to have begun to generate electricity for sale, including the sale of electricity during testing.

(35) "Commence construction" means that an owner or operator has either undertaken a continuous



program of construction or has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction.

(36) "Commence operation" means to have begun any mechanical, chemical, or electronic process, including start-up of an emissions control technology or emissions monitor or of a unit's combustion chamber.

(37) "Common stack" means the exhaust of emissions from two or more units through a single flue.

(38) "Compensating unit" means an affected unit that is not otherwise subject to acid rain emissions limitation or acid rain emissions reduction requirements during phase I and that is designated as a phase I unit in a reduced utilization plan under 40 CFR 72.43; provided that an opt-in source shall not be a compensating unit.

(39) "Compliance account" means an allowance tracking system account, established by the USEPA under 40 CFR 73.31(a), 40 CFR 73.31(b), or 40 CFR 74.40(a) for an affected source and for each affected unit at the source.

(40) "Compliance certification" means a submission to the USEPA or the director of Ohio environmental protection agency, as appropriate, that is required by this chapter or by 40 CFR Parts 72, 73, 74, 75, 76, 77, or 78, to report an affected source's or an affected unit's compliance or non-compliance with a provision of the acid rain program and that is signed and verified by the designated representative in accordance with rule 3745-103-06 of the Administrative Code, 40 CFR Part 72, Subpart B and Subpart I, and the acid rain program regulations.

(41) "Compliance plan" means the document submitted for an affected source in accordance with rules 3745-103-07 and 3745-103-08, or 3745-103-41 to 3745-103-51 of the Administrative Code, or 40 CFR Part 76, specifying the method (including one or more acid rain compliance options as provided under rules 3745-103-09 and 3745-103-10 of the Administrative Code or rules 3745-103-41 to 3745-103-51 of the Administrative Code, or 40 CFR Part 76) by which each affected unit at the source will meet the applicable acid rain emissions limitation and acid rain emissions reduction requirements.



(42) "Compliance use date" means the first calendar year for which an allowance may be used for purposes of meeting a source's acid rain emissions limitation for sulfur dioxide.

(43) "Conditionally valid data" means data from a continuous monitoring system that are not quality assured, but which may become quality assured if certain conditions are met. Examples of data that may qualify as conditionally valid are either of the following:

(a) Data recorded by an uncertified monitoring system prior to its initial certification.

(b) Data recorded by a certified monitoring system following a significant change to the system that may affect its ability to accurately measure and record emissions.

A monitoring system shall pass a probationary calibration error test, in accordance with 40 CFR Part 75, Appendix B, Section 2.1.1, to initiate the conditionally valid data status. In order for conditionally valid emission data to become quality assured, one or more quality assurance tests or diagnostic tests shall be passed within a specified time period in accordance with paragraph (b)(3) of 40 CFR 75.20.

(44) "Construction" means fabrication, erection, or installation of a unit or any portion of a unit.

(45) "Customer" means a purchaser of electricity not for the purposes of retransmission or resale. For generating rural electric cooperatives, the customers of the distribution cooperatives served by the generating cooperative will be considered customers of the generating cooperative.

(46) "Demonstration period" means a period of time not less than fifteen months, approved under rule 3745-103-62 of the Administrative Code, for demonstrating that the affected unit cannot meet the applicable emission limitation under rule 3745-103-57, 3745-103-58, or 3745-103-59 of the Administrative Code and establishing the minimum NO<sub>x</sub> emission rate that the unit can achieve during long-term load dispatch operation.

(47) "Designated representative" means a responsible natural person authorized by the owners and operators of an affected source and of all affected units at the source, as evidenced by a certificate of representation submitted in accordance with 40 CFR Part 72, Subpart B, to represent and legally bind





each owner and operator, as a matter of federal law, in matters pertaining to the acid rain program. The term "designated representative" shall be construed to include the alternate designated representative, if any.

(48) "Diesel fuel" means a low sulfur fuel oil of grades 1-D or 2-D, as defined by the American society for testing and materials ASTM D975 (Standard Specification for Diesel Fuel Oils), grades 1-GT or 2-GT, as defined by ASTM D2880 (Standard Specification for Gas Turbine Fuel Oils), or grade one or grade two, as defined by ASTM D396 (Standard Specification for Fuel Oils).

(49) "Direct public utility ownership" means direct ownership of equipment and facilities by one or more corporations, the principal business of which is sale of electricity to the public at retail. Percentage ownership of such equipment and facilities shall be measured on the basis of book value.

(50) "Dry bottom" means a boiler has a furnace bottom temperature below the ash melting point and the bottom ash is removed as a solid.

(51) "Emissions" means air pollutants exhausted from a unit or source into the atmosphere, as measured, recorded, and reported to the USEPA by the designated representative and as determined by the USEPA, in accordance with the emissions monitoring requirements of 40 CFR Part 75.

(52) "EPA protocol gas" means a calibration gas mixture prepared and analyzed according to section two of the "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards," May 2012, EPA-600/R-12/531, or such revised procedure as approved by the administrator.

(53) "Excess emissions" means either of the following:

(a) Any tonnage of sulfur dioxide emitted by the affected units at an affected source during a calendar year that exceeds the acid rain emissions limitation for sulfur dioxide for the source.

(b) Any tonnage of nitrogen oxide emitted by an affected unit during a calendar year that exceeds the annual tonnage equivalent of the acid rain emissions limitation for nitrogen oxides applicable to the affected unit taking into account the unit's heat input for the year.



(54) "Existing unit" means a unit (including a unit subject to section 111 of the Clean Air Act) that commenced commercial operation before November 15, 1990 and that on or after November 15, 1990 served a generator with a nameplate capacity of greater than twenty-five MWe. Existing unit does not include simple combustion turbines or any unit that on or after November 15, 1990 served only generators with a nameplate capacity of twenty-five MWe or less. Any existing unit that is modified, reconstructed, or repowered after November 15, 1990, continues to be an existing unit.

(55) "Fast-track modification" means that at the option of the designated representative, the permittee publicizes the proposed permit modifications in a newspaper of general circulation in the area where the source is located or in a state publication and gives notice to the interested parties. The public has thirty days to comment to the Ohio EPA. The permittee submits its proposed modifications to the Ohio EPA, and the agency has thirty days after the close of the comment period to rule on the proposed modifications.

(56) "Flue gas" means the combustion products arising from the combustion of fossil fuel in a utility boiler.

