61–62. Air Pollution Control Regulations and Standards.

(Statutory Authority: Section 48–1–10 et seq., S.C. Code of Laws, 1976, as amended.)

A. General. The standards and procedures herein prescribed are necessary to maintain reasonable standards of purity of the air resources of the State consistent with the public health, safety, and welfare of its citizens, maximum employment, the industrial development of the State, the propagation and protection of terrestrial and marine flora and fauna, and the protection of physical property and other resources.

B. Table of Contents

Regulations

61–62.1 Definitions and General Requirements
61–62.2 Prohibition of Open Burning
61–62.3 Air Pollution Episodes
61–62.4 Hazardous Air Pollution Conditions
61–62.5 Air Pollution Control Standards
61–62.6 Control of Fugitive Particulate Matter
61–62.7 Good Engineering Practice Stack Height
61–62.60 South Carolina Designated Facility Plan and New Source Performance Standards
61–62.61 National Emission Standards for Hazardous Air Pollutants (NESHAP)
61–62.63 National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories
61–62.68 Chemical Accident Prevention Provisions
61–62.70 Title V Operating Permit Program
61–62.72 Acid Rain
61–62.96 Nitrogen Oxides (NO_X) and Sulfur Dioxide (SO_2) Budget Trading Program
61–62.97 Cross-State Air Pollution Rule (CSAPR)Trading Program
61–62.99 Nitrogen Oxides (NO_X) Budget Program Requirements for Stationary Sources Not in the Trading Program

61–62.1. Definitions and General Requirements.

(Statutory Authority: S.C. Code § 48–1–10 et seq.)

Editor's Note

Unless noted otherwise, the history for Sections I through V is as follows:

HISTORY: Amended by State Register Volume 16, Issue No. 6, eff June 26, 1992; State Register Volume 19, Issue No. 6, eff June 23, 1995; State Register Volume 20, Issue No. 1, eff January 26, 1996; State Register Volume 22, Issue 6, eff June 26, 1998; State Register Volume 22, Issue No. 8, eff August 28, 1998; State Register Volume 23, Issue No. 6, eff June 25, 1999; State Register Volume 24, Issue No. 5, eff May 26, 2000; State Register Volume 25, Issue No. 7, eff July 27, 2001; State Register Volume 25, Issue No. 10, eff October 26, 2001; State Register Volume 26, Issue No. 8, eff August 23, 2002; State Register Volume 27, Issue No. 6, Part 1, eff June 27, 2003; State Register Volume 29, Issue No. 2, eff February 25, 2005; State Register Volume 29, Issue No. 6, eff June 24, 2005; State Register Volume 29, Issue No. 8, eff August 26, 2005; State Register Volume 31, Issue No. 5, eff May 25, 2007; State Register Volume 32, Issue No. 10, eff October 24, 2008; State Register Volume 34, Issue No. 5, eff May 28, 2010; State Register Volume 34, Issue No. 11, eff November 26, 2010.

SECTION I. DEFINITIONS

The following words and phrases when used in the Regulations and Standards shall, for the purpose of these regulations, have the meanings respectively ascribed to them in this section, unless a different meaning is clearly indicated. This section augments the South Carolina Pollution Control Act.

1. Acid Mist - Means mist or droplets of sulfuric or other acids. Sulfuric acid mist includes sulfur trioxide (SO_3) and sulfuric acid vapor as well as liquid mist.

2. Add - Means additions to a process which will increase size, scope, or emissions from such process.

3. Administrator - Means the Administrator of the United States Environmental Protection Agency (EPA) or his/her designee.

4. Afterburner - Means an auxiliary burner for destroying unburned or partially burned combustion gases after they have passed from the combustion chamber.

5. Air Curtain Incinerator - Means an incinerator that operates by forcefully projecting a curtain of air across an open chamber or pit in which burning occurs. Incinerators of this type can be constructed above or below ground and require a refractory lined chamber or pit.

6. Alter - Means modification or change in a process or processes which would affect emissions to the atmosphere.

7. Ambient Air Quality Standards - Means the standard for the quality of ambient air at or beyond a property line on which a source of pollution is emitting.

8. Application - Means a form provided by the Department which is prescribed to provide the information required to grant approval to construct and operate a source or an incinerator; or to report an existing incinerator.

9. Biologicals - Means preparations made from living organisms and their products, including vaccines, cultures, etc., intended for use in diagnosing, immunizing, or treating humans or animals or in research pertaining thereto.

10. Blood Products - Means any product derived from human blood, including but not limited to blood plasma, platelets, red or white blood corpuscles, and other derived licensed products, such as interferon, etc.

11. Board - Means Board of Health and Environmental Control.

12. Body Fluids - Means liquid emanating or derived from humans and limited to blood; dialysate; amniotic, cerebrospinal, synovial, pleural, peritoneal, and pericardial fluids; and semen and vaginal secretions.

13. Boiler - Means an enclosed device using controlled flame combustion and having specific characteristics including the following:

a. The combustion chamber and primary energy recovery section shall be of integral design (for example, waste heat recovery boilers attached to incinerators are not boilers). To be of integral design, the combustion chamber and the primary energy recovery sections (such as water walls and super heaters) shall be physically formed into one (1) manufactured or assembled unit. A unit in which the combustion chamber and the primary energy recovery sections are joined only by ducts or connections carrying flue gas is not integrally designed; however, secondary energy recovery equipment (such as economizers or air preheaters) need not physically be formed into the same unit as the combustion chamber and the primary energy recovery section. The following units are not precluded from boilers solely because they are not of integral design: process heaters (units that transfer energy directly to a process stream) and fluidized bed combustion units; and

b. At least seventy-five (75) percent of recovered energy shall be "exported," for example, not used for internal uses like preheating of combustion air or fuel, or driving combustion air fans or feedwater pumps.

14. Bypass Stack - Means a device used for discharging combustion gases to avoid severe damage to the air pollution control device or other equipment.

15. CAA - Means the Clean Air Act, as amended, 42 U.S.C. 7401, et seq. Also referred to as "the Act."

16. Chemotherapeutic Waste - Means all waste resulting from the production or use of antineoplastic agents used for the purpose of stopping or reversing the growth of malignant cells. Chemotherapeutic waste shall not include any waste containing antineoplastic agents that are listed as hazardous waste under Section 261 of Regulation 61–79, Hazardous Waste Management.

17. Clean Wood - Means untreated wood or untreated wood products including clean untreated lumber, tree stumps (whole or chipped), and tree limbs (whole or chipped). Clean wood does not

include yard waste, which is defined elsewhere in this section, or construction, renovation, and demolition waste (including but not limited to railroad ties and telephone poles).

18. Code of Federal Regulations (CFR) - Means the general and permanent rules codified and published in the Federal Register by the departments and agencies of the federal government.

19. Commercial Incinerator - Means an incinerator that burns non-hazardous waste from commercial activities with a design capacity of no more than 1250 pounds per hour (lb/hr) and which burns no more than six (6) tons per day (tons/day). Incinerators of this type not meeting these limits are considered municipal waste combustors. This definition does not include retail and industrial incinerators nor does it include waste from maintenance activities at commercial establishments.

20. Commissioner - Means the Commissioner (also known as the Director) of the Department of Health and Environmental Control.

21. Conditional Major Source - Means a stationary source that obtains a federally enforceable physical or operational limitation from the Department to limit or cap the stationary source's potential to emit to avoid being defined as a major source as defined by applicable federal and state regulations.

22. Continuous Emission Monitoring System or CEMS - Means a monitoring system for continuously measuring and recording the emissions of a pollutant from an affected facility.

23. Continuous Program of Physical On-site Construction - Means significant and continuous site preparation work such as major clearing or excavation followed by placement of footings, pilings, and other materials of construction, assembly, or installation of unique facilities or equipment at the site of the source. With respect to a change in the method of operating, this term refers to those on-site activities, other than preparatory activities, which mark the initiation of the change.

24. Crematory Incinerator - Means any incinerator designed and used solely for the burning of human remains or animal remains.

25. Department - Means the South Carolina Department of Health and Environmental Control.

26. Dioxins/Furans - Means the combined emissions of tetra- through octa-chlorinated dibenzo-paradioxins and dibenzofurans, as measured by EPA Reference Method 23 (40 Code of Federal Regulations (CFR) 60, Appendix A).

27. Emission - Means a release or discharge to the outdoor (ambient) atmosphere of air contaminants, including fugitive emissions.

28. Emission Data - Means the definition contained in 40 CFR 2.301(a)(2), July 1, 1986, is incorporated by reference.

29. Emission Limitation (and Emission Standard) - Means a requirement established by the state or by the Administrator which limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirements which limit the level of opacity, prescribe equipment, set fuel specifications, or prescribe operation or maintenance procedures for a source to assure continuous emission reduction.

30. Federally Enforceable - Means all limitations and conditions which are enforceable by the Administrator and citizens under the Act, including those requirements developed pursuant to 40 CFR 60, 61, 63, and 70; requirements within the South Carolina State Implementation Plan (SIP); and any permit requirements established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51 Subpart I, including operating permits issued under an EPA-approved program that is incorporated into the SIP and expressly requires adherence to any permit issued under such program.

31. Fuel Burning Operation - Means use of a furnace, boiler, device, or mechanism used principally, but not exclusively, to burn any fuel for the purpose of indirect heating in which the material being heated is not contacted by and adds no substance to the products of combustion.

32. Fugitive Dust - Means a type of particulate emission that becomes airborne by forces of wind, man's activity, or both, including, but not limited to, construction sites, tilled land, materials storage piles, and materials handling.

33. Fugitive Emissions - Means emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

34. Garbage - Means animal and vegetable waste resulting from the handling, preparation, cooking, and serving of foods.

35. Hazardous Air Pollutant (HAP) - Means a pollutant which is the subject of National Emission Standards for Hazardous Air Pollutants (NESHAP) promulgated by the EPA by publication in the Federal Register.

36. Hazardous Waste - Means any waste identified as such by Regulation 61–79.

37. Hazardous Waste Fuel - Means hazardous waste that has a heat value greater than 5000 British thermal unit per pound (Btu/lb) and is burned in an industrial or utility boiler or industrial furnace for energy recovery, except for hazardous wastes exempted by Section 266.30(b) of Regulation 61–79.

38. Hazardous Waste Incinerator - Means an incinerator whose primary function is to combust hazardous waste, except for devices which have qualified for exemption as provided in Sections 264.340(b) or 265.340(b) of Regulation 61–79.

39. Hospital - Means any facility which has an organized medical staff, maintains at least six (6) inpatient beds, and where the primary function of the institution is to provide diagnostic and therapeutic patient services and continuous nursing care primarily to human inpatients who are not related and who stay on average in excess of twenty-four (24) hours per admission. This definition does not include facilities maintained for the sole purpose of providing nursing or convalescent care to human patients who generally are not acutely ill but who require continuing medical supervision.

40. Hospital/Medical/Infectious Waste Incinerator or HMIWI or HMIWI Unit - Means any device that combusts any amount of hospital waste and/or medical/infectious waste.

41. Hospital Waste - Means discards generated at a hospital, except unused items returned to the manufacturer. The definition of hospital waste does not include human corpses, remains, and anatomical parts that are intended for interment or cremation.

42. Incinerator - Means any engineered device used in the process of controlled combustion of waste for the purpose of reducing the volume; removing the contamination and/or reducing or removing the hazardous potential of the waste charged by destroying combustible matter leaving the noncombustible ashes, material, and/or residue; and which does not meet the criteria nor classification as a boiler nor is listed as an industrial furnace.

43. Industrial Boiler - Means a boiler that produces steam, heated air, or other heated fluids for use in a manufacturing process.

44. Industrial Furnace - Means any of the following enclosed devices that are integral components of manufacturing processes and that use controlled flame devices to accomplish recovery of materials or energy:

a. Cement kilns

b. Lime kilns

c. Aggregate kilns

d. Phosphate kilns

e. Coke ovens

f. Blast furnaces

g. Smelting, melting, and refining furnaces (including pyrometallurgical devices such as tray furnaces, cupolas, reverberator furnaces, sintering machines, roasters, and foundry furnaces)

h. Titanium dioxide chloride process oxidation reactors

i. Methane reforming furnaces

j. Pulping liquor recovery furnaces

k. Combustion devices used in the recovery of sulfur values from spent sulfuric acid

l. Such other devices as the Department may determine on a case-by-case basis using one (1) or more of the following factors:

i. The design and use of the device primarily to accomplish recovery of material products;

ii. The use of the device to burn or reduce raw materials to make a material product;

iii. The use of the device to burn or reduce secondary materials as effective substitutes for raw materials in processes using raw materials as principal feedstocks;

iv. The use of the device to burn or reduce secondary materials as ingredients in an industrial process to make a material product;

v. The use of the device in common industrial practice to produce a material product; and

vi. Other factors as appropriate.

45. Industrial Incinerator - Means any incinerator utilized in an industrial plant that does not meet the definition for any other type of incinerator or an incinerator used to combust Type 5 or 6 waste at any site.

46. In Existence - Means that the owner or operator has obtained all necessary construction permits required by this Department and either has:

a. Begun, or caused to begin, a continuous program of physical on-site construction of the source; or

b. Entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of construction of the source to be completed in a reasonable time, or that the owner or operator possesses a valid operating permit for the source prior to the effective date of a regulation or standard.

47. Kraft Pulp Mill - Means any stationary source which produces pulp from wood by cooking (digesting) wood chips in a water solution of sodium hydroxide and sodium sulfide (white liquor) at a high temperature and pressure. Regeneration of the cooking chemicals through a recovery process is also considered part of the kraft pulp mill.

48. Major Source - Means, except as otherwise provided, any source which directly emits, or has the potential to emit, greater than or equal to the major source threshold as defined by applicable federal and state regulations.

49. 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. During periods of malfunction, the operator shall operate within established parameters as much as possible, and monitoring of all applicable operating parameters shall continue until all waste has been combusted or until the malfunction ceases, whichever comes first.

50. Mass Emission Rate - Means the weight discharged per unit of time.

51. Medical/Infectious Waste - Means any waste generated in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals listed below; and any waste defined as infectious waste in Regulation 61–105, Infectious Waste Management. The definition of medical/infectious waste does not include hazardous waste identified or listed in Regulation 61–79.261; household waste, as defined in Regulation 61–79.261.4(b)(1); ash from incineration of medical/infectious waste, once the incineration process has been completed; human corpses, remains, and anatomical parts that are intended for interment or cremation; and domestic sewage materials identified in Regulation 61–79.261.4(a)(1).

a. Cultures and stocks of infectious agents and associated biologicals, including: cultures from medical and pathological laboratories; cultures and stocks of infectious agents from research and industrial laboratories; wastes from the production of biologicals; discarded live and attenuated vaccines; and culture dishes and devices used to transfer, inoculate, and mix cultures.

b. Human pathological waste - tissues, organs, body parts, and body fluids that are removed during surgery or autopsy or other medical procedures, and specimens of body fluids and their containers.

c. Human blood and blood products including:

i. Liquid waste human blood;

ii. Products of blood;

iii. Items saturated and/or dripping with human blood; or

iv. Items that were saturated and/or dripping with human blood that are now caked with dried human blood; including serum, plasma, and other blood components, and their containers which were used or intended for use in either patient care, testing and laboratory analysis, or the development of pharmaceuticals. Intravenous bags are also included in this category.

d. Sharps - instruments used in animal or human patient care or treatment or in medical, research, or industrial laboratories, including hypodermic needles, syringes (with or without the attached needle), pasteur pipettes, scalpel blades, blood vials, needles with attached tubing, and culture dishes (regardless of presence of infectious agents). Also included are other types of broken or unbroken glassware that were in contact with infectious agents, such as used slides and cover slips.

e. Animal waste including contaminated animal carcasses, body parts, and bedding of animals that were known to have been exposed to infectious agents during research (including research in veterinary hospitals), production of biologicals, or testing of pharmaceuticals.

f. Isolation wastes - biological waste and discarded materials contaminated with blood, excretions, exudates, or secretions from humans who are isolated to protect others from highly communicable diseases or isolated animals known to be infected with highly communicable diseases.

g. Unused sharps including the following unused, discarded sharps: hypodermic needles, suture needles, syringes, and scalpel blades.

52. Multiple-Chamber Incinerator - Means an incinerator consisting of at least two (2) refractory lined combustion chambers (primary and secondary) in series, physically separated by refractory walls, interconnected by gas passage ports or ducts.