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

(58) "Fossil fuel-fired" means the combustion of fossil fuel or any derivative of fossil fuel, alone or in combination with any other fuel, independent of the percentage of fossil fuel consumed in any calendar year (expressed in MMBtu).

(59) "Fuel flowmeter quality assurance operating quarter" means a unit operating quarter in which the unit combusts the fuel measured by the fuel flowmeter for at least one hundred sixty-eight or more unit operating hours.

(60) "Fuel oil" means any petroleum-based fuel (including diesel fuel or petroleum derivatives such as oil tar) as defined by the American society for testing and materials in ASTM D396 (Standard Specification for Fuel Oils), and any recycled or blended petroleum products or petroleum by-products used as a fuel whether in a liquid, solid or gaseous state.



(61) "Gas-fired" means:

(a) For all purposes under the acid rain program, except for 40 CFR Part 75, the combustion of both of the following:

(i) Natural gas or other gaseous fuel (including coal-derived gaseous fuel), for at least 90.0 per cent of the unit's average annual heat input during the previous three calendar years and for at least 85.0 per cent of the annual heat input in each of those calendar years.

(ii) Any fuel, except coal or solid or liquid coal-derived fuel, for the remaining heat input, if any.

(b) For purposes of 40 CFR Part 75, the combustion of both of the following:

(i) Natural gas or other gaseous fuel (including coal-derived fuel) for at least 90.0 per cent of the unit's average annual heat input during the previous three calendar years and for at least 85.0 per cent of the annual heat input in each of those calendar years.

(ii) Fuel oil, for the remaining heat input, if any.

(c) For purposes of 40 CFR Part 75, a unit may initially qualify as gas-fired if the designated representative demonstrates to the satisfaction of the Ohio EPA that the requirements of paragraph (B)(62)(b) of this rule are met, or will in the future be met, through one of the following submissions:

(i) For a unit for which a monitoring plan has not been submitted under 40 CFR 75.62, the designated representative submits either of the following:

(A) Fuel usage data for the unit for the three calendar years immediately preceding the date of initial submission of the monitoring for the unit under 40 CFR 75.62.

(B) If a unit does not have fuel usage data for one or more of the three calendar years immediately preceding the date of initial submission of the monitoring for the unit under 40 CFR 75.62, the unit's



designated fuel usage; all available fuel usage data (including the percentage of the unit's heat input derived from the combustion of gaseous fuels), beginning with the date on which the unit commenced commercial operation; and the unit's projected fuel usage.

(ii) For a unit for which a monitoring plan has already been submitted under 40 CFR 75.62, that has not qualified as gas-fired under paragraph (B)(62)(c)(i) of this rule, and whose fuel usage changes, the designated representative submits either of the following:

(A) Three calendar years of data following a change in the unit's fuel usage, showing that no less than 90.0 per cent of the unit's average annual heat input during the previous three calendar years, and no less than 85.0 per cent of the unit's annual heat input during any one of the previous three calendar years, if from the combustion of gaseous fuels and the remaining heat input is from the combustion of fuel oil.

(B) A minimum of seven hundred twenty hours of unit operating data following the change in the unit's fuel usage, showing that no less than 90.0 per cent of the unit's heat input is from the combustion of gaseous fuels and the remaining heat input is from the combustion of fuel oil, and a statement that this changed pattern of fuel usage is considered permanent and is projected to continue for the foreseeable future.

(iii) If a unit qualifies as gas-fired under paragraph (B)(62)(c)(i) or (B)(62)(c)(ii) of this rule, the unit is classified as gas-fired as of the date of the submission under such paragraph.

(d) For the purpose of 40 CFR Part 75, a unit that initially qualifies as gas-fired under paragraph (B)(62)(c)(i) or (B)(62)(c)(ii) of this rule shall meet the criteria in paragraph (B)(62)(b) of this rule each year in order to continue to qualify as gas-fired. If such a unit combusts only gaseous fuel and fuel oil but fails to meet such criteria for a given year, the unit no longer qualifies as gas-fired starting the day after the first day for which the criteria are not met. If a unit failing to meet the criteria in paragraph (B)(62)(b) of this rule initially qualified as a gas-fired unit under paragraph (B)(62)(c) of this rule, the unit may qualify as a gas-fired unit for a subsequent year only if the designated representative submits the data specified in paragraph (B)(62)(c)(ii)(a) of this rule.

(62) "Gas manufacturers intermediate standard (GMIS)" means a compressed gas calibration



standard that has been assayed and certified by direct comparison to a standard reference material (SRM), an SRM-equivalent PRM, a NIST/EPA-approved certified reference material (CRM), or a NIST traceable reference material (NTRM) in accordance with section 2.1.2.1 of the "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards," EPA-600/R-12/53.

(63) "Generator" means a device that produces electricity and was or would have been required to be reported as a generating unit pursuant to the United States department of energy form 860 (1990 edition).

(64) "Generator output capacity" means the full-load continuous rating of a generator under specific conditions as designated by the manufacturer.

(65) "Group one boiler" means a tangentially fired boiler or a dry bottom wall-fired boiler (other than a unit applying cell burner technology).

(66) "Group two boiler" means a wet bottom wall-fired boiler, a cyclone boiler, a boiler applying cell burner technology, a vertically fired boiler, an arch-fired boiler, or any other type of utility boiler (such as a fluidized bed or stoker boiler) that is not a group one boiler.

(67) "Heat input" means the product (expressed in MMBtu per unit of time) of the gross calorific value of the fuel (expressed in Btu per pound) and the fuel feed rate into the combustion device (expressed in mass of fuel per unit of time) and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust from other sources.

(68) "Independent power production facility" or "IPP" means a source that meets all of the following:

(a) Is nonrecourse project financed, as defined by the secretary of energy at 10 CFR Part 715.

(b) Is used for the generation of electricity, eighty per cent or more of which is sold at wholesale.

(c) Is a new unit required to hold allowances under Title IV of the Clean Air Act; provided that direct



public utility ownership of the equipment comprising the facility does not exceed fifty per cent.

(69) "Kacfm" means thousands of cubic feet per minute actual conditions.

(70) "Kscfh" means thousands of cubic feet per hour at standard conditions.

(71) "KWH" means kilowatt hour.

(72) "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 generated by any specified generating unit and pays its proportional amount of such unit's total costs, pursuant to a contract for any of the following:

(a) For the life of the unit.

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

(c) 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 was 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.

(73) "Low NO<sub>x</sub> burners" and "low NO<sub>x</sub> burner technology" means commercially available combustion modification NO<sub>x</sub> controls that minimize NO<sub>x</sub> formation by introducing coal and its associated combustion air into a boiler such that initial combustion occurs in a manner that promotes rapid coal devolatilization in a fuel-rich (i.e., oxygen deficient) environment and introduces additional air to achieve a final fuel-lean (i.e., oxygen rich) environment to complete the combustion process. This definition includes the staging of any portion of the combustion air using air nozzles or registers located inside any waterwall hole that includes a burner. This definition excludes the staging of any portion of the combustion air using air nozzles or ports located outside any waterwall hole that includes a burner (commonly referred to as NO<sub>x</sub> ports or separated overfire air ports).



(74) "Maximum continuous steam flow at one hundred per cent of load" means the maximum capacity of a boiler as reported in line seven (maximum continuous steam flow at one hundred per cent load in thousand pounds per hour) of schedule 6, part C (boiler information - design parameters) of the United States department of energy's form EIA-860.

(75) "MMBtu" means million Btu.

(76) "MWe" means megawatt electrical.

(77) "Nameplate capacity" means the maximum electrical generating output (expressed in MWe) that a generator can sustain over a specified period of time when not restricted by seasonal or other deratings, as listed in the NADB under the data field "NAMECAP" if the generator is listed in the NADB or as measured in accordance with the United States department of energy standards if the generator is not listed in the NADB.

(78) "National allowance data base" or "NADB" means the data base established under section 402 (4)(c) of the Clean Air Act.

(79) "Natural gas" means a naturally occurring fluid mixture of hydrocarbons (e.g., methane, ethane, or propane), produced in geological formations beneath the earth's surface, that maintains a gaseous state at standard atmospheric temperature and pressure, under ordinary conditions. Natural gas contains 20.0 grains or less of total sulfur per one hundred standard cubic feet. Additionally natural gas shall either be composed of at least seventy per cent methane by volume or have a gross calorific value between nine hundred fifty and one thousand one hundred Btu per standard cubic foot. Natural gas does not include the following gaseous fuels: landfill gas, digester gas, refinery gas, sour gas, blast furnace gas, coal-derived gas, producer gas, coke oven gas, or any gaseous fuel produced in a process which might result in highly variable sulfur content or heating value.

(80) "New unit" means a unit that commences commercial operation on or after November 15, 1990, including any such unit that serves a generator with a nameplate capacity of twenty-five MWe or less or that is a simple combustion turbine.



(81) "NIST" means national institute of standards and technology.

(82) "NIST traceable reference material (NTRM)" means a calibration gas mixture tested by and certified by the NIST to have a certain specified concentration of gases. NTRMs may have different concentrations from those of standard reference materials.

(83) "Non-plug-in combustion controls" means the replacement, in a cell burner boiler, of the portions of the waterwalls containing the cell burners by new portions of the waterwalls containing low NO<sub>x</sub> burners or low NO<sub>x</sub> burners with overfire air.

(84) "Oil-fired" means:

(a) For all purposes under the acid rain program, except for 40 CFR Part 75 the combustion of the following:

(i) Fuel oil for more than ten per cent of the average annual heat input during the previous three calendar years or for more than fifteen per cent of the annual heat input in any one of those calendar years; and any solid, liquid, or gaseous fuel, other than coal or any other coal-derived fuel (except a coal-derived gaseous fuel with a sulfur content no greater than natural gas), for the remaining heat input, if any.

(ii) Any solid, liquid or gaseous fuel (including coal-derived gaseous fuel), other than coal or any other coal-derived gaseous fuel), for the remaining heat input, if any.

(b) For the purpose of 40 CFR Part 75, combustion of only fuel oil and gaseous fuels, provided that the unit involved does not meet the definition of gas fired.

(85) "Operating" when referring to a combustion or process source seeking entry into the "Opt-in Program," means that the source had documented consumption of fuel input for more than eight hundred seventy-six hours in the six months immediately preceding the submission of a combustion source's opt-in application under paragraph (A) of rule 3745-103-29 of the Administrative Code.

(86) "Operating period" means a period of time of not less than three consecutive months and that





occurs not more than one month prior to applying for an alternative emission limitation demonstration period under rule 3745-103-62 of the Administrative Code, during which the owner or operator of an affected unit that cannot meet the applicable emission limitation meets all of the following:

(a) Operates the installed NO<sub>x</sub> emission controls in accordance with primary vendor specifications and procedures, with the unit operating under normal conditions.

(b) Records and reports quality-assured continuous emission monitoring (CEM) and unit operating data according to the methods and procedures in 40 CFR Part 75.

(87) "Operating permit" means a permit issued under 40 CFR Part 70 and any other regulations implementing Title V of the Clean Air Act.

(88) "Opt-in" or "opt into" means to elect to become an affected unit under the acid rain program through the issuance of the final effective opt-in permit under rule 3745-103-28 of the Administrative Code.

(89) "Opt-in permit" means the legally binding written document that is contained within the acid rain permit and sets forth the requirements under rule 3745-103-29 of the Administrative Code for a combustion source or rule 3745-103-30 of the Administrative Code for a process source that opts into the acid rain program.

(90) "Opt-in source" means a combustion source or process source that has elected to become an affected unit under the acid rain program and whose opt-in permit has been issued and is in effect.

(91) "Owner" means any of the following persons:

(a) Any holder of any portion of the legal or equitable title in an affected unit or in a combustion source or process source.

(b) Any holder of a leasehold interest in an affected unit or in a combustion source or process source.



(c) Any purchaser of power from an affected unit or from a combustion source or process source under a life-of-the-unit, firm power contractual arrangement as the term is defined herein and used in section 408 (i) of the Clean Air Act. 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 affected unit.

(d) With respect to any allowance tracking system general account, any person identified in the submission required by 40 CFR 73.31(c) that is subject to the binding agreement for the authorized account representative to represent that person's ownership interest with respect to allowances.

(92) "Operator" means any person who is an owner or who operates, controls, or supervises an affected unit or affected source and includes, but is not limited to, any holding company, utility system, or plant manager of an affected unit or affected source, combustion source, or process source.