53. Municipal Solid Waste, MSW, or Municipal-type Solid Waste -a. Means household, commercial/retail, and/or institutional waste. Household waste includes material discarded by single and multiple residential dwellings, hotels, motels, and other similar permanent or temporary housing establishments or facilities. Commercial/retail waste includes material discarded by stores, offices, restaurants, warehouses, nonmanufacturing activities at industrial facilities, and other similar establishments or facilities. Institutional waste includes material discarded by schools, nonmedical waste discarded by hospitals, material discarded by nonmanufacturing activities at prisons and government facilities, and material discarded by other similar establishments or facilities. Household, commercial/retail, and institutional wastes include:

i. Yard waste;

ii. Refuse-derived fuel; and

iii. Motor vehicle maintenance materials limited to vehicle batteries and tires.

b. Household, commercial/retail, and institutional waste (MSW) does not include used oil; sewage sludge; wood pallets; construction, renovation, and demolition wastes (which includes, but is not limited to, railroad ties and telephone poles); clean wood; industrial process or manufacturing wastes (including Type 5 or 6 waste); medical waste; radioactive contaminated waste; hazardous waste; or motor vehicles (including motor vehicle parts or vehicle fluff).

54. Municipal Waste Combustor, MWC, or Municipal Waste Combustor Unit - Means any setting or equipment that combusts solid, liquid, or gasified municipal solid waste including, but not limited to, field-erected incinerators (with or without heat recovery), modular incinerators (starved-air or excess-air), boilers (for example, steam generating units) and furnaces (whether suspension-fired, grate-fired, mass-fired, or fluidized bed-fired, etc.), air curtain incinerators, and pyrolysis/combustion units. Municipal waste combustors do not include pyrolysis/combustion units located at plastics/rubber recycling units. Municipal waste combustors do not include internal combustion engines, gas turbines, or other combustion devices that combust landfill gases collected by landfill gas collection systems. For the purpose of determining reconstruction or modification, as defined in 40 CFR 60 Subpart A, or Regulation 62.5, Standard No. 3, to a municipal waste combustor, the following applies:

a. The boundaries of a municipal solid waste combustor are defined as follows. The municipal waste combustor unit includes, but is not limited to, the municipal solid waste fuel feed system, grate system, flue gas system, bottom ash system, and the combustor water system. The municipal waste combustor boundary starts at the municipal solid waste pit or hopper and extends through:

i. The combustor flue gas system, which ends immediately following the heat recovery equipment or, if there is no heat recovery equipment, immediately following the combustion chamber;

ii. The combustor bottom ash system, which ends at the truck loading station or similar ash handling equipment that transfers the ash to final disposal, including all ash handling systems that are connected to the bottom ash handling system; and

iii. The combustor water system, which starts at the feed water pump and ends at the piping exiting the steam drum or superheater.

b. The municipal waste combustor unit does not include air pollution control equipment, the stack, water treatment equipment, or the turbine-generator set.

55. NAICS Code - Means North American Industry Classification System (NAICS) Code, a six digit coding system, which attempts to classify all business establishments by the types of products or services they provide.

56. Non-Industrial Boiler - Means any boiler not classified as an industrial boiler.

57. Non-Industrial Furnace - Means any furnace not classified as an industrial furnace.

58. Non-Spec. Oil (Off-Spec. Oil) - See definition of used oil.

59. Opacity - Means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

60. Open Burning - Means any fire or smoke-producing process which is not conducted in any boiler plant, furnace, high temperature processing unit, incinerator or flare, or in any other such equipment primarily designed for the combustion of fuel or waste material.

61. Part 70 Permit - Means any permit or group of permits covering a source subject to the permitting requirements of Regulation 61–62.70. The use of the term "Title V Permit" shall be construed to mean "Part 70 Permit."

62. Particulate Matter - Means any material, except uncombined water, that exists in a finely divided form as a liquid or solid at standard conditions.

63. Particulate Matter Emissions - Means all finely divided solid or liquid material, other than uncombined water, emitted to the ambient air as measured by an applicable reference method described in 40 CFR 60, July 1, 1987, or an equivalent or alternative method approved by the Department, with the concurrence of the EPA.

64. Pathological Waste - Means waste material consisting of only human or animal remains, anatomical parts, and/or tissue; the bags/containers used to collect and transport the waste material; and animal bedding (if applicable).

65. Plant - Means, except as otherwise provided, any stationary source or combination of stationary sources, which is located on one (1) or more contiguous or adjacent properties and owned or operated by the same person(s) under common control.

66. Plastics/Rubber Recycling Unit - Means an integrated processing unit where plastics, rubber, and/or rubber tires are the only feed materials (incidental contaminants may be included in the feed materials) and they are processed into a chemical plant feedstock or petroleum refinery feedstock where the feedstock is marketed to and used by a chemical plant or petroleum refinery as input feedstock. The combined weight of the chemical plant feedstock and petroleum refinery feedstock produced by the plastics/rubber recycling unit on a calendar quarter basis shall be more than seventy (70) percent of the combined weight of the plastics, rubber, and rubber tires processed by the plastics/rubber recycling unit on a calendar quarter basis. The plastics, rubber, and/or rubber tire feed materials to the plastics/rubber recycling unit may originate from the separation or diversion of plastics, rubber, or rubber tires from MSW or industrial solid waste; and may include manufacturing scraps, trimmings, off-specification plastics, rubber, and rubber tire discards. The plastics, rubber, and rubber tire feed materials to the plastics/rubber recycling unit may contain incidental contaminants (for example, paper labels on plastic bottles, metal rings on plastic bottle caps, etc.).

67. $PM_{2.5}$ - Means particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers emitted to the ambient air as measured by a reference method based on Appendix L of 40 CFR 50 and designated in accordance with 40 CFR 53 or by an equivalent method designated in accordance with 40 CFR 53.

68. $PM_{2.5}$ Emissions - Means finely divided solid or liquid material with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers emitted to the ambient air as measured by a reference method approved by the Department with concurrence of the EPA.

69. PM_{10} - Means particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by a reference method based on Appendix J of 40 CFR 50 and designated in accordance with 40 CFR 53 or by an equivalent method designated in accordance with 40 CFR 53.

70. PM_{10} Emissions - Means finely divided solid or liquid material with an aerodynamic diameter less than or equal to a nominal 10 micrometers emitted to the ambient air as measured by a reference method approved by the Department with concurrence of the EPA.

71. Potential to Emit - Means the maximum capacity of a source to emit a regulated pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a regulated pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a source.

72. Process Industry - Means any source engaged in the manufacture, processing, handling, treatment, forming, storing, or any other action upon materials except fuel-burning operations.

73. Process Weight - Means the total weight of all materials introduced into a source operation, including air and water where these materials become an integral part of the product and solids used as fuels, but excluding liquids and gases used solely as fuels.

74. Process Weight Rate -

a. Means a rate established as follows:

i. For continuous or long-run steady-state source operations, the total process weight for the entire period of continuous operation or for a typical portion thereof, divided by the number of hours of such period or portion thereof.

ii. For cyclical or batch unit operations or unit processes, the total process weight for a period that covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such a period.

b. Where the nature of any process or operation or the design of any equipment is such as to permit more than one interpretation of this definition, the interpretation that results in the minimum value for allowable emission shall apply.

75. Pyrolysis/Combustion Unit - Means a unit that produces gases, liquids, or solids through the heating of waste; and the gases, liquids, or solids produced are combusted and emissions vented to the atmosphere.

76. Refuse - Means garbage, rubbish, and/or trade waste.

77. Refuse-derived Fuel - Means a type of municipal solid waste produced by processing municipal solid waste through shredding and size classification. This includes all classes of refuse-derived fuel including low-density fluff refuse-derived fuel through densified refuse-derived fuel and pelletized refuse-derived fuel.

78. Retail Business Type Incinerator - Means an incinerator that combusts waste typical of a retail business rather than domestic, commercial, or industrial activities.

79. Rubbish - Means solid wastes from residences and dwellings, commercial establishments, and institutions.

80. Salvage Operations - Means any operation of a business, trade, or industry engaged in whole or in part in salvaging or reclaiming any product or material including, but not limited to, metals, chemicals, shipping containers, drums, or automobiles.

81. Secondary Emissions - Means emissions which would occur as a result of the construction or operation of a major source or major modification but do not come from the major source or major modification itself. Secondary emissions shall be specific, well defined, quantifiable, and shall impact the same general area as the source or modification which causes the secondary emissions. Secondary emissions may include, but are not limited to:

a. Emissions from ships or trains moving to or from the new or modified source.

b. Emissions from any offsite support operation which would not otherwise be constructed or increase its emissions as a result of the construction or operation of the major source or major modification.

82. SIC Code - Means Standard Industrial Classification Codes which are four digit numerical codes designed by the U.S. Department of Labor in order to create uniform descriptions of business establishments.

83. Sludge Incinerator - Means an incinerator that combusts wastes containing more than ten (10) percent (dry weight basis) sludge produced by municipal or industrial wastewater treatment plants or each incinerator that charges more than 2205 pounds per day (lb/day) (dry weight basis) of sludge produced by municipal or industrial wastewater treatment plants.

84. Smoke - Means small gasborne and airborne particles arising from a process of combustion in sufficient number to be observable by a person of normal vision under normal conditions.

85. Solid Fuel - Means a fuel which is fired as a solid such as coal, lignite, and wood.

86. Spec. Oil - See definition of used oil.

87. Stack - Means any flue, conduit, chimney, or opening arranged to conduct an effluent into the open air.

88. Stack Height - Means the vertical distance measured in feet between the point of discharge from the stack or chimney into the outdoor atmosphere and the elevation of the land thereunder.

89. Standard Conditions - Means 760 millimeters of mercury (mmHg) at twenty-five (25) degrees Centigrade (C).

90. Stationary Source - Means any building, structure, installation, or process which emits or may emit an air pollutant subject to regulation by any national or state standard. Use of the term "source" is to be construed to mean "stationary source."

91. Substantial Loss - Means, generally, a loss which would equal or exceed ten (10) percent of the total initial project cost.

92. Synthetic Minor Source - Means a stationary source that obtains a federally enforceable physical or operational limitation from the Department to limit or cap the stationary source's potential to emit to avoid being defined as a major source or major modification, as defined by applicable federal and state regulations.

93. Total Reduced Sulfur (TRS) - Means the sum of the sulfur compounds hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide that are released during the kraft pulping operation.

94. Total Suspended Particulate (TSP) - Means particulate matter as measured by the method described in Appendix B, 40 CFR 50, July 1, 1987.

95. Trade Waste - Means all solid, liquid, or gaseous material or rubbish resulting from construction, building operations, or the prosecution of any business, trade, or industry including, but not limited to, plastic products, cartons, paint, grease, oil and other petroleum products, chemicals, and cinders.

96. Untreated Lumber - Means wood or wood products that have been cut or shaped and include wet, air-dried, and kiln-dried wood products. Untreated lumber does not include wood products that have been painted, pigment-stained, or "pressure-treated." Pressure-treating compounds include, but are not limited to, chromate copper arsenate, pentachlorophenol, and creosote.

97. Used Oil - Means any oil that has been refined from crude or synthetic oil and as a result of use, storage, or handling, has become unsuitable for its original purpose due to the presence of impurities or loss of original properties, but which may be suitable for further use and may be economically recyclable. This also includes absorbent material contaminated with used oil such as oily rags or absorbent blankets. Two (2) types of used oil are defined as follows:

a. Spec. Oil (Specification Oil) - Used oil that meets the following specifications: *

i. Arsenic - 5 parts per million (ppm) maximum;

ii. Cadmium - 2 ppm maximum;

iii. Chromium - 10 ppm maximum;

iv. Lead - 100 ppm maximum;

v. Nickel - 120 ppm maximum;

vi. Total halogens - 4000 ppm maximum; and **

vii. Flash Point - 100 degrees Fahrenheit (F) (37.8 degrees C) minimum.

b. Non-Spec. Oil (Off-Spec. Oil) - Used oil that does not meet the specification above.

98. Utility Boiler - Means a boiler that produces steam, heated air, or other heated fluids for sale or for use in producing electric power for sale.

99. Virgin Fuel - Means unused solid, liquid, or gaseous commercial fuel, and clean wood or bark that has not been processed other than for size reduction excluding clean wood or bark burned in an air curtain incinerator.

100. Volatile Organic Compound (VOC) - a. Means any organic compound which participates in atmospheric photochemical reactions; or which is measured by a reference method (as specified in 40 CFR 60, as of July 1, 1990), an equivalent method, an alternative method, or which is determined by procedures specified under any subpart of 40 CFR 60. This definition does not include compounds that have negligible photochemical reactivity according to the methods employed by the EPA to determine compounds listed in 40 CFR 51.100(s).

b. For purposes of determining compliance with emission limits, VOCs will be measured by the approved test methods. Where such a method also inadvertently measures compounds with negligible photochemical reactivity, an owner or operator may exclude these negligibly reactive compounds when determining compliance with an emissions standard.

101. Waste - Means any discarded material including, but not limited to, used oil, hazardous waste fuel, hazardous waste, medical waste, municipal solid waste (MSW), sludge, waste fuel, and waste classification Types 0 through 6 or any material which as a result of use, storage, or handling has become unsuitable for its original purpose due to the presence of impurities or loss of original properties.

a. Type 0 - Trash, a mixture of highly combustible waste such as paper, cardboard, wood boxes, and combustible floor sweepings from commercial and industrial activities. The mixture contains up to ten (10) percent by weight of plastic bags, coated paper, laminated paper, treated corrugated cardboard, oily rags, and plastic or rubber scraps.

Typical composition: ten (10) percent moisture, five (5) percent incombustible solids, and has a heating value of approximately 8500 Btu/lb as fired.

b. Type 1 - Rubbish, a mixture of combustible waste such as paper, cardboard cartons, wood scrap, foliage, and combustible floor sweepings from domestic, commercial, and industrial activities. The mixture contains up to twenty (20) percent by weight of restaurant or cafeteria waste, but contains little or no treated paper, plastic, or rubber wastes.

Typical composition: twenty-five (25) percent moisture, ten (10) percent incombustible solids, and has a heating value of approximately 6500 Btu/lb as fired.

c. Type 2 - Refuse, consisting of an approximately even mixture of rubbish and garbage by weight. This type of waste is common to apartment and residential occupancy.

Typical composition: up to fifty (50) percent moisture, seven (7) percent incombustible solids, and has a heating value of approximately 4300 Btu/lb as fired.

d. Type 3 - Garbage, consisting of animal and vegetable wastes from restaurants, cafeterias, hotels, hospitals, markets, and like installations.

Typical composition: up to seventy (70) percent moisture, up to five (5) percent incombustible solids, and has a heating value of approximately 2500 Btu/lb as fired.

e. Type 4 - Human and animal remains, consisting of carcasses, organs, and solid organic wastes from hospitals, laboratories, abattoirs, animal pounds, and similar sources.

Typical composition: up to eighty-five (85) percent moisture, five (5) percent incombustible solids, and having a heating value of approximately 1000 Btu/lb as fired.

f. Type 5 - By-product waste, gaseous, liquid, or semi-liquid, such as tar, paints, solvents, sludge, fumes, etc., from industrial operations. Btu values shall be determined by the individual materials to be destroyed.

g. Type 6 - Solid by-product waste, such as rubber, plastics, wood waste, etc., from industrial operations. Btu values shall be determined by the individual materials to be destroyed.

102. Waste Fuel - Means waste that does not meet hazardous waste criteria but has a heat value greater than 5000 Btu /lb.

103. Yard Waste - Means grass, grass clippings, bushes, shrubs, and clippings from bushes and shrubs that are generated by residential, commercial/retail, institutional, and/or industrial sources as part of maintenance activities associated with yards or other private or public lands. Yard waste does not include construction, renovation, and demolition wastes, which are exempt from the definition of MSW in this section. Yard waste does not include clean wood, which is also exempt from the definition of MSW in this section.

* This specification does not apply to used oil fuel mixed with a hazardous waste.

** Used oil containing more than 1000 ppm total halogens is presumed to be a hazardous waste. The burden of proof that this is not true rests with the user.

HISTORY: Amended by State Register Volume 35, Issue No. 11, eff November 25, 2011 (errata); State Register Volume 36, Issue No. 9, eff September 28, 2012 (errata); State Register Volume 37, Issue No. 4, eff April 26, 2013; State Register Volume 37, Issue No. 12, eff December 27, 2013; State Register Volume 38, Issue No. 6, Doc. No. 4388, eff June 27, 2014; State Register Volume 40, Issue No. 6, Doc. No. 4590, eff June 24, 2016; State Register Volume 41, Issue No. 8, Doc. No. 4750, eff August 25, 2017.