(93) "Ozone season" means the period of time beginning May first of a year and ending on September thirtieth of the same year, inclusive.

(94) "Peaking unit" means:

(a) A unit that has all of the following:

(i) An average capacity factor of no more than 10.0 per cent during the previous three calendar years,

(ii) A capacity factor of no more than 20.0 per cent in each of those calendar years.

(b) For the purpose of 40 CFR Part 75, a unit may initially qualify as a peaking unit if the designated representative demonstrates to the satisfaction of the director that the requirements of paragraph (B)(95)(a) of this rule are met, or will in the future be met, through one of the following submissions:

(i) For a unit for which a monitoring plan has not been submitted under 40 CFR 75.62, the designated representative submits either of the following:



(A) Capacity factor data for the unit for the three calendar years immediately preceding the date of initial submission of the monitoring plan for the unit under 40 CFR 75.62.

(B) If unit does not have capacity factor data for one or more of the three years immediately preceding the date of initial submission of the monitoring plan for the unit under 40 CFR 75.62, all available capacity factor data, beginning with the date on which the unit commenced commercial operation; and projected capacity factor data.

(ii) For a unit for which a monitoring plan has already been submitted under 40 CFR 75.62, that has not qualified as a peaking unit under paragraph (B)(95)(b)(i) of this rule, and where the capacity factor changes, the designated representative submits either of the following:

(A) Three calendar years of data following the change in the units capacity factor showing an average capacity factor of no more than 10.0 per cent during the three previous calendar years and a capacity factor of no more than 20.0 per cent for each of those years.

(B) One calendar year of data following the change in the units capacity factor showing a capacity factor of no more than 10.0 per cent and a statement that this changed pattern of operation resulting in a capacity factor less than 10.0 per cent is considered permanent and is projected to continue for the foreseeable future.

(c) For the purpose of 40 CFR Part 75, a unit that initially qualifies as a peaking unit shall meet the criteria in paragraph (B)(95)(a) of this rule each year in order to continue to qualify as a peaking unit. If such a unit fails to meet such criteria for a given year, the unit no longer qualifies as a peaking unit starting January first of the year after the year for which the criteria are not met. If a unit failing to meet the criteria in paragraph (B)(95)(a) of this rule initially qualified as a peaking unit under paragraph (B)(95)(b) of this rule, the unit may qualify as a peaking unit for a subsequent year only if the designated representative submits the data specified in paragraph (B)(95)(b)(ii)(a) of this rule.

(d) A unit required to comply with the provisions of 40 CFR Part 75, Subpart H, under a State or Federal NO<sub>x</sub> mass emissions reduction program, may, pursuant to 40 CFR 75.74(c)(11), qualify as a peaking unit on an ozone season basis rather than an annual basis, if the owner or operator reports



NO<sub>x</sub> mass emissions and heat input data only during the ozone season.

(95) "Permitting authority" means the Ohio EPA, local agency, other state agency, or other agency authorized by the director to administer acid rain permits under rule 3745-103-13 of the Administrative Code.

(96) "Permit revision" means a permit modification, fast track modification, administrative permit amendment, or automatic permit amendment, as provided in rules 3745-103-16 to 3745-103-19 of the Administrative Code.

(97) "Phase I" means the acid rain program beginning January 1, 1995 and ending December 31, 1999.

(98) "Phase I unit" means any affected unit, except an affected unit under rules 3745-103-22 to 3745-103-54 of the Administrative Code, that is subject to an acid rain emissions reduction requirement or acid rain emissions limitations beginning in phase I; or any unit exempt under rule 3745-103-04 of the Administrative Code that, but for such exemption, would be subject to an acid rain emissions limitation beginning in phase I.

(99) "Phase II" means the acid rain program period beginning January 1, 2000, and continuing into the future thereafter.

(100) "Phase II unit" means any affected unit, except an affected unit under rules 3745-103-22 to 3745-103-54 of the Administrative Code, that is subject to an acid rain emissions reduction requirement or acid rain emissions limitation during phase II only.

(101) "Pipeline natural gas" means a naturally occurring fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions, and which is provided by a supplier through a pipeline. Pipeline natural gas contains 0.5 grains or less of total sulfur per one hundred standard cubic feet. Additionally, pipeline natural gas shall either be composed of at least seventy per cent methane by volume or have a gross calorific value between nine hundred fifty and one thousand one hundred Btu per standard cubic foot.



(102) "Plug-in combustion controls" means the replacement, in a cell burner boiler, of existing cell burners by low NO<sub>x</sub> burners or low NO<sub>x</sub> burners with overfire air.

(103) "Potential electrical output capacity" means the MWe capacity rating for the units which shall be equal to thirty-three per cent of the maximum design heat input capacity of the steam generating unit, as calculated according to 40 CFR Part 72, Appendix D.

(104) "Power distribution system" means the portion of an electricity grid owned or operated by a utility that is dedicated to delivering electric energy to customers.

(105) "Power purchase commitment" means a commitment or obligation of a utility to purchase electric power from a facility pursuant to any of the following:

(a) A power sales agreement.

(b) A state regulatory authority order requiring a utility to perform any of the following:

(i) Enter into a power sales agreement with the facility.

(ii) Purchase from the facility.

(iii) Enter into arbitration concerning the facility for the purpose of establishing terms and conditions of the utility's purchase of power.

(c) A letter of intent or similar instrument committing to purchase power (actual electrical output or generator output capacity) from the source at a previously offered or lower price and a power sales agreement applicable to the source is executed within the time frame established by the terms of the letter of intent, but no later than November 15, 1993 or, where the letter of intent does not specify a time frame, a power sales agreement applicable to the source is executed on or before November 15, 1993.

(d) A utility competitive bid solicitation that resulted in the selection of the qualifying facility or



independent power production facility as the winning bidder.

(106) "Power sales agreement" means a legally binding agreement between a QF, IPP, or firm associated with such facility and a regulated electric utility that establishes the terms and conditions for the sale of power from the facility to the utility.

(107) "Primary fuel" or "primary fuel supply" means the main fuel type (expressed in MMBtu) consumed by an affected unit for the applicable calendar year.

(108) "Primary vendor" means the vendor of the NO<sub>x</sub> emission control system who has primary responsibility for providing the equipment, service, and technical expertise necessary for detailed design, installation, and operation of the controls, including process data, mechanical drawings, operating manuals, or any combination thereof.