Editor's Note

Scrivener's error corrected in Section 53 in 2017.

SECTION II. PERMIT REQUIREMENTS

The following regulation will not supersede any state or federal requirements nor special permit conditions, unless this regulation would impose a more restrictive emission limit. The owner or operator shall comply with all terms, conditions, and limitations of any Department-issued permit for sources or activities at the owner or operator's facility. A source's permit status may change upon promulgation of new regulatory requirements.

A. Construction Permits

1. Applicability

a. Except as allowed under Section II.A.1.b and A.1.c below, any person who plans to construct, alter, or add to a source of air contaminants, including installation of any device for the control of air contaminant discharges, shall first obtain a construction permit from the Department prior to commencement of construction.

b. The Department may grant permission to proceed with minor alterations or additions without issuance of a construction permit when the Department determines that the alteration or addition will not increase the quantity and will not alter the character of the source's emissions.

c. The owners or operators of sources not requesting to use federally enforceable construction permit conditions to limit potential to emit, sources not subject to regulations with more stringent start of construction limitations, or sources not otherwise exempt from permit requirements, may undertake the following on-site activities prior to obtaining a construction permit:

i. Planning;

ii. Engineering and design;

iii. Geotechnical investigation;

iv. Site land clearing and grading;

v. Setting up temporary trailers to house construction staff and contractor personnel;

vi. Ordering of equipment and materials;

vii. Receipt and storing of equipment;

viii. Pouring of the foundation up to and including the mounting pads and slab on grade;

ix. Relocation of utilities;

x. For existing sources, relocation/installation of piping, electrical service, and instrumentation;

xi. Temporary power for the site (such as power lines);

xii. Site drainage including ditches and culverts;

xiii. Temporary dewatering activities associated with the excavations;

xiv. Temporary gravel (Right Out of Crusher (ROC)) road beds for the site;

xv. Soil only excavations;

xvi. Temporary telecommunications for the site (such as telephone and internet); and

xvii. Security fencing related to the storage of equipment and materials.

d. In the event that the source does not qualify for issuance of a construction permit, the owners or operators accept the financial risk of commencing the activities listed in Section II.A.1.c.i through A.1.c.xvii above.

2. No permit to construct or modify a source will be issued if emissions interfere with attainment or maintenance of any state or federal standard.

3. The owner or operator shall submit written notification to the Department of the date construction is commenced, postmarked within thirty (30) days after such date, and written notification of the actual date of initial startup of each new or altered source, postmarked within fifteen (15) days after such date.

4. Approval to construct shall become invalid if construction:

a. Is not commenced within eighteen (18) months after receipt of such approval;

b. Is discontinued for a period of eighteen (18) months or more; or

c. Is not completed within a reasonable time as deemed by the Department.

5. The Department may extend the construction permit for an additional 18-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within eighteen (18) months of the projected and approved commencement date.

B. Exemptions from the Requirement to Obtain a Construction Permit

1. No construction permits shall be required for the sources listed in Section II.B.1.a through B.1.c below, which burn virgin fuel and which were constructed prior to February 11, 1971, and which are not located at a facility that meets the definition of a major source as defined in Regulation 61–62.70.2(r); however, modifications at these facilities may trigger the requirement to obtain a construction permit.

a. Natural gas boilers.

b. Oil-fired boilers of 50 x 10^6 British thermal unit per hour (Btu/hr) rated input capacity or smaller.

c. Coal-fired boilers of 20 x 10^6 Btu/hr rated input capacity or smaller.

2. No construction permits shall be required for the sources listed in Section II.B.2.a through B.2.h below, unless otherwise specified by Regulation 61–62.70 or any other state or federal requirement. A source's exemption status may change upon the promulgation of new regulatory requirements applicable to any of the sources listed in Section II.B.2.a through B.2.g, or to any other sources that have been determined to have total uncontrolled emissions less than the thresholds in Section II.B.2.h, or to any similar sources that have been granted an exemption by the Department.

a. Boilers and space heaters of less than 1.5 x 10^6 Btu/hr rated input capacity which burn only virgin liquid fuels or virgin solid fuels.

b. Boilers and space heaters of less than 10 x 10^6 Btu/hr rated input capacity which burn only virgin gas fuels.

c. Comfort air-conditioning or ventilation systems.

d. Motor vehicles.

e. Laboratory hoods.

f. Emergency power generators as described below:

i. Generators of less than or equal to 150 kilowatt (kW) rated capacity.

ii. Generators of greater than 150 kW rated capacity designated for emergency use only and are operated a total of 500 hours per year or less for testing and maintenance and have a method to record the actual hours of use such as an hour meter.

g. Sources emitting only steam, air, nitrogen, oxygen, carbon dioxide, or any physical combination of these.

h. Sources with a total uncontrolled potential to emit (PTE) of less than five (5) tons per year each of particulates, sulfur dioxide, nitrogen oxides, and carbon monoxide; and a total uncontrolled PTE of less than 1000 pounds per month (lbs/month) of VOCs will not require construction permits. Unless otherwise exempt, sources may be exempted under this section at higher emission levels if there is a demonstration that there are no applicable limits or requirements. These applicable requirements include federally applicable limits or requirements. However, these sources may be required to be included in any subsequent construction or operating permit review to ensure that there is no cause or contribution to an exceedance of any ambient air quality standard or limit. For toxic air pollutant exemptions, refer to Regulation 61–62.5, Standard No. 8. Emissions calculations and any other information necessary to document qualification for this exemption must be maintained onsite and provided to the Department upon request.

3. The Department will place the exempt sources listed in Section II.B.2.a through B.2.g above, and other sources that have been determined will not interfere with the attainment or maintenance of any state or federal standard, on a list of sources to be exempted without further review. The Department may develop emission thresholds for exemption that have been determined will not interfere with the attainment or maintenance of any state or federal standard, to be maintained with the list of sources to be exempted without further review. This list of sources and source emission thresholds that are exempt without further review from the requirement to obtain a construction permit will be maintained by the Department and periodically published in the South Carolina State Register for use by the public and the regulated community. Requests to the Department may be made to add sources to the list.

4. Sources with only fugitive emissions must submit source information, and the need for permit(s) will be made by the Department on a case-by-case basis. This determination will take into consideration, but will not be limited to, the nature and amount of the pollutants, location, proximity to residences and commercial establishments, etc.

5. Sources of VOCs greater than 1000 lbs/month may not require a permit. This determination will take into consideration, but will not be limited to, applicability to state and federal requirements. No waiver will be permissible if federal requirements apply unless otherwise exempt. Emissions calculations and any other information necessary to document qualification for this exemption and the need for permit(s) will be made by the Department on a case-by-case basis. Exempt sources of VOCs may be required to be included in any subsequent construction or operating permit review to ensure that there is no cause or contribution to an exceedance of any ambient air quality standard or limit.

6. Requests for exemption from the requirement to obtain a construction permit, for new sources similar to sources already on the Department maintained list established in Section II.B.3 above, or for modifications to existing equipment, including the reconstruction, relocation, and replacement of existing equipment, which may qualify for exemption as per Section II.B.2.h and Section II.B.4 above, shall include the following information:

a. A complete description of the existing equipment and proposed modification;

b. The pollutant(s) being emitted and any deviation from the parameters provided in earlier permit applications, permit exemptions, and issued permits;

c. Any ambient air quality demonstrations needed for Regulation 61–62.5, Standards No. 2, No. 7, and No. 8; and

d. A regulatory review to demonstrate the project is not a CAA Title I modification nor subject to Regulation 61–62.5, Standards No. 7 and No. 7.1.

7. The construction permitting exemptions in Section II.B do not relieve the owner or operator of any source from any obligation to comply with any other applicable requirements. The Department reserves the right to require a construction permit, and the need for permit(s) will be made by the Department on a case-by-case basis. This determination will take into consideration, but will not be limited to, the nature and amount of the pollutants, location, proximity to residences and commercial establishments, etc.

C. Construction Permit Applications

1. Construction permit applications shall be reviewed and signed by a professional engineer registered to practice in the State of South Carolina (except professional engineers employed by the federal government preparing applications for the federal government or other professional engineers exempted from the state registration requirements).

2. The following are exempt from the requirement that the construction permit applications be reviewed and signed by a registered professional engineer provided the proposed unit is identical to a prototype model which has been previously designed or otherwise certified by a professional engineer:

a. Package-type incinerators of 750 lb/hr rated capacity or smaller which burn Types 0 and 1 wastes as defined by the Incinerator Institute of America;

b. Package-type incinerators of 500 lb/hr rated capacity or smaller which burn animal remains excluding those remains that are considered infectious waste; and

c. Package-type boilers of 100 x 10^6 Btu/hr input capacity or smaller which burn natural gas or virgin oil as fuel.

3. Construction permit applications shall provide the information described in Section II.C.3.a through C.3.p. This information should be submitted on Department forms, but project specific information may need to be provided in addition to that requested in applicable forms.

a. The facility name; and the name, mailing address, and telephone number of the owner or operator for the facility;

b. The location of the facility including its street address and the name, mailing address, and telephone number of the facility's contact person;

c. The facility's Federal Employer Identification Number or Federal Tax ID Number;

d. A description and the U. S. Standard Industrial Classification (SIC) Code and North American Industry Classification System (NAICS) Code of the products or product lines to be produced by the proposed sources covered by this application;

e. The facility's planned operating schedules;

f. A description of the facility's proposed new or altered processes, including the physical and chemical properties and feed rate of the materials used and produced (in pounds per hour), from which the facility determined potential emissions;

g. A process flow diagram/production process layout of all new or altered sources showing the flow of materials and intermediate and final products. The process flow diagram/production process layout must identify all equipment, machines, and process steps or product lines within the production process; all product streams; all exhaust streams (emission points) including fugitive within the production process; all waste streams; and all control devices including inherent process control devices used within the production process;

h. A detailed description of each proposed or existing source that is being altered, including the size and type along with the make and model of the source and any associated air pollution control equipment;

i. A description, including physical and chemical properties and the Chemical Abstract Service (CAS) number (if applicable), of all emissions from each proposed source or existing source that is being altered. Mass emission data and emission calculations, including the potential uncontrolled and controlled mass emission rate of each criteria pollutant and other air contaminants such as VOCs, toxic air pollutants (TAPs), and HAPs, that will be emitted from each source covered by the application. Emission calculations must be based on proper documentation that supports the basis of the emission rates such as stack test data, AP-42 emission factors, material balance, and/or engineering estimates. All assumptions used in the emission calculations must be provided. Fugitive emissions (for example, emissions from filling operations, pumps, valves, flanges, etc.) must be included in the emission calculations;

j. A description of all air pollution control devices or systems on the new or altered sources, whether inherent or add-on. The description shall include, but not be limited to, the manufacturer specifications and ratings, the engineering design and operating characteristics, the projected capture and destruction, the control or removal efficiencies at expected contaminant loading levels, and the monitoring data collection and recordkeeping necessary to ensure proper operation of the air pollution control devices;

k. Source information and calculations to demonstrate compliance with "Good Engineering Practice Stack Height" rules;

l. A description of each stack or vent related to the proposed and/or existing source(s), including the minimum anticipated height above ground, maximum anticipated internal dimensions, discharge orientation, exhaust volume flow rate, exhaust gas temperature, and rain protection device, if any;

m. Scale drawings showing a plan view of the property lines, the location of the source, all stacks, and other emission points related to the source, as well as buildings that might affect dispersion of any emissions;

n. An air dispersion modeling analysis or other information demonstrating that emissions from the facility, including those in the application, will not interfere with the attainment or maintenance of any ambient air quality standard;

o. A summary of facility-wide potential uncontrolled and controlled emissions with a regulatory applicability determination; and

p. Other information as may be necessary for proper evaluation of the source as determined by the Department.

D. General Construction Permits

1. The Department may develop and issue general construction permits applicable to similar sources for new construction projects or minor modifications to existing sources.

2. General construction permits shall incorporate all requirements applicable to the construction of similar sources and shall identify criteria by which sources may qualify for coverage under a general construction permit.

3. Sources may submit a construction permit application to the Department with a request for coverage under the conditions and terms of a general construction permit for similar sources. The Department shall grant a general construction permit to sources certifying qualification for and agreeing to the conditions and terms of a general construction permit for similar sources.

4. Sources shall be subject to enforcement action for operation without a valid permit if a source is later determined not to qualify for coverage under a general construction permit.

5. The Department may grant a source's request for authorization to operate under a general construction permit, but such a grant shall be a final permit action for purposes of judicial review.

6. The permit application for general construction permits may deviate from the requirements of Section II.C above, provided that such application includes all information necessary to determine qualification for, and to assure compliance with, the general permit.

7. A source that qualifies for coverage under a Department issued general construction permit may submit a construction permit application to the Department and request an individual construction permit in lieu of coverage under a general construction permit.

E. Synthetic Minor Construction Permits

1. General Provisions

a. Any stationary source may request to use federally enforceable permit conditions to limit the source's potential to emit and become a synthetic minor source.

b. Stationary sources requesting a synthetic minor construction permit shall submit a complete permit application package to the Department as prescribed by Section II.E.5 below.

c. Stationary sources requesting a synthetic minor construction permit shall undergo the public participation procedures of Section II.N below.

d. The Department shall act, within a reasonable time, on an application for a synthetic minor construction permit and shall notify the applicant in writing of its approval, conditional approval, or denial.

e. In the event of a denial of a synthetic minor construction permit application, the Department shall notify the applicant in writing of the reasons for the denial. The Department shall not accept a subsequent synthetic minor construction permit application until the applicant has addressed the concerns specified by the Department which caused the denial. The source shall correct all deficiencies noted by the Department within sixty (60) calendar days of receiving notice of the denial,

or submit a complete major source construction permit application, as prescribed by Section II.C above, if the source desires to proceed with the project.

2. New Sources and Modifications

a. A stationary source desiring to restrict its potential to emit shall submit a written request to the Department for a federally enforceable construction permit conditioned to constrain the operation of the source, along with a completed construction permit application package as prescribed by Section II.E.5 below. The construction of the new or modified source shall not commence until the source has received an effective permit to construct.

b. The owner or operator shall submit written notification to the Department of the date construction is commenced, postmarked within thirty (30) days after such date, and written notification of the actual date of initial startup of each new or altered source, postmarked within fifteen (15) days after such date. A written request to obtain an operating permit shall be submitted to the Department within fifteen (15) days after the actual date of initial startup of each new or altered source in accordance with Section II.F below. A satisfactory compliance inspection by a Department representative may precede the issuance of an operating permit for any newly constructed or modified source.

3. Synthetic Minor Construction Permit Conditions

a. Synthetic minor construction permits shall contain the standard permit conditions listed in Section II.J.1 below and any special permit conditions required to verify a source's compliance with the emissions limitations and operational requirements.

b. The limitations and requirements listed as permit conditions shall be permanent, quantifiable, or otherwise enforceable as a practical matter.

c. All synthetic minor construction permit conditions that constrain the operation of a source in an effort to limit potential to emit below major source threshold levels shall be federally enforceable. Unless otherwise agreed by the Department and EPA, the Department shall provide to EPA on a timely basis a copy of each proposed (or draft) and final permit intended to be federally enforceable.

4. General Synthetic Minor Construction Permits

a. The Department may, after notice and opportunity for public participation provided under Section II.N below, issue a general synthetic minor construction permit applicable to similar sources.

b. Any general synthetic minor construction permit shall incorporate all requirements applicable to the construction of similar synthetic minor sources and shall identify criteria by which sources may qualify for the general permit.

c. Sources may submit a permit application to the Department with a request for coverage under the conditions and terms of a general synthetic minor construction permit for similar sources. The Department shall grant the general synthetic minor construction permit to sources certifying qualification for and agreeing to the conditions and terms of the general synthetic minor construction permit for similar sources.

d. The source shall be subject to enforcement action for operation without a valid permit if the source is later determined not to qualify for the conditions and terms of the general synthetic minor construction permit.

e. The Department may grant a source's request for authorization to operate under a general permit without further public notice, but such a grant shall be a final permit action for purposes of judicial review.

f. The Department shall provide timely notice to the public of any authorization given to a facility to operate under the terms of a general permit. Such notice may be made on a periodic, summarized basis covering all facilities receiving authorization since the last notice.

5. Requirements for Synthetic Minor Construction Permit Applications

a. In addition to the minimum information required by Section II.C.3 above, any facility applying for a synthetic minor construction permit must also provide the following:

i. Potential emission calculations and proposed federally enforceable emission limitations for each emission unit at the facility verifying that the total emissions at the facility will be below the major source (or facility) thresholds;

ii. All proposed production and/or operational limitations that will constrain the operation of each emission unit that are to be identified as federally enforceable; and

iii. All proposed monitoring parameters, recordkeeping, and reporting requirements the applicant will use to determine and verify compliance with the requested federally enforceable limitations on a continuous basis. The applicant shall also provide the compliance status of these proposed parameters and requirements at the time of the application submittal.

b. The permit application for general synthetic minor construction permits may deviate from the requirements of Section II.E.5.a provided that such application includes all information necessary to determine qualification for, and to assure compliance with, the general permit.

F. Operating Permits

1. The owner or operator shall submit written notification to the Department of the actual date of initial startup of each new or altered source, postmarked within fifteen (15) days after such date. Any source that is required to obtain an air quality construction permit issued by the Department must obtain an operating permit when the new or altered source is placed into operation and shall comply with the requirements of this section.

2. The owner/operator or professional engineer in charge of the project shall certify that, to the best of his/her knowledge and belief and as a result of periodic observation during construction, the construction under application has been completed in accordance with the specifications agreed upon in the construction permit issued by the Department. If construction is certified as provided above, the owner or operator may operate the source in compliance with the terms and conditions of the construction permit until the operating permit is issued by the Department. If construction is not built as specified in the permit application and associated construction permit(s), the owner/operator must submit to the Department a complete description of modifications that are at variance with the documentation of the construction permitting determination prior to commencing operation. Construction variances that would trigger additional requirements that have not been addressed prior to start of operation shall be considered construction without a permit.

3. Request for a New or Revised Operating Permit

a. For sources covered by an effective Title V operating permit, the modification request required by Regulation 61–62.70 shall serve as the request to operate for the purposes of this regulation.

b. For sources not subject to Regulation 61 62.70, or not yet covered by an effective Title V operating permit, the owner or operator shall submit a written request for a new or revised operating permit to cover any new, or altered source, postmarked within fifteen (15) days after the actual date of initial startup of each new or altered source.

c. The written request for a new or revised operating permit must include, at a minimum, the following information:

i. A list of sources that were placed into operation; and

ii. The actual date of initial startup of each new or altered source.

G. Conditional Major Operating Permits

1. The requirements of Section II.G shall apply to those sources that request a federally enforceable permit to limit their potential to emit to less than major source thresholds.

2. General Provisions

a. Any stationary source that satisfies the definition of a major source may request a federally enforceable conditional major operating permit to limit the source's potential to emit and become a conditional major source. Any stationary source that has received a synthetic minor construction permit to limit the source's potential to emit below major source threshold levels, that is not required to obtain a Title V operating permit, shall be issued a conditional major operating permit to consolidate the source's limitations on potential to emit and shall be considered a conditional major source.

b. Stationary sources requesting a conditional major operating permit shall submit a complete request for a new or revised operating permit to the Department as required by Section II.G.6 below.

c. Stationary sources requesting an original conditional major operating permit shall undergo the public participation procedures of Section II.N below.

d. Submission of a request for renewal meeting the requirements in Section II.H below, shall allow the owner or operator to continue operating pursuant to the most recent conditional major operating permit until such time as the Department has taken final action on the request for renewal.

e. The Department shall act on a request for a conditional major operating permit and shall notify the source in writing of its approval, conditional approval, or denial.

f. In the event of a denial of a conditional major operating permit request, the Department shall notify the source in writing of the reasons for the denial. The Department shall not accept a subsequent conditional major operating permit request until the source has addressed the concerns specified by the Department which caused the original denial. The source shall correct all deficiencies noted by the Department or submit a complete permit application in accordance with Regulation 61–62.70 in order to receive a Title V operating permit.

3. Existing Sources

a. Any owner or operator desiring to be permitted as a conditional major source shall submit an operating permit request containing the information identified in Section II.G.6 below. A federally enforceable conditional major operating permit shall constrain the operations of the source such that potential emissions fall below applicable regulatory levels and therefore exclude the source from the requirements to have a Title V operating permit.

b. A request for a conditional major operating permit shall not relieve a source from the requirement to meet the deadline for submittal of a Title V operating permit application.

4. New or Modified Sources

a. Any owner or operator who plans to construct, alter, or add to a source of air contaminants, including the installation of any device for the control of air contaminant discharges, and desires a conditional major operating permit shall provide a written request to the Department for a federally enforceable synthetic minor construction permit conditioned to constrain the operation of the source, along with a complete construction permit application package containing the information identified in Section II.G.6 below. The construction of the new or modified source shall not commence until the source has received an effective permit to construct from the Department.

b. A written request to obtain a conditional major operating permit shall be submitted to the Department, postmarked within fifteen (15) days after the actual date of initial startup of each new or altered source. This request shall include any additional information required in Section II.G.6 below. These facilities will be issued conditional major operating permits without further public notice if no substantive changes to limitations are required. A satisfactory compliance inspection by a Department representative may precede the issuance of an operating permit for any newly constructed or modified source.

5. Conditional Major Operating Permit Conditions

a. Conditional major operating permits shall contain the standard permit conditions listed in Section II.J.1 below, and any special permit conditions required to verify a source's compliance with the emissions limitations and operational requirements.

b. The limitations and requirements listed as permit conditions shall be permanent, quantifiable, or otherwise enforceable as a practical matter.

c. All conditional major operating permit conditions that constrain the operation of a source in an effort to limit potential to emit below major source threshold levels as defined in Regulation 61–62.70 shall be federally enforceable. Unless otherwise agreed by the Department and EPA, the Department shall provide to EPA on a timely basis a copy of each proposed (or draft) and final permit intended to be federally enforceable.

6. Additional Requirements for Conditional Major Operating Permit Requests

a. In addition to the minimum information required by Section II.C.3 above, any facility requesting a conditional major operating permit must also provide the following:

i. Potential emission calculations and proposed federally enforceable emission limitations for each emission unit at the facility verifying that the total emissions at the facility will be below the major source (or facility) thresholds;

ii. All proposed production and/or operational limitations that will constrain the operation of each emission unit that are to be identified as federally enforceable; and

iii. All proposed monitoring parameters, recordkeeping, and reporting requirements the source will use to determine and verify compliance with the requested federally enforceable limitations on a continuous basis. The source shall also provide the compliance status of these proposed parameters and requirements at the time of the request submittal.

b. The request for general conditional major operating permits may deviate from the requirements of Section II.G.6 provided that such request includes all information necessary to determine qualification for, and to assure compliance with, the general permit.

7. General Conditional Major Operating Permits

a. The Department may, after notice and opportunity for public participation provided under Section II.N below, issue a general conditional major operating permit applicable to similar sources.

b. Any general conditional major operating permit shall incorporate all requirements applicable to the operation of similar conditional major sources and shall identify criteria by which sources may qualify for a general permit.

c. Sources may submit a permit application to the Department with a request for coverage under the conditions and terms of a general conditional major operating permit for similar sources. The Department shall grant a general conditional major operating permit to sources certifying qualification for and agreeing to the conditions and terms of a general conditional major operating permit for similar sources.

d. The source shall be subject to enforcement action for operation without a valid permit if the source is later determined not to qualify for the conditions and terms of a general conditional major operating permit.

e. The Department may grant a source's request for authorization to operate under a general permit without further public notice, but such a grant shall be a final permit action for purposes of judicial review.

f. The Department shall provide timely notice to the public of any authorization given to a facility to operate under the terms of a general permit. Such notice may be made on a periodic, summarized basis covering all facilities receiving authorization since the last notice.

H. Operating Permit Renewal Requests

1. Any source that wishes to have its operating permit renewed must submit a written request to the Department.

2. The provisions of Section II.H shall apply only to those sources not subject to Regulation 61–62.70. For sources covered by an effective Title V operating permit, the operating permit renewal request required by Regulation 61–62.70 shall serve as the request to operate for the purposes of this regulation.

3. For sources not subject to Regulation 61 62.70, the owner or operator shall submit an operating permit renewal request to the Department within ninety (90) days prior to the operating permit expiration date. The source may be inspected by the Department in order to decide whether to renew the permit. Past records of compliance and future probability of compliance will be considered in making the decision regarding renewal.

4. Operating permit renewal requests shall include a description of any changes at the facility that have occurred since issuance of the last operating permit that may affect the operating permit or operating permit review. In general, the description shall include any addition, alteration, or removal of sources, including sources exempt from construction permit requirements; addition, alteration, or removal of emission limitations; any changes to monitoring, recordkeeping, or reporting requirements; and any changes or additions to special permit conditions. The following items should be addressed as part of the operating permit renewal request:

a. The facility name; and the name, mailing address, and telephone number of the owner or operator for the facility;

b. The location of the facility including its street address and the name, mailing address, and telephone number of the facility's contact person;

c. The facility's Federal Employer Identification Number or Federal Tax ID Number;

d. Any change to the SIC Code or NAICS Codes of the products or product lines;

e. Any construction permits to be incorporated into the operating permit, either whole or in part, any listed information descriptions that have been removed or decommissioned, and any changes to exempted sources listed in the current operating permit;

f. Any change to the facility's planned operating schedules or description of the facility's current and/or proposed processes, including the physical and chemical properties and feed rate of the materials used and produced (in lb/hr) from which the facility determined actual and potential emissions;

g. Any changes to current process flow diagram or production process layout shall be addressed, showing the flow of materials and intermediate and final products. Updated process flow diagram or production process layout must identify major equipment, machines, and process steps or product lines within the production process; all product streams; all exhaust streams (emission points) including fugitive within the production process; all waste streams; and all control devices including inherent process control devices used within the production process;

h. A description, including the CAS number (if applicable), of all emissions from each source. Mass emission data and emission calculations, including the potential uncontrolled and controlled mass emission rate of each criteria pollutant and other air contaminants such as VOCs, TAPs, and HAPs emitted from each source. Emission calculations must be based on proper documentation that supports the basis of the emission rates such as stack test data, AP-42 emission factors, material balance, and/or engineering estimates. All assumptions used in the emission calculations must be provided. Fugitive emissions (for example, emissions from filling operations, pumps, valves, flanges, etc.) must be included in the emission calculations. A summary of facility-wide potential uncontrolled and controlled emissions with a regulatory applicability determination must be provided. If existing data supplied to the Department remains correct, identify documents referenced to comply with this requirement;

i. A description of stack, vent, or fugitive emission parameters associated with each non exempt emission source. For each emission point/source, this information should include, as appropriate, Universal Transverse Mercator or latitude and longitude coordinates of the emission location, the minimum height above ground, maximum internal dimensions of the emission point/vent, discharge orientation, emission exit velocity, emission exit temperature, dimensions describing the volume or area of fugitive emissions, existence of any rain protection device or other impediment to vertical dispersion, etc. If existing data supplied to the Department remains correct, identify the document(s) submitted to comply with this requirement; and

j. Other information as may be necessary for proper evaluation of the operating permit request.

I. Registration Permits

1. Development of Registration Permits

a. The Department may develop registration permits applicable to similar sources. Any registration permit developed shall specify compliance with all requirements applicable to the construction and operation of that specific category of stationary sources and shall identify criteria by which sources may qualify for the registration permit.

b. Registration permits will be developed only for specific stationary source groups with uncontrolled potential to emit less than the threshold for major source groups, in accordance with Regulation 61–62.70, Title V Operating Permit Program; Regulation 61–62.5, Standard No. 7, Prevention of Significant Deterioration; Regulation 61–62.5, Standard No. 7.1, Nonattainment New Source Review; and where equipment similarities and simplicity remove the need for in depth site-specific review.

2. Application for Coverage Under a Registration Permit

a. A source that qualifies may elect to apply to the Department for coverage under a registration permit in lieu of a construction and operating permit as provided in Section II.A and F above. The Department shall grant a registration permit to sources certifying qualification for and agreeing to the conditions and terms of the registration permit applicable to similar sources.

b. The source shall be subject to enforcement action for operation without a valid permit if the source is later determined not to qualify for the conditions and terms of a registration permit. The Department reserves the right to require a construction and/or operating permit; the requirement for a permit(s) will be made by the Department on a case-by-case basis. This determination will take into consideration, but may not be limited to, the nature and amount of the pollutants, location, and proximity to residences and commercial establishments.

c. The Department may grant a source's request for authorization to operate under a registration permit, but such a grant shall be a final permit action for purposes of judicial review.

3. Registration Permit Conditions

a. Registration permits shall contain any applicable permit conditions listed in Section II.J below as the Department finds appropriate.

b. Registration permits shall contain any applicable special permit conditions required to verify a source's compliance with any emissions limitations and operational requirements.

4. Any registration permit may be reopened by the Department for cause or to include any new standard or regulation which becomes applicable to a source during the life of the permit.

J. Permit Conditions

1. Standard Permit Conditions

All construction and operating permits shall contain the following standard permit conditions.

a. No applicable law, regulation, or standard will be contravened.

b. All official correspondence, plans, permit applications, and written statements are an integral part of the permit. Any false information or misrepresentation in the application for a construction or operating permit may be grounds for permit revocation.

c. For sources not required to have continuous emission monitors, any malfunction of air pollution control equipment or system, process upset, or other equipment failure which results in discharges of air contaminants lasting for one (1) hour or more and which are greater than those discharges described for normal operation in the permit application, shall be reported to the Department within twenty-four (24) hours after the beginning of the occurrence and a written report shall be submitted to the Department within thirty (30) days. The written report shall include, at a minimum, the following:

i. The identity of the stack and/or emission point where the excess emissions occurred;

ii. The magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the excess emissions;

iii. The time and duration of the excess emissions;

iv. The identity of the equipment causing the excess emissions;

v. The nature and cause of such excess emissions;

vi. The steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunction;

vii. The steps taken to limit the excess emissions; and

viii. Documentation that the air pollution control equipment, process equipment, or processes were at all times maintained and operated, to the maximum extent practicable, in a manner consistent with good practice for minimizing emissions.

d. Sources required to have continuous emission monitors shall submit reports as specified in applicable parts of the permit, law, regulations, or standards.

e. Any owner or operator who constructs or operates a source or modification not in accordance with the application submitted pursuant to this regulation or with the terms of any approval to construct, or who commences construction after the effective date of these regulations without applying for and receiving approval hereunder, shall be subject to enforcement action.

f. Approval to construct shall become invalid if construction is not commenced within eighteen (18) months after receipt of such approval, if construction is discontinued for a period of eighteen (18) months or more, or if construction is not completed within a reasonable time. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within eighteen (18) months of the projected and approved commencement date.

g. A copy of the Department issued construction and/or operating permit must be kept readily available at the facility at all times. The owner or operator shall maintain such operational records; make reports; install, use, and maintain monitoring equipment or methods; sample and analyze emissions or discharges in accordance with prescribed methods at locations, intervals, and procedures as the Department shall prescribe; and provide such other information as the Department reasonably may require. All records required to demonstrate compliance with the limits established under a permit shall be maintained on site for a period of at least five (5) years from the date the record was generated.

2. Special Permit Conditions

As the Department finds appropriate, permits shall include special permit conditions such as, but not limited to, production limits, operational limits, source performance testing, operation and maintenance requirements, notification requirements, recordkeeping requirements, reporting requirements, and other monitoring as required.

a. When special permit conditions contain production or operational limits, the permit shall have monitoring and/or recordkeeping requirements to verify a source's compliance with the limitations.

b. When special permit conditions require an add-on air pollution control device to be operated at a specified destruction and removal efficiency level, the permit shall have monitoring and recordkeeping requirements to determine the add-on air pollution control device's performance on a short term basis.

c. The time period over which a permit limitation on production or operation extends will be as short as possible. For the purpose of determining compliance, permit limitations will, in general, not exceed one (1) month and shall not exceed an annual limit with a rolling monthly average or sum.

d. An owner or operator of stationary sources that desires or is required to conduct performance tests to verify emissions limitations shall ensure that source tests are conducted in accordance with the provisions of Regulation 61–62.1, Section IV, Source Tests.

e. An hourly emission limit shall be sufficient only if the permit condition(s) require the installation, calibration, maintenance, and operation of a CEMS or any other monitoring approved by the Department. All monitoring data shall be defined and recorded for showing compliance with the emission limit(s).

f. The limitations and requirements listed in the permit conditions shall be permanent, quantifiable, or otherwise enforceable as a practical matter.

K. Exceptions

1. Upon request, the Department may alter operating permits, compliance schedules, or other restrictions on operation of a source provided that resulting ambient air concentration levels will not exceed any national or state ambient air quality standard. Factors to be considered by the Department may include, but are not limited to, technology, economics, national energy policy, and existing air quality. The request by the source must also show the following:

a. Good faith efforts have been made to comply with the state requirements;

b. The source is unable to comply with the state requirements because the necessary technology or other alternative methods of control are not reasonably available or have not been available for a sufficient period of time;

c. Any available operating procedures or control measures reducing the impact of the source on ambient air concentrations have been implemented; and

d. The request is submitted in a timely manner.