(109) "Probationary calibration error test" means an on-line calibration error test performed in accordance with 40 CFR Part 75, Appendix B, Section 2.1.1, that is used to initiate a conditionally valid data period.

(110) "QA operating quarter" means a calendar quarter in which there are at least one hundred sixty-eight unit operating hours or, for a common stack or bypass stack or bypass stack, a calendar quarter in which there are at least one hundred sixty-eight stack operating hours.

(111) "Qualifying facility" or "QF" means a qualifying small power production facility within the meaning of section 3(17)(C) of the Federal Power Act or a qualifying cogeneration facility within the meaning of section 3(18)(B) of the Federal Power Act.

(112) "Qualifying power purchase commitment" means a power purchase commitment in effect as of November 15, 1990, without regard to changes to that commitment so long as both of the following apply:

(a) The identity of the electric output purchaser, or the identity of the steam purchaser and the location of the facility, remain unchanged as of the date the facility commences commercial operation.



(b) The terms and conditions of the power purchase commitment are not changed in such a way as to allow the costs of compliance with the acid rain program to be shifted to the purchaser.

(113) "Qualifying repowering technology" means replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the USEPA, in consultation with the secretary of energy, a derivative of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990.

(114) "RATA" means relative accuracy test audit.

(115) "Reburning" means reducing the coal and combustion air to the main burners and injecting a reburn fuel (such as gas or oil) to create a fuel-rich secondary combustion zone above the main burner zone and final combustion air to create a fuel-lean burnout zone. The formation of  $\text{NO}_x$  is inhibited in the main burner zone due to the reduced combustion intensity, and  $\text{NO}_x$  is destroyed in the fuel-rich secondary combustion zone by conversion to molecular nitrogen.

(116) "Reduced utilization" means a reduction, during any calendar year in phase I, in the heat input (expressed in MMBtu for the calendar year) at a phase I unit below the unit's baseline, where such reduction subjects the unit to the requirement to submit a reduced utilization plan under 40 CFR 72.43; or, in the case of an opt-in source, means a reduction in the average utilization, as specified in rule 3745-103-45 of the Administrative Code, of an opt-in source below the opt-in source's baseline.

(117) "Replacement unit" means an affected unit replacing the thermal energy provided by an opt-in source, where both the affected unit and the opt-in source are governed by a thermal energy plan.

(118) "Repowering extension" means owners or operators of certain affected units, which were operating in 1985 or before with 1985  $\text{SO}_2$  emission rates of 1.2 pounds per MMBtu or greater, may apply for additional phase II allowance allocations for up to four years (the extension period) in



exchange for replacing existing boiler technology with new USEPA approved clean coal technology.

(119) "Research gas mixture (RGM)" means a calibration gas mixture developed by agreement of a requestor and NIST that NIST analyzes and certifies as "NIST traceable." RGM may have concentrations different from those of standard reference materials.

(120) "Schedule of compliance" means an enforceable sequence of actions, measures, or operations designed to achieve or maintain compliance, or correct non-compliance, with an applicable requirement of the acid rain program, including any applicable acid rain permit requirement.

(121) "Selective catalytic reduction" means a noncombustion control technology that destroys  $\text{NO}_x$  by injecting a reducing agent (e.g., ammonia) into the flue gas that, in the presence of a catalyst (e.g., vanadium, titanium, or zeolite), converts  $\text{NO}_x$  into molecular nitrogen and water.

(122) "Selective noncatalytic reduction" means a noncombustion control technology that destroys  $\text{NO}_x$  by injecting a reducing agent (e.g., ammonia, urea, or cyanuric acid) into the flue gas, downstream of the combustion zone that converts  $\text{NO}_x$  to molecular nitrogen, water, and when urea or cyanuric acid are used, to carbon dioxide ( $\text{CO}_2$ ).

(123) "Simple combustion turbine" means a unit that is a rotary engine driven by a gas under pressure that is created by the combustion of any fuel. This term includes combined cycle units without auxiliary firing. This term excludes combined cycle units with auxiliary firing, unless the unit did not use the auxiliary firing from 1985 through 1987 and does not use auxiliary firing at any time after November 15, 1990.

(124) "Solid waste incinerator" means a distinct operating unit of any facility which combusts any solid waste material from commercial or industrial establishments or the general public, including single and multiple residences, hotels, and motels.

(125) "SO<sub>2</sub>RTE" means a data field listed in the national allowance data base which represents the 1985 boiler SO<sub>2</sub> emission rate expressed in pounds per MMBtu.

(126) "SO<sub>2</sub>" means sulfur dioxide.





(127) "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, provided that one or more combustion or process sources that have, under paragraph (C) of rule 3745-103-25 of the Administrative Code, a different designated representative than the designated representative for one or more affected utility units at a source shall be treated as being included in a separate source from the source that includes such utility units for purposes of 40 CFR Parts 72 to 78, but shall be treated as being included in the same source as the source that includes such utility units for purposes of section 502(c) of the Clean Air Act. For purposes of this rule, a "source," including a "source" with multiple units, is considered a single "facility."

(128) "Span" means the highest pollutant or diluent concentration or flow rate that a monitor component is required to be capable of measuring under 40 CFR Part 75.

(129) "Stack operating hour" means a clock hour during which flue gases flow through a particular stack or duct (either for the entire hour or for part of the hour) while the associated unit is combusting fuel.

(130) "Standard reference material-equivalent compressed gas primary reference material (SRM-equivalent PRM)" means those gas mixtures listed in a declaration of equivalence in accordance with section 2.1.2 of the "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards," EPA-600/R-12/53.

(131) "State" means one of the forty-eight contiguous states and the District of Columbia and includes any non-federal authorities, including local agencies, interstate associations, and state-wide agencies with approved state operating permit programs. The term "state" has the conventional meaning where such meaning is clear from the context.

(132) "State operating permit program" means an operating permit program that the USEPA has approved under 40 CFR Part 70.

(133) "Stationary gas turbine" means a turbine that is not self-propelled and that combusts natural



gas, other gaseous fuel with a total sulfur content no greater than the total sulfur content of natural gas, or fuel oil in order to heat inlet combustion air and thereby turn a turbine in addition to or instead of producing steam or heating water.

(134) "Stoker boiler" means a boiler that burns solid fuel in a bed, on a stationary or moving grate, that is located at the bottom of the furnace.