2. The provisions of this paragraph shall not apply to mass emission limits which are imposed upon any source by the following requirements:

a. Federal New Source Performance Standards (NSPS);

b. National Emission Standards for Hazardous Air Pollutants (NESHAP);

c. Federal or State Prevention of Significant Deterioration (PSD) Regulations; or

d. Nonattainment requirements.

3. Where a permanent increase in the visible emission limitation for a source is requested, the source must demonstrate that it will remain in compliance with the applicable particulate emission standard.

4. Any alternative compliance schedule shall provide for compliance with the applicable regulations as expeditiously as practicable based on a plan submitted with the request for the alternative compliance schedule.

5. Any request under this section will be subjected to public notice and opportunity for a public hearing. Upon approval by the Board, the recommendations of this Department shall be sent to the Administrator, or his designated representative, for approval or disapproval.

6. Where alternative compliance schedule provisions are contained elsewhere in the air pollution control regulations, those provisions shall supersede the requirements in this section.

L. Emergency Provisions

1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, in which a situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

2. An emergency may be documented through properly signed, contemporaneous operating logs and other relevant evidence that verify:

a. An emergency occurred and the owner or operator can identify the cause(s) of the emergency;

b. The permitted source was, at the time the emergency occurred, being properly operated;

c. During the period of the emergency, the owner or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in the permit; and

d. The owner or operator gave a verbal notification of the emergency to the Department within twenty-four (24) hours of the time when emission limitations were exceeded, followed by a written report within thirty (30) days. The written report shall include, at a minimum, the information required by Section II.J.1.c.i through J.1.c.viii above. The written report shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

3. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

M. Transfer of Ownership/Operation

Within thirty (30) days of the transfer of ownership/operation of a facility, the current permit holder and prospective new owner/operator shall submit to the Department a written request for transfer of the source operating or construction permit(s). The written request for transfer of the source operating or construction permit(s) shall include any changes pertaining to the facility name; the name, mailing address, and telephone number of the owner or operator for the facility; and any proposed changes to the permitted activities of the source. Transfer of the operating or construction permit(s) will be effective upon written approval by the Department.

N. Public Participation Procedures

1. When determined to be appropriate by the Department (or specified by regulation), notice of permitting activity shall be provided to the public and other entities for their review and comment. Public notice shall be given by publication in a newspaper of general circulation in the area where the source is located, or by posting on the Department's website, or by publication in the South Carolina

State Register, and to persons on a mailing list developed by the Department, including those who request in writing to be on the list. The Department may use other means of public notice.

2. The notice shall include the following:

a. The name and physical address of the facility;

b. The name and address of the Department;

c. Applicable activities involved in the permit action;

d. Applicable emission change involved in any permit modification;

e. The name, address, and telephone number of a person from whom interested persons may obtain additional information, including copies of the permit draft, the application, and all other materials available to the Department that are relevant to the permit decision, except for information entitled to confidential treatment (the contents of any proposed or draft permit shall not be treated as confidential information);

f. A brief description of the comment procedures; and

g. The time and place of any public hearing that may be held, including a statement of procedures to request a hearing (unless a hearing has already been scheduled).

3. The Department shall provide at least thirty (30) days for public and EPA comment and shall give notice of any public hearing at least thirty (30) days in advance of the hearing.

a. The Department shall keep a record of the commenters and the comments made during the public comment period.

b. The Department shall consider all written comments submitted within a time specified in the notice of public comment and all comments received at any public hearing(s) in making a final decision on the approvability of the application.

4. A newly constructed or modified source issued a federally enforceable final construction permit will not require an additional public comment period and/or hearing to obtain an operating permit, unless the source proposes a change in the original construction and/or operational plan, prior to commencing construction, which the Department determines would require an additional public comment period and/or hearing.

5. Any proposed new or modified stationary source required to undergo a public comment period shall not commence any construction until all public participation procedures of this section are completed, and the source has received an effective construction permit from the Department.

6. Maintenance activities, repairs, and replacements which the Department determines to be routine for that source category shall not, by themselves, be required to undergo the public participation procedures of Section II.N.

O. Inspection and Entry

Upon presentation of credentials and other documents as may be required by law, the owner or operator shall allow the Department or an authorized representative to perform the following:

1. Enter the facility where emissions-related activity is conducted, or where records must be kept under the conditions of the permit;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;

3. Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and

4. As authorized by the Clean Air Act and/or the South Carolina Pollution Control Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

HISTORY: Amended by State Register Volume 36, Issue No. 1, eff January 27, 2012 (errata); State Register Volume 36, Issue No. 9, eff September 28, 2012 (errata); State Register Volume 37, Issue No. 4, eff April 26, 2013; State Register Volume 38, Issue No. 6, Doc. No. 4388, eff June 27, 2014; State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015; State Register Volume 40, Issue No. 6, Doc. No. 4590, eff June 24, 2016; State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016.

SECTION III. EMISSIONS INVENTORY AND EMISSIONS STATEMENTS

A. General

1. An emissions inventory is a study or compilation of pollutant emissions. The purposes of emissions inventories are to locate air pollution sources, to define the type and size of sources, to define the type and amount of emissions from each source, to determine pollutant frequency and duration, to determine the relative contributions to air pollution from classes of sources and of individual sources, to provide a basis for air permit fees, and to determine the adequacy of regulations and standards. The requirements of this section notwithstanding, an emissions inventory may be required from any source at any time.

2. An emissions statement is a less detailed statement which focuses on emissions estimates for pollutants associated with a nonattainment designation.

B. Emissions Inventory Reporting Requirements

1. Beginning with the effective date of this regulation, sources must submit an emissions inventory for the previous calendar year by March 31 at a frequency as outlined below:

a. Type A Sources are Title V Sources with annual emissions greater than or equal to any of the emission thresholds listed for Type A Sources in Table 1 below. Type A Sources must submit an emissions inventory every year.

Table 1 - Minimum Point Source Reporting Thresholds by Pollutant (tons per year)

Pollutants	Type A Sources: Annual Cycle	Potential[1] or Actual[2]
SO_X	≥2500	Potential
VOC	≥250	Potential
NO_X	≥2500	Potential
CO	≥2500	Potential
Pb	≥0.50[2]	Actual
PM_{10}	≥250	Potential
$PM_{2.5}$	≥250	Potential
NH_3	≥250	Potential

[1] Tons per year (tpy) potential to emit means the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, will be treated as part of its design if the limitation is enforceable by the Administrator and included in the source's permit prior to the end of the reporting year.

[2] The EPA considers that the ambient monitoring rule threshold is 0.5 tons of actual emissions; therefore, this criterion is based on actual emissions rather than the potential-to-emit approach taken for other criteria pollutant and precursor thresholds.

b. All other Title V Sources with annual emissions less than the emission thresholds listed for Type A Sources in Table 1 above must submit emissions inventories every three (3) years beginning with calendar year 2014 data.

c. Nonattainment area (NAA) Sources are sources located in a NAA with annual emissions during any year of the three (3) year cycle greater than or equal to any of the emission thresholds listed for NAA Sources in Table 2 below. These sources that are not also Type A Sources must submit emissions inventories every three (3) years beginning with calendar year 2014 data.

Table 2 - Minimum Point Source Reporting Thresholds by Pollutant (tons per year)

Pollutant	NAA[3] Sources: Three-year Cycle	Potential[1] or Actual[2]
SO_X	≥100	Potential
VOC	≥100 (moderate O_3 NAA) ≥50 (serious O_3 NAA)	

	≥25 (severe O_3 NAA)	
	≥10 (extreme O_3 NAA)	
NO_X	≥100 (all O_3 NAA)	Potential
CO	≥100 (all O_3 NAA)	Potential
	≥100 (all CO NAA)	
Pb	≥0.50	Actual
PM_{10}	≥100 (moderate PM_{10} NAA)	Potential
	≥70 (serious PM_{10} NAA)	
$PM_{2.5}$	≥100	Potential
NH_3	≥100	Potential

[1] Tons per year (tpy) potential to emit means the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, will be treated as part of its design if the limitation is enforceable by the Administrator and included in the source's permit prior to the end of the reporting year.
[2] The EPA considers that the ambient monitoring rule threshold is 0.5 tons of actual emissions; therefore, this criterion is based on actual emissions rather than the potential-to-emit approach taken for other criteria pollutant and precursor thresholds.
[3] Special point source reporting thresholds apply for certain pollutants by type of NAA.
The pollutants by nonattainment area are:
Ozone: VOC, NO_X, and CO;
Carbon Monoxide: CO; and
Particulate matter less than 10 microns: PM_{10}.

2. Other Requirements

a. Unless otherwise indicated, all emissions inventories must be submitted to the Department by March 31 following the year of inventory. All applicable information must be recorded in the current format for reporting emissions data provided by the Department.

b. All newly permitted and constructed Title V Sources which have obtained or are in the process of obtaining a Title V permit and all newly permitted and constructed NAA Sources must complete and submit to the Department an initial emissions inventory for the source's first partial calendar year of operation and an emissions inventory for the source's first full calendar year of operation.

i. The partial year emissions inventory must be submitted to the Department no later than March 31 of the year following the source's partial year of operation and must include an emissions inventory from the source's operation start date through December 31 of the same year.

ii. The first full calendar year emissions inventory must be submitted to the Department by March 31 of the year following the source's first calendar year of operation.

iii. Sources must submit future emissions inventories on the schedule as described in paragraph B.1.a, paragraph B.1.b, and paragraph B.1.c of this section.

c. Any existing sources that are determined by the Department to be subject to Regulation 61–62.70, Title V Operating Permit Program, and/or NAA Sources must complete and submit to the Department an emissions inventory for the previous calendar year within ninety (90) days. These sources must then submit future emissions inventories on the schedule as described in paragraph B.1.a, paragraph B.1.b, and paragraph B.1.c of this section.

d. Submittal of emissions inventories outside of the schedules in this section will be accepted and reviewed only if a modification has occurred that required issuance of an air quality permit since the last emissions inventory submittal by the source. This modification must alter the quantity or character of the source's emissions. These sources may submit a new emissions inventory following the first full calendar year of operation after the modification. These sources must then submit future emissions inventories on the schedule described in paragraph B.1.a, paragraph B.1.b, and paragraph B.1.c of this section.

e. Information required in an emissions inventory submittal to the Department must include the following:

i. Information on fuel burning equipment;

ii. Types and quantities of fuel used;

iii. Fuel analysis;

iv. Exhaust parameters;

v. Control equipment information;

vi. Raw process materials and quantities used;

vii. Design, normal, and actual process rates;

viii. Hours of operation;

ix. Significant emission generating points or processes as discussed in the current format for reporting emissions data provided by the Department;

x. Any desired information listed in 40 CFR 51 Subpart A (December 17, 2008) that is requested by the Department;

xi. Emissions data from all regulated pollutants; and

xii. Any additional information reasonably related to determining if emissions from an air source are causing standards of air quality to be exceeded.

f. A source may submit a written request to the Department for approval of an alternate method for estimating emissions outside of those methods prescribed by the Department. Such requests will be reviewed by the Department's emissions inventory staff on a case-by-case basis to determine if the alternate method better characterizes actual emissions for the reporting period than the Department's prescribed methods.

g. Emission estimates from insignificant activities listed on a source's permit are required only in the initial emissions inventory submitted by the source. If emissions from these insignificant activities have not been included in a past emissions inventory submitted to the Department, the source must include these emissions in their next required emissions inventory submittal.

h. Copies of all records and reports relating to emissions inventories as required in this section must be retained by the owner/operator at the source for a minimum of five (5) years.

C. Emissions Statement Requirements

1. Sources in areas designated nonattainment for an ozone National Ambient Air Quality Standard (NAAQS) must submit to the Department by March 31 for the previous calendar year an emissions statement which includes emissions estimates for both VOCs and nitrogen oxides (NO_X) beginning with the effective date of this regulation.

2. The statement must contain a certification that the information contained in the statement is accurate to the best knowledge of the individual certifying the statement.

3. All applicable information must be recorded in the current format for reporting emissions data provided by the Department.

4. Copies of all records and reports relating to emissions statements as required in this section must be retained by the owner or operator at the source for a minimum of five (5) years.

HISTORY: Amended by State Register Volume 36, Issue No. 1, eff January 27, 2012 (errata); State Register Volume 36, Issue No. 9, eff September 28, 2012 (errata); State Register Volume 38, Issue No. 6, Doc. No. 4388, eff June 27, 2014; State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016.

Editor's Note

Scrivener errors corrected in 2012.

SECTION IV. SOURCE TESTS

A. Applicability

1. This section shall apply to the owner, operator, or representative of any source which conducts:

a. A source test required under an applicable standard or permit condition; or pursuant to a judicial or administrative order, consent agreement, or any other such binding requirement entered into after the effective date of this standard; or

b. Any other source test from which data will be submitted to the Department for any purpose including but not limited to: determination of applicability of regulatory requirements, development of emission factors, establishment of parameters for compliance assurance monitoring, continuous emission monitor performance specification testing, and Relative Accuracy Test Audits (RATA).

2. The Department may, on a case-by-case basis, exempt from the requirements of this section source tests which are performed for development of emission factors or for determination of applicability of regulations.

B. Submission and Approval of a Site-Specific Test Plan

1. Prior to conducting a source test subject to this section, the owner, operator, or representative shall ensure that:

a. A written site-specific test plan, including all of the information required in Section IV.C below, has been developed and submitted to the Department. If the Department has previously approved a site-specific test plan, the owner, operator, or representative may submit a letter which references the approved plan and which includes a thorough description of amendments to the plan; and

b. Written Department approval of the site-specific test plan or amended test plan, methods, and procedures has been received.

2. All test methods included in the site-specific test plan must be either EPA Reference Methods described in 40 CFR 51, Appendix M; or 40 CFR 60, Appendix A; or 40 CFR 61, Appendix B; or 40 CFR 63, Appendix A. If an applicable air regulation or permit provides for a choice of test methods, the selected method must be approved by the Department. If an applicable air regulation or permit does not specify use of an EPA standard reference method, the alternative test method to be used must be approved by the Department.

3.a. The owner, operator, or representative of a source proposing to use alternative source test methods shall ensure that the alternative source test method is either validated according to EPA Reference Method 301 (40 CFR 63, Appendix A, December 29, 1992) and any subsequent amendments or editions, or approved by the Department.

b. The owner, operator, or representative shall ensure that requests for approval of alternative source test methods are submitted to the Department along with the site-specific test plan, and that the submission contains all of the information required by Section IV.C below.

4. The Department shall determine whether any source test method proposed in the site-specific test plan is appropriate for use.

5.a. The owner, operator, or representative shall submit site-specific test plans or a letter which amends a previously approved test plan at least forty-five (45) days prior to the proposed test date. Sources conducting tests for substances listed in Regulation 61–62.5, Standard No. 8, shall submit site-specific test plans or a letter which amends a previously approved test plan at least sixty (60) days prior to the proposed test date.

b. If the only amendments to a previously approved test plan are to facility information included in Section IV.C.1.a and C.1.b below, the requirement in Section IV.B.5.a above will not apply. The owner, operator, or representative, however, shall submit the amendments at least two (2) weeks prior to the proposed test date.

6. Within thirty (30) days of site-specific test plan receipt, the Department will notify the owner, operator, or representative of site-specific test plan approval or denial or will request additional information.

7. The owner, operator, or representative shall submit any additional information requested by the Department necessary to facilitate the review of the site-specific test plan.

8. Approval of a site-specific test plan for which an owner, operator, or representative fails to submit any additional requested information will be denied.

9. Neither the submission of a site-specific test plan, nor the Department's approval or disapproval of a plan, nor the Department's failure to approve or disapprove a plan in a timely manner shall relieve an owner, operator, or representative of legal responsibility to comply with any

applicable provisions of this section or with any other applicable federal, state, or local requirement or prevent the Department from enforcing this section.

C. Requirements for a Site-Specific Test Plan

A site-specific test plan shall include, at a minimum, the following (Section IV.C.1 through C.8):

1. General Information:

a. Facility name, address, telephone number, and name of facility contact;

b. Facility permit number and source identification number;

c. Name, address, and telephone number of the company contracted to perform the source test; and

d. Name, address, and telephone number of the laboratory contracted to perform the analytical analysis of the source test samples.

2. Test Objectives:

a. Description and overall purpose of the tests (for example, to demonstrate compliance, to establish emission factors, etc.); and

b. Citation of any applicable state or federal regulation or permit condition requiring the tests.

3. Process Descriptions:

a. Description of the process including a description of each phase of batch or cyclic processes and the time required to complete each phase;

b. Process design rates and normal operating rates;

c. Proposed operating rate and conditions for the source test;

d. Methods including proposed calculations, equations, and other related information that will be used to demonstrate and verify the operating rate during the source test;

e. Description of any air pollution control equipment;

f. Description of any stack gas or opacity monitoring systems;

g. Description of all air pollution control monitors (for example, pressure gauges, flow indicators, cleaning cycle timers, electrostatic precipitator voltage meters, etc.) when applicable; and

h. A list of process and air pollution control operating parameters that will be recorded during the tests, the responsible party who will record these readings, and the frequency at which readings will be recorded.

4. Safety Considerations:

a. Identification of any risks associated with sampling location and accessibility, toxic releases, electrical hazards, or any other unsafe conditions; and a plan of action to correct or abate these hazards; and

b. List of all necessary or required safety equipment including respirators, safety glasses, hard hats, safety shoes, hearing protection, and other protective equipment.

5. Sampling and Analytical Procedures:

a. Description of sampling methods to be used;

b. Description of analytical methods to be used;

c. Number of tests to be conducted;

d. Number of runs comprising a test;

e. Duration of each test run;

f. Description of minimum sampling volumes for each test run;

g. Location where samples will be recovered;

h. Explanation of how blank and recovery check results and analytical non-detects will be used in final emission calculations;

i. Maximum amount of time a sample will be held after collection prior to analysis; and

j. Method of storing and transporting samples.

6. Sampling Locations and Documentation:

a. Schematics of sampling sites (include stack dimensions and distances upstream and downstream from disturbances);

b. A description of all emission points, including fugitive emissions, associated with the process to be tested, and when applicable, the method that will be used to measure or include these emissions during the source test; and

c. Procedure for verifying absence of cyclonic or non-parallel stack gas flow.

7. Internal Quality Assurance/Quality Control (QA/QC) Measures - for each proposed test method when applicable:

a. Citation of the QA/QC procedures specified in the EPA Reference Methods and the EPA Quality Assurance Handbook for Air Pollution Measurement Systems, Volume III;

b. Chain-of-custody procedures and copies of chain-of-custody forms;

c. Procedure for conditioning particulate matter filters (before and after source testing);

d. Procedure for conducting leak checks on vacuum lines, pitot tubes, flexible bags, orsats, etc.;

e. Equipment calibration frequencies, ranges, and acceptable limits;

f. Minimum detection limits of analytical instrumentation;

g. Names, addresses, and responsible persons of all sub-contracting laboratories and a description of analytical methods to be used, chain-of-custody procedures, and QA/QC measures;

h. QA/QC measures associated with the collection and analysis of process or raw material samples and the frequency at which these samples will be collected;

i. Methods for interference and matrix effects checks, and number of replicate analyses;

j. Methods and concentrations for internal standards (standards additions prior to extraction);

k. Methods and concentrations for surrogate standards (standards additions to collection media prior to sampling);

l. Methods for recovery checks, field blanks, lab blanks, reagent blanks, proof rinse blanks, and analytical blanks;

m. Proposed range of recoveries for data acceptability and method of data interpretation if sample recovery is not within the proposed range; and

n. Procedure for obtaining, analyzing, and reporting source test method performance audit samples and results.

8. Final Test Report Content:

a. Final report outline;

b. Example calculations when using alternative test methods or for calculation of process operating rates; and

c. Proposed report submission date if more than thirty (30) days after the source test will be needed to complete the report.

D. Notification and Conduct of Source Tests

1. Prior to conducting a source test subject to this section, the owner, operator, or representative shall ensure that a complete written notification is submitted to the Department at least two (2) weeks prior to the test date. Submission of a site-specific test plan or amendments to a previously approved test plan does not constitute notification. Requirements for a complete notification include the following:

a. Facility name, permit number, mailing address, physical address, and contact name and phone number;

b. Source(s) being tested, source identification number(s), and pollutant(s) being tested;

c. Proposed test date and start time for each source being tested; and

d. Approved test plan being used to conduct the test identified by Department approval date.

2. In the event the owner, operator, or representative is unable to conduct the source test on the date specified in the notification, the owner, operator, or representative shall notify the Department as soon as practical by telephone and follow up in writing within thirty (30) days. Telephone notification shall include a description of the circumstance(s) causing the cancellation of the test, and a projected retest date. The written follow-up report shall include a description of the condition(s) which prevented the source test from being conducted, and when applicable, what corrective action was performed, or what equipment repairs were required.

3. Rescheduling of canceled source tests must meet the two-week notice requirement. However, shorter notification periods may be allowed subject to Department approval.

4. All tests shall be conducted by or under the direction of a person qualified by training and/or experience in the field of air pollution testing or, where required by federal regulation, meeting the minimum competency requirements for air emissions testing as specified in ASTM D7036-04, Standard Practice for Competence of Air Emission Testing Bodies.

5. Unless approved otherwise by the Department, the owner, operator, or representative shall ensure that source tests are conducted while the source is operating at the maximum expected production rate or other production rate or operating parameter which would result in the highest emissions for the pollutants being tested. Examples of the operating parameters that may affect emission rates are: type and composition of raw materials and fuels, isolation of control equipment modules, product types and dimensions, thermal oxidizer combustion temperature, atypical control equipment settings, etc. Some sources may have to spike fuels or raw materials to avoid being permitted at a more restrictive feed or process rate. Any source test performed at a production rate less than the rated capacity may result in permit limits on emission rates, including limits on production if necessary.

6. When conducting a source test subject to this section, the owner, operator, or representative of a source shall provide the following:

a. Department access to the facility to observe source tests;

b. Sampling ports adequate for test methods;

c. Safe sampling site(s);

d. Safe access to sampling site(s);

e. Utilities for sampling and testing equipment; and

f. Equipment and supplies necessary for safe testing of a source.

E. Source Test Method Performance Audit Program

1. The Department may request that samples collected during any source tests be split with the Department for analysis by an independent or Department laboratory. Any request for split samples will be made in advance of the source test.

2. Performance testing shall include a test method performance audit (PA) during the performance test if a PA sample is commercially available.

a. PAs consist of blind audit samples supplied by an accredited audit sample provider (AASP) and analyzed during the performance test in order to provide a measure of test data bias.

b. An "accredited audit sample provider (AASP)" is an organization that has been accredited to prepare audit samples by an independent, third party accrediting body.

3. The source owner, operator, or representative of the tested facility shall obtain an audit sample, if commercially available, from an AASP for each test method used for regulatory compliance purposes.

a. No audit samples are required for the following test methods: Methods 3A and 3C of Appendix A-2 of 40 CFR 60; Methods 6C, 7E, 9, and 10 of Appendix A-4 of 40 CFR 60; Method 18 of Appendix A-6 of 40 CFR 60; Methods 20, 22, and 25A of Appendix A-7 of 40 CFR 60; and Methods 303, 318, 320, and 321 of Appendix A of 40 CFR Part 63.

b. If multiple sources at a single facility are tested during a compliance test event, only one audit sample is required for each method used during a compliance test.

c. Upon request, the Department may waive the requirement to include an audit sample if the Department determines that an audit sample is not necessary. A waiver of the performance audit requirements to conduct a PA for a particular source does not constitute a waiver of performance audit requirements for future source tests.

d. "Commercially available" means that two or more independent AASPs have blind audit samples available for purchase. If the source owner, operator, or representative cannot find an audit sample for a specific method, the owner, operator, or representative shall consult the EPA Web site at the following URL, http://www.epa.gov/ttn/emc, to confirm whether there is an AASP that can supply an audit sample for that method.

e. If the EPA Web site does not list an available audit sample at least 60 days prior to the beginning of the compliance test, the source owner, operator, or representative shall not be required to include an audit sample as part of the quality assurance program for the compliance test.

f. When ordering an audit sample, the source, operator, or representative shall give the AASP an estimate for the concentration of each pollutant that is emitted by the source or the estimated concentration of each pollutant based on the permitted level and the name, address, and phone number of the Department.

g. The source owner, operator, or representative shall report the results for the audit sample along with a summary of the emission test results for the audited pollutant to the Department and shall report the results of the audit sample to the AASP. The source owner, operator, or representative shall make both reports at the same time and in the same manner or shall report to the Department first and then report to the AASP.

h. If the method being audited is a method that allows the samples to be analyzed in the field and the tester plans to analyze the samples in the field, the tester may analyze the audit samples prior to collecting the emission samples provided a representative of the Department is present at the testing site. The source owner, operator, or representative may request in the test protocol a waiver to the requirement that a representative of the Department must be present at the testing site during the field analysis of an audit sample.

i. The final test report shall document any attempt to obtain an audit sample and, if an audit sample was ordered and utilized, the pass/fail results as applicable.

4. The Department shall have discretion to require any subsequent remedial actions of the owner, operator, or representative based on the split samples and/or performance audit results.

F. Final Source Test Report

1. The owner, operator, or representative of a source subject to this section shall submit a written report of the final source test results to the Department by the close of business on the 30th day following the completion of the test, unless an alternative date has been requested in and approved with the site-specific test plan prior to testing or is otherwise specified in a relevant federal or state standard.

2. The final test report for each site-specific test plan shall contain, at a minimum, the following supporting information when applicable:

a. Summary of the results;

b. Emission calculations and emission rates in units of the applicable standard, permit limit, etc.;

c. Allowable emission rates in units of the applicable standard, permit limit, etc.;

d. Source compliance status;

e. Process operating rates;

f. Methods including actual calculations, equations, and other related information that were used to demonstrate and verify the operating rate during the source test;

g. Chain of custody records;

h. Certification of all reference standards used;

i. Signature of a responsible facility representative who can verify process operating rates and parameters;

j. Legible copies of all raw laboratory data (for example, filter tare and final weights, titrations, chromatograms, spectrograms, analyzer measurements, etc.);

k. Legible copies of all raw field data (for example, strip charts, field data forms, field calibration forms, etc.);

l. Legible copies of applicable stack gas or opacity monitoring system readings identified in the approved site-specific test plan;

m. Legible copies of all applicable process and air pollution control operating parameter readings identified in the approved site-specific test plan;

n. Results of all calibrations and QA/QC measures and checks identified in the approved site-specific test plan;

o. Results of performance audits pursuant to Section IV.E above or documentation that no audit sample was commercially available 60 days prior to the beginning of the compliance test;

p. Description of any deviations from the proposed process operations as approved in the site-specific test plan during testing;

q. Description of any deviations from approved sampling methods/procedures;

r. Description of any deviations from approved analytical procedures;

s. Description of any problems encountered during sampling and analysis, and explanation of how each was resolved; and

t. Legible copies of any applicable or required certifications (for example, Visible Emission Observer, Qualified Source Testing Individual (QSTI), etc.).

G. Noncompliant Results

Within fifteen (15) days of submission of a test report indicating noncompliance, the owner, operator, or representative shall submit to the Department a written plan which includes at a minimum:

1. Interim actions being taken to minimize emissions pending demonstration of compliance;

2. Corrective actions that have been taken or that are proposed to return the source to compliance;

3. Method that will be used to demonstrate the source has returned to compliance (for example, retest and proposed date); and

4. Any changes necessary to update the site-specific test plan prior to a retest.

H. Analytical Observation

Upon request by the Department, the owner, operator, representative, or the source test consultant shall ensure that Department representatives are provided access to the analytical laboratory for observation of instrument calibrations and analysis of field and audit samples.

I. Site Inspection

Upon request by the Department and prior to approval of the site-specific test plan, the owner, operator, or representative shall ensure Department representatives are provided access to the site for inspection of the source(s) to be tested.

J. Modifications

Modifications to the approved site-specific test plan must have prior Department approval. Approval shall be considered on a case-by-case basis. Failure to obtain prior Department approval may cause final test results to be unacceptable.

HISTORY: Amended by State Register Volume 36, Issue No. 1, eff January 27, 2012 (errata); State Register Volume 36, Issue No. 9, eff September 28, 2012 (errata); State Register Volume 37, Issue No. 4, eff April 26, 2013; State Register Volume 38, Issue No. 6, Doc. No. 4388, eff June 27, 2014.

SECTION V. CREDIBLE EVIDENCE

A. The Department promulgated Regulation 61–62, Air Pollution Control Regulations and Standards, and developed the South Carolina Air Quality Implementation Plan to provide enforceable

emission limitations; to establish an adequate enforcement program; to require owners or operators of stationary sources to monitor emissions, submit periodic reports of such emissions, and maintain records as specified by various regulations and permits; and to evaluate reports and records for consistency with the applicable emission limitation or standard on a continuing basis over time. The monitoring data collected and records of operations would serve as the basis for a source to certify compliance, and could be used by the Department as direct evidence of an enforceable violation of the underlying emission limitation or standard.

B. The purpose of this section is:

1. To clarify the statutory authority of Regulation 61–62, Air Pollution Control Regulations and Standards, and the South Carolina Air Quality Implementation Plan, whereby non-reference test data and various kinds of information already available and utilized for other purposes may be used to demonstrate compliance or noncompliance with emission standards;

2. To eliminate any potential ambiguity regarding language that has been interpreted to provide for exclusive reliance on reference test methods as the means of certifying compliance with various emission limits; and

3. To curtail language that limits the types of testing or monitoring data that may be used for determining compliance and for establishing violations.

C. The following are applicable in the determination of noncompliance by the Department or for compliance certification by the owners or operators of stationary sources:

1. Enforcement - Consistent with South Carolina's Environmental Audit Privilege and Voluntary Disclosure Act, codified as S.C. Code Ann. Sections 48–57–10 et seq., and notwithstanding any other provision in the South Carolina Air Quality Implementation Plan, any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test had been performed, can be used to establish whether or not a person has violated or is in violation of any standard in the plan; and

2. Compliance Certifications - Consistent with South Carolina's Environmental Audit Privilege and Voluntary Disclosure Act, codified as S.C. Code Ann. Sections 48–57–10 et seq., and notwithstanding any other provision in the South Carolina Air Quality Implementation Plan, the owner or operator may use any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test had been performed for the purpose of submitting compliance certifications.

HISTORY: Amended by State Register Volume 36, Issue No. 1, eff January 27, 2012 (errata); State Register Volume 36, Issue No. 9, eff September 28, 2012 (errata); State Register Volume 38, Issue No. 6, Doc. No. 4388, eff June 27, 2014.

61–62.2. Prohibition of Open Burning.

OPEN BURNING IS PROHIBITED EXCEPT AS PROVIDED BELOW:

SECTION I - Exceptions

A. Open burning of leaves, tree branches or yard trimmings originating on the premises of private residences and burned on those premises.

B. Open burning in connection with the preparation of food for immediate consumption.

C. Campfires and fires used solely for recreational purposes, ceremonial occasions, or human warmth. Fires set for the purpose of human warmth must use only clean wood products (woody vegetation, leaves, or wood which is not coated with stain, paint, glue or other coating material, and not treated lumber).

D. Fires purposely set in accordance with Smoke Management Guidelines for Vegetative Debris Burning Operations in South Carolina, administered by the South Carolina Forestry Commission and acceptable to the Department to include the following:

1. Prescribed burning of forest lands for specific management practices;

2. Fires purposely set for agricultural control of diseases, weeds, pests, and for other specific agricultural purposes; and

3. Open burning of trees, brush, grass, and other vegetable matter for game management purposes.

E. Open burning in areas other than predominantly residential for the purpose of land clearing or right-of-way maintenance. This will be exempt only if the following minimum conditions are followed:

1. The location of the burning must be a sufficient distance but not less than one-thousand (1000) feet from public roadways and all residential, commercial, and industrial sites not a part of the contiguous property on which the burning is conducted;

2. Winds during the time of the burning must be away from any area in which the ambient air may be significantly affected by smoke from the burning if that area contains a public roadway or a residential, commercial, or industrial site;

3. The material to be burned must have been generated onsite and not moved to the site from another location;

4. The amount of dirt on the material being burned must be minimized;

5. No heavy oils, asphaltic materials, items containing natural or synthetic rubber, or any materials other than plant growth may be burned;

6. The initial burning must be started only between the hours of 9:00 a.m. and 3:00 p.m.; no combustible material may be added to the fire between 3:00 p.m. of one day and 9:00 a.m. the following day;

7. No more than two (2) piles thirty (30) feet by thirty (30) feet or equivalent may be burned within a six (6)-acre area at one time; and

8. In the case of land clearing, all salvageable timber and pulpwood must be removed.

F. Fires set for the purposes of training fire-fighting personnel and conducted at permanent fire-fighter training facilities. Prior Department approval is required in order to obtain the exemption as a permanently established training site. Fires set for the purpose of fire-fighter training at non-permanent locations must receive Department approval prior to the initiation of any burning activity. Materials used for fire-fighter training cannot contain asbestos, heavy oils, asphaltic material, plastic or rubber without express written consent from the Department.