(135) "Sulfur-free generation" means the generation of electricity by a process that does not have any emissions of sulfur dioxide, including hydroelectric, nuclear, solar, and wind generation.

(136) "Submit" or "serve" means to send or transmit a document, information, or correspondence to the person specified in accordance with the applicable regulations by one of the following methods:

(a) In person.

(b) By United States postal service.

(c) By other equivalent means of dispatch, or transmission, and delivery.

Compliance with any submission, service, or mailing deadline is determined by the date of dispatch, transmission, or mailing and not the date of receipt.

(137) "Sulfur-free generator" means a generator that produces such sulfur-free generation.

(138) "Tangentially fired boiler" means a boiler that has coal and air nozzles mounted in each corner of the furnace where the vertical furnace walls meet. Both pulverized coal and air are directed from the furnace corners along a line tangential to a circle lying in a horizontal plane of the furnace.

(139) "Thermal energy" means the thermal output produced by a combustion source used directly as part of a manufacturing process but not used to produce electricity.

(140) "Ton" or "tonnage" means any short ton (i.e., two thousand pounds). For the purpose of determining compliance with the acid rain emissions limitations and reduction requirements, total



tons for a year shall be calculated as the sum of all recorded hourly emissions (or the tonnage equivalent of the recorded hourly emissions rates) in accordance with 40 CFR Part 75, 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 not to equal a ton.

(141) "Total installed net output capacity" means the generator output capacity, excluding that portion of the electrical power actually used at the power production facility, as installed.

(142) "Total planned net output capacity" means the planned generator output capacity, excluding that portion of the electrical power which is designed to be used at the power production facility, as specified under one or more qualifying power purchase commitments or contemporaneous documents as of November 15, 1990.

(143) "Turbo-fired boiler" means a pulverized coal, wall-fired boiler with burners arranged on walls so that the individual flames extend down toward the furnace bottom and then turn back up through the center of the furnace.

(144) "Unit" means a fossil fuel-fired combustion device.

(145) "Unit operating hour" means a clock hour during which a unit combusts any fuel, either for part of the hour or for the entire hour.

(146) "USEPA" means the United States environmental protection agency.

(147) "Utility" means any person that sells electricity.

(148) "Utility competitive bid solicitation" is a public request from a regulated utility for offers to the utility for meeting future generating needs. A qualifying facility, independent power production facility, or new IPP may be regarded as having been selected in such solicitation if the utility has named the facility as a project with which the utility intends to negotiate a power sales agreement.

(149) "Utility system" means all interconnected units and generators operated by the same utility operating company as reported in the NADB under the data field "UTILNAME."



(150) "Utility unit" means a unit owned or operated by a utility:

(a) That serves a generator in any state that produces electricity for sale; or

(b) That during 1985, served a generator in any state that produced electricity for sale.

(c) Notwithstanding paragraphs (B)(151)(a) and (B)(151)(b) of this rule, a unit that was in operation during 1985, but did not serve a generator that produced electricity for sale during 1985, and did not commence commercial operation on or after November 15, 1990 is not a utility unit for purposes of the acid rain program.

(d) Notwithstanding paragraphs (B)(151)(a) and (B)(151)(b) of this rule, a unit that cogenerates steam and electricity is not a utility unit for purposes of the acid rain program, unless the unit is constructed for the purpose of supplying, or commences construction after November 15, 1990 and supplies, more than one-third of its potential electrical output capacity and more than twenty-five MWe output to any power distribution system for sale.

(151) "Vertically fired boiler" means a dry bottom boiler with circular burners, or coal and air pipes, oriented downward and mounted on waterwalls that are horizontal or at an angle. This definition includes dry bottom roof-fired boilers and dry bottom top-fired boilers, and excludes dry bottom arch-fired boilers and dry bottom turbo-fired boilers.

(152) "Very low sulfur fuel" means any of the following:

(a) A fuel with a total sulfur content no greater than 0.05 per cent by weight.

(b) Natural gas or pipeline natural gas, as defined in this rule.

(c) Any gaseous fuel with a total sulfur content no greater than twenty grains of sulfur per one hundred standard cubic feet.

(153) "Wall-fired boiler" means a boiler that has pulverized coal burners arranged on the walls of the



furnace. The burners have discrete, individual flames that extend perpendicularly into the furnace area.

(154) "Wet bottom" means that the ash is removed from the furnace in a molten state.

(155) "Wet bottom boiler" includes: wet bottom wall-fired boilers, including wet bottom turbo-fired boilers; and wet bottom boilers otherwise meeting the definition of vertically fired boilers, including wet bottom arch-fired boilers, wet bottom roof-fired boilers, and wet bottom top-fired boilers. The term "wet bottom boiler" excludes cyclone boilers and tangentially fired boilers.

(156) "Zero air material" means any of the following:

(a) A calibration gas certified by the gas vendor not to contain concentrations of  $\text{SO}_2$ ,  $\text{NO}_x$ , or total hydrocarbons above one tenth part per million, a concentration of CO above one part per million, or a concentration of  $\text{CO}_2$  above four hundred parts per million.

(b) Ambient air conditioned and purified by a CEMS for which the CEMS manufacturer or vendor certifies that the particular CEMS model produces conditioned gas that does not contain concentrations of  $\text{SO}_2$ ,  $\text{NO}_x$ , or total hydrocarbons above one tenth part per million, a concentration of CO above one part per million, or a concentration of  $\text{CO}_2$  above four hundred parts per million.

(c) For dilution-type CEMS, conditioned and purified ambient air provided by a conditioning system concurrently supplying dilution air to the CEMS.

(d) A multicomponent mixture certified by the supplier of the mixture that the concentration of the component being zeroed is less than or equal to the applicable concentration specified in paragraph (B)(157)(a) of this rule, and that the mixture's other components do not interfere with the CEMS readings.

(C) Referenced materials. This chapter includes references to certain matter or materials. The text of the referenced material is not included in the rules contained in this chapter. Information on the availability of the referenced materials as well as the date of, or the particular edition or version of the material is included in this rule. For materials subject to change, only the specific versions



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 applicable unless and until this rule has been amended to specify the new dates.

(1) Availability. The referenced materials are available as follows:

(a) American Society for Testing and Materials. 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."

(b) The American Society of Mechanical Engineers. Information and copies may be obtained by writing to: "ASME International, Three Park Ave., New York, NY 10016." These documents are also available for purchase at [www.asme.org](http://www.asme.org). ASME documents are also generally available at local public libraries and "The State Library of Ohio."