G. Open burning on the property where it occurs of residential construction waste from building and construction operations will be exempt only if the following conditions are met:

1. The material being burned is residential construction waste associated with the building and construction of one and two family dwellings only;

2. The location of the burning is at least five-hundred (500) feet from any occupied structure other than a dwelling or structure located on the property on which the burning is conducted;

3. Heavy oils, treated wood products, asphaltic materials, items containing natural or synthetic rubber, or any other trade wastes which produce smoke in excess of forty (40) percent opacity are not burned;

4. The burning does not occur during the ozone season (April 1 through October 30); and

5. The burning is conducted only between the hours of 9:00 a.m. and 3:00 p.m.

H. Open burning, in remote or specified areas:

1. For non-recurring unusual circumstances.

2. For experimental burning for purposes of data gathering and research.

However, prior approval for these types of burning (in subparagraph H above) must be obtained from the Department.

SECTION II - General

A. A written report or warning to a person of a violation at one site shall be considered adequate notice of the Regulation and subsequent observed violations at the same or different site will result in appropriate legal action.

B. Open burning may be conducted in certain situations if no undesirable levels are or will be created. The authority to conduct open burning under this Regulation does not exempt or excuse the person responsible for the burning from the consequences of or the damages or injuries resulting from the burning and does not exempt or excuse anyone from complying with other applicable laws and

with ordinances, regulations, and orders of governmental entities having jurisdiction, even though the burning is otherwise conducted in compliance with this Regulation.

C. The Department reserves the right to impose other or different restrictions and exemptions on open burning in addition to those enumerated above whenever in the judgment of the Department such is necessary to realize the purpose of this Regulation.

HISTORY: Amended by State Register Volume 28, Issue No. 6, eff June 25, 2004; State Register Volume 36, Issue No. 2, eff February 24, 2012 (errata); State Register Volume 36, Issue No. 9, eff September 28, 2012 (errata); State Register Volume 37, Issue No. 12, eff December 27, 2013.

61–62.3. Air Pollution Episodes.

SECTION I.—EPISODE CRITERIA

Conditions justifying the proclamation of any stage of an air pollution episode shall be deemed to exist whenever the Commissioner determines that the accumulation of air pollutants in any place is attaining or has attained levels which could, if such levels are sustained or exceeded, lead to substantial threat to the health of persons. The appropriate episode stage will be declared on a regional basis, as dictated by air quality monitoring. Adverse air quality need not be regionwide to trigger control actions; the appropriate episode stage will be declared for an entire Air Quality Control Region when any monitoring site within the region records ambient air quality in excess of that designated in the criteria. In making this determination, the Commissioner will be guided by the criteria listed below:

1. FORECAST—This level will normally be activated when an Air Stagnation Advisory (ASA) is issued for any part of South Carolina by the Columbia Forecast Office of the National Weather Service. If continuous air monitoring equipment indicates an upward trend in pollutant concentrations, the Commissioner may request that the National Weather Service issue an ASA, even though meteorological factors do not appear critical. In the absence of an ASA, the Commissioner may, at his discretion, declare this level when it is in the best interest of public health and welfare.

2. WATCH—This level will be activated when continuous air quality monitoring indicates that one of the following pollutant concentrations has been reached:

PM_{10} - 350 micrograms per cubic meter ($\mu g/m^3$), twenty-four (24)-hour average;

SO_2 - 400 $\mu g/m^3$ (0.15 parts per million (ppm)), twenty-four (24)-hour average; or

O_3 (Ozone) - 400 $\mu g/m^3$ (0.2 ppm), one (1)-hour average;

and meteorological conditions are such that the pollutant concentrations can be expected to remain at the above levels for twelve (12) hours or more, or increase, or in the case of ozone, the situation is likely to recur within the next twenty-four (24) hours unless control actions are taken.

3. ALERT—This level indicates that air quality is continuing to deteriorate and that additional control actions are necessary. An alert will be declared when monitoring indicates that one of the following pollutant concentrations has been reached:

PM_{10} - 420 $\mu g/m^3$, twenty-four (24)-hour average;

SO_2 - 800 $\mu g/m^3$ (0.3 ppm), twenty-four (24)-hour average; or

O_3 (Ozone) - 800 $\mu g/m^3$ (0.4 ppm), one (1)-hour average;

and meteorological conditions are such that pollutant concentrations can be expected to remain at the above levels for twelve (12) hours or more, or increase, or in the case of ozone, the situation is likely to recur within the next twenty-four (24) hours unless control actions are taken.

4. EMERGENCY—The primary objective of this plan is to prevent this level from ever being reached; however, should this level be reached the most stringent control actions are necessary. An emergency will be declared when monitoring indicates that one of the following pollutant concentrations has been reached:

PM_{10} - 500 $\mu g/m^3$, twenty-four (24)-hour average;

SO_2 - 1600 $\mu g/m^3$ (0.6 ppm), twenty-four (24)-hour average; or

O_3 (Ozone) - 1000 $\mu g/m^3$ (0.5 ppm), one (1)-hour average;

and meteorological conditions are such that this condition can be expected to continue for twelve (12) hours or more, or increase, or in the case of ozone, the situation is likely to recur within the next twenty-four (24) hours unless control actions are taken.

5. TERMINATION—Once declared, any level reached by application of these criteria will remain in effect until the criteria for that level are no longer met. At such time, the next lower level will be assumed.

SECTION II.—EMISSION REDUCTION REQUIREMENTS

Operators of plants emitting one-hundred (100) tons per year or more of a single pollutant, and located in a nonattainment county or a county with a nonattainment area, are required to submit written plans for meeting the required reductions of pollutants for which the county is in nonattainment. These plans must identify the air pollutant source, the approximate amount of reduction of pollutants and a brief description of the manner in which the reduction will be achieved during each level. Sources of particulate matter and sulfur dioxide have been subject to this requirement since 1972 and sources of volatile organic compounds since July 1, 1980.

TABLE 1—EMISSION REDUCTION PLANS WATCH LEVEL

PART A. GENERAL

When a Watch Level is declared, the following voluntary actions will be requested:

1. There should be no open burning by any persons of tree waste, vegetation, refuse, or debris in any form.

2. The use of incinerators for the disposal of any form of solid waste should be limited to the hours between 12:00 p.m. (noon) and 4:00 p.m.

3. Persons operating fuel-burning equipment which requires boiler lancing or soot blowing should perform such operations between the hours of 12:00 p.m. (noon) and 4:00 p.m.

4. Persons operating motor vehicles should eliminate all unnecessary operations.

PART B. SOURCE CURTAILMENT

Persons responsible for the operation of a source of air pollutants listed below shall be advised of existing conditions and be advised to review their emission reduction plans:

1. Coal or oil-fired electric power generating plants.

2. Coal or oil-fired process steam generating plants.

3. Industrial Sources of the following classifications:

Tire Manufacturing	Bulk Gasoline Terminals
Primary Metals Industry	Mineral Processing Industries
Petroleum Refining Operations	Paper and Allied Products
Chemical Industries	Grain Industry
Petroleum Storage Plants	Surface Coating
Printing	Degreasing Operations

TABLE 2—EMISSION REDUCTION PLANS ALERT LEVEL

PART A. GENERAL

Upon declaration of an Alert Level the following will apply:

1. There shall be no open burning by any persons of tree waste, vegetation, refuse, or debris in any form.

2. The use of incinerators for the disposal of any form of solid waste or liquid waste shall be prohibited.

3. Persons operating fuel-burning equipment which requires boiler lancing or soot blowing shall perform such operations only between the hours of 12:00 p.m. (noon) and 4:00 p.m.

4. Persons operating motor vehicles are requested to reduce operations by the use of car pools and increased use of public transportation and elimination of unnecessary operation.

PART B. SOURCE CURTAILMENT

Any person responsible for the operation of a source of air pollutants listed below shall take all required control actions for this Alert Level to include the following:

1. Coal or oil-fired electric power generating plants:

a. Maximum reduction by utilization of fuels having lowest ash and sulfur content.

b. Maximum utilization of mid-day (12:00 p.m. (noon) to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing.

c. Maximum reduction by diverting electric power generation to plants outside of Alert Area.

2. Coal and Oil-fired process steam generating plants:

a. Maximum reduction by utilization of fuels having the lowest available ash and sulfur content.

b. Maximum utilization of mid-day (12:00 p.m. (noon) to 4:00 p.m.) atmospheric turbulence for boiler lancing or soot blowing.

c. Making ready for use a plan of action to be taken if an emergency develops.

3. Industrial sources including petroleum refining, chemical, primary metals, glass, paper, and allied products which require considerable lead time for shut-down:

a. Maximum reduction of air contaminants from manufacturing operations by, if necessary, assuming reasonable economic hardships by postponing production and allied operations.

b. Maximum reduction by deferring trade waste disposal operations which emit solid particles, gases, vapors, or any malodorous substances.

c. Maximum reduction of heat load demands for processing.

d. Maximum utilization of mid-day (12:00 p.m. (noon) to 4:00 p.m.) atmospheric turbulence for boiler lancing or soot blowing.

4. Industrial sources including primary metals, chemical, mineral processing, grain, surface coating, bulk gasoline terminals, petroleum storage plants, degreasing operations, printing, and tire manufacturing which require relatively short lead times for shut-down:

a. Elimination of air pollutants from manufacturing operations by ceasing, curtailing, postponing or deferring production and allied operations to the extent possible without causing injury to persons or damage to equipment.

b. Elimination of air pollutants from trade waste disposal processes which emit solid particles, gases, vapors or malodorous substances.

c. Maximum utilization of heat load demands for processing.

d. Maximum utilization of mid-day (12:00 p.m. (noon) to 4:00 p.m.) atmospheric turbulence for boiler lancing or soot blowing.

e. Maximum reduction in gasoline and petroleum products transfer.

TABLE 3—EMISSION REDUCTION PLANS EMERGENCY LEVEL

PART A. GENERAL

Upon declaration of Emergency Level the following will apply:

1. There shall be no open burning by any persons of tree waste, vegetation, refuse, or debris in any form.

2. The use of incinerators for the disposal of any form of solid or liquid waste shall be prohibited.

3. All places of employment described below shall immediately cease operations:

a. Mining and quarrying of nonmetallic minerals.

b. All construction work except that which must proceed to avoid emergency physical harm.

c. All manufacturing establishments except those required to have in force an air pollution episode plan.

d. All wholesale trade establishments, that is, places of business primarily engaged in selling merchandise to retailers, or industrial, commercial, institutional or professional users, or to other wholesalers or acting as agents in buying merchandise for or selling merchandise to such persons or companies except those engaged in the distribution of drugs, surgical supplies, and food.

e. All offices of local, county, and state government including authorities, joint meetings, and other public bodies except such agencies which are determined by the chief administrative officer of local, county, or state government, authorities, joint meetings, and other public bodies to be vital for public safety and welfare and the enforcement of the provisions of this order.

f. All retail trade establishments except pharmacies, surgical supply distributors, and stores primarily engaged in the sale of food.

g. Banks, credit agencies other than banks, securities and commodities brokers, dealers, exchangers and services; offices of insurance carriers; agents and brokers, real estate offices.

h. Wholesale and retail laundries, laundry services, and cleaning and dyeing establishments; photographic studios; beauty shops, barber shops, shoe repair shops.

i. Advertising offices; consumer credit reporting, adjustment and collection agencies; duplicating, addressing, blueprinting; photocopying, mailing, mailing list, and stenographic services; equipment rental services, commercial testing laboratories.

j. Automobile repair, automobile services, garages, gasoline stations.

k. Establishments rendering amusement and recreational services including motion picture theaters.

l. Elementary and secondary schools, colleges, universities, professional schools, junior colleges, vocational schools, and public and private libraries.

4. All commercial and manufacturing establishments not included in this order will institute such actions as will result in maximum reduction of air pollutants from their operation by ceasing, curtailing, or postponing operations which emit air pollutants to the extent possible without causing injury to persons or damage to equipment.

5. The use of motor vehicles is prohibited except in emergencies with the approval of local or state police.

PART B. SOURCE CURTAILMENT

Any person responsible for the operation of a source of air pollutants listed below shall take all required control actions for this Emergency Level to include the following:

1. Coal or oil-fired electric power generating plants:

a. Maximum reduction by utilization of fuels having lowest ash and sulfur content.

b. Maximum utilization of mid-day (12:00 p.m. (noon) to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing.

c. Maximum reduction by diverting electric power generation to plants outside of Emergency Area.

2. Coal and oil-fired process steam generating plants:

a. Maximum reduction by reducing heat and steam demands to absolute necessities consistent with preventing equipment damage.

b. Maximum utilization of mid-day (12:00 p.m. (noon) to 4:00 p.m.) atmospheric turbulence for boiler lancing or soot blowing.

c. Take the action called for in the emergency plan.

3. Primary metals, petroleum refining, chemical, mineral processing, grain, paper and allied products industries shall take the following control actions:

a. Elimination of air pollutants from manufacturing operations by ceasing, curtailing, postponing or deferring production and operations to the extent possible without causing injury to persons or damage to equipment.

b. Elimination of air pollutants from trade waste disposal processes which emit solid particles, gases, vapors, or malodorous substances.

c. Maximum reduction of heat load demands for processing.

d. Maximum utilization of mid-day (12:00 p.m. (noon) to 4:00 p.m.) atmospheric turbulence for boiler lancing or soot blowing.

HISTORY: Amended by State Register Volume 24, Issue No. 5, eff May 26, 2000; State Register Volume 25, Issue No. 10, eff October 26, 2001; State Register Volume 35, Issue No. 5, eff May 27, 2011; State Register Volume 36, Issue No. 2, eff February 24, 2012 (errata); State Register Volume 36, Issue No. 9, eff September 28, 2012 (errata); State Register Volume 37, Issue No. 4, eff April 26, 2013.

Editor's Note

Scrivener's error corrected in 2017, in Table 1, Part A, 3, substituting "should" for "shall", and removing "only" following "operations".

61–62.4. Hazardous Air Pollution Conditions.

A. Definitions

The following words and phrases when used in this regulation shall have the meanings respectively ascribed to them:

1. Hazardous Conditions (or hazardous levels)—Conditions created by the release or discharge into the ambient air of one (1) or more air contaminants which because of the characteristics and/or quantity of material involved may pose an imminent threat to the health of anyone who might come in contact with the material through this release as well as involving substantial risk of injury, to include injury to property or plant and animal life. This includes the indirect threat to human life and property by the creation of traffic hazards.

2. Traffic Hazards—Impairment of visibility whenever the concentration of dust, fumes, condensed vapor, or any other substance is such that the horizontal visibility at or near ground level is reduced to 2400 feet or less.

B. General

The owner or operator of any source, in addition to complying with all applicable regulations and standards, shall take all steps necessary to protect human health and welfare and otherwise minimize the effects of unintended, short-term or other releases of air contaminants and other substances which produce unintended hazardous conditions.

C. Traffic Hazards

The emission of smoke, dust, fumes, condensed vapor, or any other substance which creates a traffic hazard on public roads by impairment of visibility, or intensifies an existing condition to the extent that a traffic hazard is created is prohibited.

D. EMERGENCY ACTIONS

In the event that releases of dust, fumes, smoke, gases, mists, vapors, or other substances occur in such quantity as to create imminently hazardous levels, the owner or operator of the source shall take all necessary emergency acts to cause the release to cease, to notify nearby residents and occupants, to assist in evacuation if deemed necessary, to notify the Department immediately, and to take such other action as responsible officials deem advisable.

E. Cleanup

If releases to the atmosphere of air contaminants result from spillage and cause such concentrations as to produce an imminently hazardous level, clean up activities shall begin as soon as possible and shall be completed to the satisfaction of the Commissioner.

F. NOTIFICATION

The affected public, the Department, the South Carolina Disaster Preparedness Agency, and all law enforcement officials having jurisdiction shall be notified promptly by the owner or operator of the source in the event of releases of material which may cause imminently hazardous levels. If traffic hazards are created, notification shall be made to appropriate state or local agencies of the possible existence of such a condition and of the corresponding need for posting of appropriate signs, warning devices, or flagmen. When the concentrations of materials are reduced sufficiently as to no longer present an imminent hazard, public announcement will be made, and normal operations may resume.