(c) Clean Air Act. 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 copying at most public libraries and "The State Library of Ohio."

(d) 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 [www.gpo.gov/fdsys/](http://www.gpo.gov/fdsys/). The CFR compilations are also available for inspection and copying at most public libraries and "The State Library of Ohio."

(e) EIA-860 (2007); "Annual Electric Generator Report;" Information and copies may be obtained by writing to: "Energy Information Administration, 1000 Independence Ave, SW, Washington, DC 20585." The forms are also available in electronic format at <http://www.eia.gov/cneaf/electricity/2008forms/consolidate.html>.



(f) EPA-600/R-12/531; "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards;" Information and copies may be obtained by writing to: "Superintendent of Documents, Attn: New Orders, PO Box 371954, Pittsburgh, PA 15250-7954." The form is also available in electronic format at <https://www.epa.gov/air-research/epa-traceability-protocol-assay-and-certification-gaseous-calibration-standards>.

(g) Federal Power Act. 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 is also available in electronic format at [http://www.law.cornell.edu/uscode/html/uscode16/usc\\_sup\\_01\\_16\\_10\\_12\\_20\\_I.html](http://www.law.cornell.edu/uscode/html/uscode16/usc_sup_01_16_10_12_20_I.html). A copy of the act is also available for inspection and copying at most public libraries and "The State Library of Ohio."

(h) International Organization for Standardization. These documents are available for purchase at [www.iso.org](http://www.iso.org). ISO documents are also generally available at local public libraries and "The State Library of Ohio."

(i) USEPA Form 7610-16. Information and copies may be obtained by writing to: US EPA Clean Air Markets Division, 1310 L Street, NW Second Floor, Washington, DC 20005. It is also available in electronic format at [https://www.epa.gov/sites/production/files/2017-01/documents/acid\\_rain\\_permit\\_application.pdf](https://www.epa.gov/sites/production/files/2017-01/documents/acid_rain_permit_application.pdf). Form 7610-16 can also be obtained for inspection and copying at most public libraries and "The State Library of Ohio."

(j) United States Code. 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 United States Code is also available in electronic format at <https://www.law.cornell.edu/uscode/text>. The USC compilations are also available for inspection and copying at most public libraries and "The State Library of Ohio."

(2) Referenced materials.

(a) 10 CFR Part 715; "Definition of non-recourse project-financed;" 56 FR 55064, Oct. 24, 1991.



(b) 18 USC 1001; "Statements or entries generally;" published in Supplement III of the 2012 Edition of the United States Code.

(c) 40 CFR 60.15; "Reconstruction;" 40 FR 58420, Dec. 16, 1975.

(d) 40 CFR 60.48Da; "Compliance provisions;" 44 FR 33613, June 11, 1979, as amended at 54 FR 6664, Feb. 14, 1989; 63 FR 49454, Sept. 16, 1998; 66 FR 18552, Apr. 10, 2001; 66 FR 31178, June 11, 2001. Redesignated from 40 CFR 60.50a to 40 CFR 60.48a and amended at 70 FR 28653, 28654, May 18, 2005. Redesignated from 40 CFR 60.48a to 40 CFR 60.48Da at 70 FR 51268, August 30, 2005, as amended at 72 FR 32722, June 13, 2007, 74 FR 5079, Jan. 28, 2009; 76 FR 3522, Jan. 20, 2011; 77 FR 9454, Feb. 16, 2012; 78 FR 24083, Apr. 24, 2013; 81 FR 20180, Apr. 6, 2016.

(e) 40 CFR 72.3; "Measurements, abbreviations, and acronyms;" 58 FR 3650, Jan. 11, 1993, as amended at 64 FR 28588, May 26, 1999.

(f) 40 CFR 72.4; "Federal authority;" 58 FR 3650, Jan. 11, 1993, as amended at 60 FR 17113, Apr. 4, 1995.

(g) 40 CFR 72.5; "State authority," 58 FR 3650, Jan. 11, 1993.

(h) 40 CFR 72.10; "Availability of information," 58 FR 3650, Jan. 11, 1993.

(i) 40 CFR 72.11; "Computation of time," 58 FR 3650, Jan. 11, 1993.

(j) 40 CFR 72.12; "Administrative appeals," 58 FR 3650, Jan. 11, 1993.

(k) 40 CFR 72.13; "Incorporation by reference," 58 FR 3650, Jan. 11, 1993, as amended at 60 FR 26526, May 17, 1995; 62 FR 55478, Oct. 24, 1997; 76 FR 17306, Mar. 28, 2011.

(l) 40 CFR 72.23; "Changing the designated representative, alternate designated representative; changes in the owners and operators," 58 FR 3650, Jan. 11, 1993, as amended at 71 FR 25378, Apr. 28, 2006.





(m) 40 CFR 72.24; "Certificate of representation;" 58FR 3650, Jan. 11, 1993, as amended at 62FR 55480, Oct. 24, 1997; 71 FR 25378, Apr. 28, 2006; 70 FR 25334, May 12, 2005; 72 FR 59205, Oct. 19, 2007.

(n) 40 CFR 72.41; "Phase I substitution plans;" 58FR 3650, Jan. 11, 1993, as amended at 58FR 40747, July 30, 1993; 59 FR 60230, 60238, Nov. 22, 1994; 62FR 55481, Oct. 24, 1997.

(o) 40 CFR 72.43; "Phase I reduced utilization plans;" 58FR 3650, Jan. 11, 1993, as amended at 59FR 60230, Nov. 22, 1994; 60 FR 18470, Apr. 11, 1995; 62FR 55481, Oct. 24, 1997.

(p) 40 CFR 72.74; "Federal issuance of Phase II permits;" 62FR 55483, Oct. 24, 1997.

(q) 40 CFR 72.81; "Permit modifications;" 58FR 3650, Jan. 11, 1993, as amended at 60FR 17114, Apr. 4, 1995; 62FR 55485, Oct. 24, 1997.

(r) 40 CFR 72.91(b); "Confirmation report;" 58FR 3650, Jan. 11, 1993, as amended at 58FR 40747, July 30, 1993; 59FR 60231, Nov. 22, 1994; 60FR 18470, Apr. 11, 1995; 62FR 55485, Oct. 24, 1997.

(s) 40 CFR 73.10; "Initial allocations for phase I and phase II;" 58FR 3687, Jan. 11, 1993, as amended at 58FR 15650, Mar. 23, 1993; 58FR 33770, June 21, 1993; 58FR 40747, July 30, 1993; 62FR 55486, Oct. 24, 1997; 63FR 51714, Sept. 28, 1998; 70 FR 25335, May 12, 2005.

(t) 40 CFR 73.31(a); "Existing affected units," 58 FR 3687, Jan. 11, 1993; 58 FR 40747, July 30, 1993, as amended at 71 FR 25378, Apr. 28, 2006; 70 FR 25335, May 12, 2005.

(u) 40 CFR 73.31(b); "New units," 58 FR 3687, Jan. 11, 1993; 58 FR 40747, July 30, 1993, as amended at 71 FR 25378, Apr. 28, 2006; 70 FR 25335, May 12, 2005.

(v) 40 CFR 73.34(c); "Recordation in subaccounts;" 58FR 3671, Jan. 11, 1993, as amended at 60FR 17114, Apr. 4, 1995; 63FR 68404, Dec. 11, 1998; 70 FR 25335, May 12, 2005.

(w) 40 CFR 73.35; "Compliance;" 58FR 3691, Jan. 11, 1993, as amended at 60FR 17114, Apr. 4,



1995; 64FR 25842, May 13, 1999; 70 FR 25335, May 12, 2005.

(x) 40 CFR 73.50; "Scope and submission of transfers;" 58FR 3694, Jan. 11, 1993, as amended at 63FR 68404, Dec. 11, 1998; 70 FR 25336, May 12, 2005.

(y) 40 CFR 73.70; "Auctions;" 56FR 65601, Dec. 17, 1991, as amended at 61 FR 28763, June 6, 1996; 63FR 5735, Feb. 4, 1998; 63FR 51766, Sept. 28, 1998; 70 FR 25336, May 12, 2005.

(z) 40 CFR 74.44; "Reduced utilization for combustion sources;" 60 FR 17115, Apr. 4, 1995, as amended at 63 FR 18841, Apr. 16, 1998; 70 FR 25337, May 12, 2005.

(aa) 40 CFR 74.46; "Opt-in source permanent shutdown, reconstruction, or change in affected status;" 60 FR 17115, Apr. 4, 1995, as amended at 70 FR 25337, May 12, 2005.

(bb) 40 CFR 75.16; "Special provisions for monitoring emissions from common, bypass, and multiple stacks for SO<sub>2</sub> emissions and heat input determinations;" 60 FR 26522, May 17, 1995, as amended at 61 FR 25582, May 22, 1996; 61 FR 59158, Nov. 20, 1996; 64 FR 28591, May 26, 1999; 67 FR 40423, June 12, 2002; 67 FR 53504, Aug. 16, 2002; 73 FR 4343, Jan. 24, 2008.

(cc) 40 CFR 75.17(a)(2)(i)(B); "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.

(dd) 40 CFR 75.18; "Specific provisions for monitoring emissions from common and by-pass stacks for opacity;" 58FR 3701, Jan. 11, 1993, as amended at 60FR 26524, May 17, 1995; 60FR 40296, Aug. 8, 1995; 61FR 59158, Nov. 20, 1996.

(ee) 40 CFR 75.20(b)(3); "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.



(ff) 40 CFR 75.53; "Monitoring plan;" 58 FR 3701, Jan. 11, 1993, as amended at 60 FR 26532, 26568, May 17, 1995; 61 FR 59161, Nov. 20, 1996; 64 FR 28605, May 26, 1999; 67 FR 40440, June 12, 2002; 70 FR 28682, May 18, 2005; 73 FR 4350, Jan. 24, 2008; 76 FR 17312, Mar. 28, 2011.

(gg) 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.

(hh) 40 CFR 75.67; "Retired units petitions;" 60 FR 17131, Apr. 4, 1995, as amended at 60 FR 26541, May 17, 1995; 62 FR 55487, Oct. 24, 1997.

(ii) 40 CFR 75.74(c)(11); "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.

(jj) 40 CFR 76.8; "Early election for Group 1, Phase II boilers;" 60 FR 18761, Apr. 13, 1995, as amended at 61 FR 67163, Dec. 19, 1996.

(kk) 40 CFR 76.13; "Compliance and excess emissions;" 60 FR 18761, Apr. 13, 1995.

(ll) 40 CFR 77.6; "Penalties for excess emissions of sulfur dioxide and nitrogen oxides;" 58 FR 3757, Jan. 11, 1993, as amended at 60 FR 17131, Apr. 4, 1995; 62 FR 55487, Oct. 24, 1997; 70 FR 25337, May 12, 2005.

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(oo) 40 CFR Part 60, Appendix A, Method 19; "Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxide Emission Rates;" as published in the July 1, 2017 Code of Federal Regulations.

(pp) 40 CFR Part 70; "State operating permit programs;" as published in the July 1, 2017 Code of Federal Regulations.

(qq) 40 CFR Part 71; "Federal operating permit programs;" as published in the July 1, 2017 Code of Federal Regulations.

(rr) 40 CFR Part 72; "Permits regulation;" as published in the July 1, 2017 Code of Federal Regulations.

(ss) 40 CFR Part 72, Appendix D; "Calculation of potential electric output capacity;" 58 FR 15649, Mar. 23, 1993.

(tt) 40 CFR Part 72, Subpart A; "Acid rain program general provisions;" as published in the July 1, 2017 Code of Federal Regulations.

(uu) 40 CFR Part 72, Subpart B; "Designated representative;" as published in the July 1, 2017 Code of Federal Regulations.

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(ww) 40 CFR Part 72, Subpart F; "Federal acid rain permit issuance procedures;" as published in the July 1, 2017 Code of Federal Regulations.

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(yy) 40 CFR Part 72, Subpart H; "Permit revisions;" as published in the July 1, 2017 Code of Federal Regulations.



(zz) 40 CFR Part 72, Subpart I; "Compliance certification;" as published in the July 1, 2017 Code of Federal Regulations.

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(bbb) 40 CFR Part 73, Appendix A, Section 2.1; "Generation efficiency;" 58 FR 3695, Jan. 11, 1993.

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(eee) 40 CFR Part 73, Subpart C; "Allowance tracking system;" as published in the July 1, 2017 Code of Federal Regulations.

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