HISTORY: Amended by State Register Volume 36, Issue No. 2, eff February 24, 2012 (errata); State Register Volume 36, Issue No. 9, eff September 28, 2012 (errata).

(Statutory Authority: S.C. Code § 48–1–10 et seq.)

Editor's Note

The following constitutes the history for 61–62.5 standards 1 through 8 unless noted otherwise:

HISTORY: Amended by State Register Volume 16, Issue No. 6, eff June 26, 1992; State Register Volume 18, Issue No. 11, eff November 25, 1994; State Register Volume 19, Issue No. 2, eff February 24, 1995; State Register Volume 20, Issue No. 4, eff April 26, 1996; State Register Volume 21, Issue No. 12, eff December 26, 1997; State Register Volume 22, Issue No. 6, Part 2, eff June 26, 1998; State Register Volume 23, Issue No. 6, eff June 25, 1999; State Register Volume 24, Issue No. 5, eff May 26, 2000; State Register Volume 25, Issue No. 10, eff October 26, 2001; State Register Volume 26, Issue No. 6, Part 2, eff June 28, 2002; State Register Volume 28, Issue No. 6, eff June 25, 2004; State Register Volume 28, Issue No. 9, eff September 24, 2004; State Register Volume 29, Issue No. 6, eff June 24, 2005; State Register Volume 31, Issue No. 5, eff May 25, 2007; State Register Volume 32, Issue No. 10, eff October 24, 2008; State Register Volume 33, Issue No. 4, eff April 24, 2009; State Register Volume 33, Issue No. 10, eff October 23, 2009; State Register Volume 35, Issue No. 2, eff February 25, 2011; State Register Volume 35, Issue No. 5, eff May 27, 2011.

STANDARD NO. 1

EMISSIONS FROM FUEL BURNING OPERATIONS

SECTION I—VISIBLE EMISSIONS

A. Existing Sources

No one shall discharge to the ambient air from any existing source constructed prior to February 11, 1971, smoke which exceeds opacity of forty (40) percent. The forty (40) percent opacity limit may be exceeded for soot blowing, but may not be exceeded for more than six (6) minutes in a one hour period nor be exceeded for more than a total of twenty-four (24) minutes in a twenty-four (24) hour period. Emissions caused by soot blowing shall not exceed sixty (60) percent.

B. New Sources

No one shall discharge to the ambient air from any source constructed on or after February 11, 1971, smoke which exceeds opacity of twenty (20) percent. The twenty (20) percent opacity limit may be exceeded for soot blowing, but may not be exceeded for more than six (6) minutes in a one hour period nor be exceeded for more than a total of twenty-four (24) minutes in a twenty-four (24) hour period. Emissions caused by soot blowing shall not exceed sixty (60) percent.

C. Special Provisions

Owners and operators shall, to the extent practicable, maintain and operate any source including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions. In addition, the owner or operator of fuel burning sources except natural gas and propane fired units, shall maintain a log of the time, magnitude, duration, and any other pertinent information to determine periods of startup and shutdown and make available to the Department upon request.

D. Test Method

The method which is approved by the Department for determining compliance with opacity limitations under this Section is EPA Reference Method 9 (40 Code of Federal Regulations (CFR) 60, Appendix A, as revised July 1, 1986). Alternate methods may be utilized only if approved in advance by the Department and by the Environmental Protection Agency (EPA).

SECTION II—PARTICULATE MATTER EMISSIONS

A. Allowable Discharge

The allowable discharge of particulate matter resulting from fuel burning operations shall be limited to the values obtained by use of Figure 1 and/or Part B. (For the purpose of determining heat input, total equipment capacity refers to total equipment capacity discharging through each

stack. If a boiler has more than one (1) stack the total rated capacity will be the boiler rated capacity discharging to these stacks). Interpolation of Figure 1 for fuel burning operations of 1300 million British thermal units (Btu) per hour (Btu/hr) heat input and larger shall be accomplished by use of the equation:

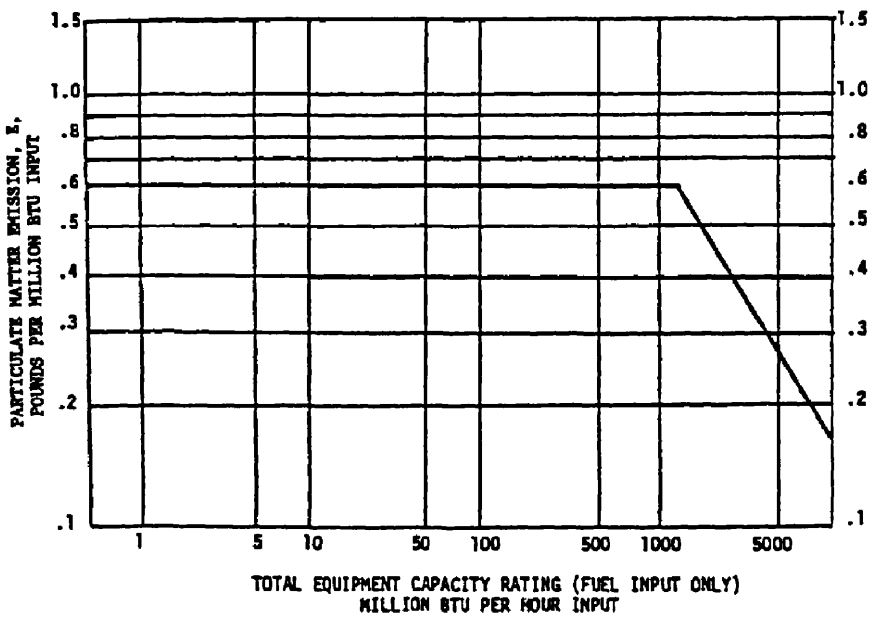
$$E = 57.84\ P^{-0.637}$$

where E = the allowable emission rate in pounds per million Btu heat input,
and P = million Btu/hr heat input

B. Special Provisions

All fuel burning operations of 10 million Btu/hr heat input and smaller constructed prior to February 11, 1971, shall be allowed 0.8 pounds (lbs) per million Btu input.

Figure 1



SECTION III—SULFUR DIOXIDE EMISSIONS

The maximum allowable discharge of sulfur dioxide (SO_2) from fuel burning operations shall be 2.3 lbs SO_2 per million Btu input.

SECTION IV—OPACITY MONITORING REQUIREMENTS

A. Applicable Sources

1. Fossil Fuel-Fired Boilers

The owner or operator of any fossil fuel-fired steam generator of more than 250 million Btu/hr heat input capacity shall install, calibrate, operate, and maintain no later than June 14, 1978, continuous monitoring system(s) for the measurement of opacity which meets the performance specifications of Section IV.D except where:

a. Gaseous fuel is the only fuel burned.

b. Oil or a mixture of gas and oil are the only fuels burned and the steam generator is able to comply with the provisions of Sections I and II of this standard without utilization of particulate matter collection equipment, and where the steam generator has never been found,

through any administrative or judicial proceedings, to be in violation of Section I of this standard.

c. The steam generator operates with an annual average capacity factor of thirty (30) percent or less, as reported to the Federal Power Commission for calendar year 1974 or otherwise adequately demonstrated to the Department; and has not subsequently increased this factor to more than thirty (30) percent.

2. Woodwaste Boilers

The owner or operator of any woodwaste boiler, not equipped with a wet scrubber, will be required to install, calibrate, operate, and maintain continuous monitoring system(s) approved by the Department for the measurement of opacity, if it meets one or more of the criteria listed in items A.2.a and A.2.b. If a boiler is fired on more than one fuel, the total capacity will determine the applicability.

a. Any woodwaste boiler of at least 100 x 10^6 Btu/hr rated heat input.

b. Any woodwaste boiler, regardless of size, that has been operating in noncompliance with any applicable state air pollution control regulations and standards.

B. Continuous Opacity Monitor Reporting Requirements

1. The owner or operator of any fossil fuel-fired steam generator subject to the provisions of Section IV.A shall submit a written Continuous Opacity Monitor report to the Department semi-annually or more often if requested. All semi-annual reports must be postmarked by the 30th day following the end of each semi-annual period. The report shall include, at a minimum, the information in items B.1.a through B.1.c below. A letter shall be sent in lieu of a semi-annual report if no incidences occurred during the reporting period.

a. All integrated six (6) minute opacity measurements for periods during which the applicable provisions of Section I have been exceeded, together with their nature and cause.

b. For periods of monitoring system malfunction:

(i) The date and time identifying each period during which the monitoring system was inoperative, except for zero and span checks.

(ii) The nature of monitoring system repairs or adjustments.

(iii) Proof of opacity monitoring system performance may be required by the Department whenever repairs or adjustments have been made.

c. Boiler system repairs or adjustments made to correct violations of the provisions of Section I.

2. Alternative data reporting procedures may be allowed if the owner or operator shows, to the satisfaction of the Department, that these procedures are at least as accurate as those described.

3. The owner or operator shall maintain a file of all information contained in the semi-annual reports, calibration data for the opacity monitoring system(s), relevant records of adjustments and maintenance performed on such system(s), and all other data generated by the continuous opacity monitoring system(s), for a minimum of two (2) years from the date of submission of such reports or collection of such data. The information contained on file must be made available for review by Department personnel upon request.

C. Exemption from Reporting Requirements

A temporary exemption from the opacity monitoring and reporting requirements of Section IV may be granted during any period of monitoring system(s) malfunction, provided the owner or operator shows, to the satisfaction of the Department, that the malfunction was unavoidable and is being repaired as expeditiously as possible.

D. Equipment Performance Specifications

1. The continuous opacity monitoring system(s) required by Section IV.A.1 (for fossil fuel-fired steam generators) shall conform with the performance specifications set forth in 40 CFR 60, Appendix B, Performance Specification 1, as revised July 1, 1986, which is incorporated by reference as a part of this standard except that where the term "Administrator" is used the term "Department"

shall be substituted. In addition, the opacity monitoring system(s) shall complete a minimum of one (1) cycle of operation for each successive 10-second period, be installed such that representative measurements of opacity from the affected steam generator are obtained, and have an instrument span of approximately eighty (80) percent opacity.

2. The owner or operator shall record the zero and span drift in accordance with the method prescribed by the manufacturer of such opacity monitoring system(s); subject the system(s) to the manufacturer's recommended zero and span check at least once daily unless the manufacturer has recommended adjustments at shorter intervals, in which case such recommendations shall be followed; adjust the zero and span whenever the 24-hour zero drift or 24-hour calibration drift limits of 40 CFR 60, Appendix B, Performance Specification 1, as revised July 1, 1986, are exceeded; adjust the opacity monitoring system(s) purchased prior to September 11, 1974, whenever the 24-hour zero drift or 24-hour calibration drift exceeds four (4) percent opacity for those generators constructed prior to February 11, 1971, and two (2) percent opacity for those generators constructed after February 11, 1971.

3. The monitoring systems must be approved by the Department prior to installation.

E. Monitor Location

When the effluents from two (2) or more affected steam generators of similar design and operating characteristics are combined before released to the atmosphere, the opacity monitoring system(s) shall be installed on the combined effluent. When the affected steam generators are not of similar design and operating characteristics, or when the effluent from one (1) affected steam generator is released to the atmosphere through more than one (1) point, the owner or operator shall apply for an alternate procedure to comply with the requirements of Section IV.

F. Exemptions from Monitoring Requirements

Whenever the requirements for continuous opacity monitoring cannot be implemented by the owner or operator due to physical source limitations, extreme economic burden, or infrequent steam generator operation of less than thirty (30) days per year, or when the specified monitoring procedure would not provide accurate opacity determinations, alternate monitoring and reporting requirements may be approved on a case-by-case basis provided the owner or operator submits a written request to the Department which includes, but is not limited to:

1. The basis or reason(s) that alternate requirements are necessary;

2. A proposal of the alternate monitoring and reporting requirements; and

3. Any other information needed by the Department to make a determination that the alternate requirements are adequate to meet the intent of Section IV.

SECTION V—EXEMPTIONS

The following sources shall be exempt from the provisions of this standard:

A. Residences of four (4) families or less.

B. Ocean-going vessels actually engaged in the physical process of national or international trade or defense.

SECTION VI—PERIODIC TESTING

An owner or operator of any source listed below shall ensure that scheduled periodic tests for particulate matter emissions are conducted every two (2) years or as required by permit conditions and are performed in accordance with the provisions of Regulation 61–62.1, Section IV, Source Tests. An owner or operator shall demonstrate compliance with SO_2 emissions by source testing, continuous monitoring, or fuel analysis as required by permit conditions.

A. Oil-fired boilers greater than 250×10^6 Btu/hr rated input.

B. Coal-fired boilers greater than 50×10^6 Btu/hr rated input.

C. Woodwaste or combination woodwaste boilers greater than 20×10^6 Btu/hr rated input.

SECTION VII—[RESERVED]

HISTORY: Amended by State Register Volume 36, Issue No. 5, eff May 25, 2012 (errata); State Register Volume 36, Issue No. 9, eff September 28, 2012 (errata); State Register Volume 38, Issue No. 6, Doc. No. 4388, eff June 27, 2014; State Register Volume 39, Issue No. 6, Doc. No. 4481, eff June 26, 2015; State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016.

Editor's Note

Scrivener's error corrected in 2017, deleting paragraph following IV.A.2.b.

STANDARD NO. 2

AMBIENT AIR QUALITY STANDARDS

The following table, unless otherwise noted, constitutes the primary and secondary ambient air quality standards for the State of South Carolina. The computations for determining if the applicable standard is met, along with the analytical methods to be used, will be those applicable Federal Reference Methods and Interpretations published in the Appendices to 40 Code of Federal Regulations (CFR) 50, or those methods designated as Federal Equivalent Methods (FEM) in accordance with 40 CFR 53. In the case of Gaseous Fluorides, either the double paper tape sampler method (ASTM D-3266-91 or later), the sodium bicarbonate-coated glass tube and particulate filter method (ASTM D-3268-91 or later), or an approved method may be used.

Pollutant	**Reference**	**Measuring Interval**	**Standard Level**			
			mg/m³	**μg/m³**	**ppm**	**ppb**
Sulfur Dioxide	40 CFR 50.4 40 CFR 50.5	3 hour (secondary)	-	1300	0.5	-
	40 CFR 50.17	1 hour (primary)	-	-	-	75
PM_{10}	40 CFR 50.6	24 hour	-	150	-	-
$PM_{2.5}$	40 CFR 50.13	24 hour (primary)	-	35	-	-
	40 CFR 50.18	Annual (primary)	-	12	-	-
		24 hour (secondary)	-	35	-	-
		Annual (secondary)	-	15	-	-
Carbon Monoxide	40 CFR 50.8	1 hour (no secondary)	40	-	35	-
		8 hour (no secondary)	10	-	9	-
Ozone	40 CFR 50.15	8 hour (2008)	-	-	0.075	-
	40 CFR 50.19	8 hour (2015)	-	-	0.070	-
Nitrogen Dioxide	40 CFR 50.11	Annual	-	100	0.053	53
		1 hour	-	-	-	100
Lead	40 CFR 50.16	Rolling 3-month Average	-	0.15	-	-

HISTORY: Amended by State Register Volume 36, Issue No. 4, eff April 27, 2012; State Register Volume 36, Issue No. 9, eff September 28, 2012 (errata); State Register Volume 38, Issue No. 9, Doc. No. 4465, eff September 26, 2014; State Register Volume 39, Issue No. 6, Doc. No. 4481, eff June 26, 2015; State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016.

STANDARD NO. 3

WASTE COMBUSTION AND REDUCTION

(Statutory Authority: S.C. Code § 48–1–10 et seq.)

SECTION I - APPLICABILITY

A. Except as provided for in paragraphs J and K of this section, this standard applies to any source, regardless of type or construction date, which burns any waste other than virgin fuel for any purpose.

B. Municipal Waste Combustion facilities constructed, reconstructed or modified on or before September 20, 1994, with a unit capacity greater than 250 tons per day of Municipal Solid Waste (MSW) shall be subject to 40 Code of Federal Regulations (CFR) 60, Subpart Cb, Emission Guidelines and Compliance Schedules for Municipal Waste Combustors, promulgated December 19, 1995, 60 Federal Register (FR) 65415, and amended August 25, 1997, 62 FR 45119 and 45125 and the South Carolina Air Quality Implementation Plan. For the purposes of this standard, the definitions contained in the various provisions of 40 CFR 60, adopted herein, shall apply except that the term "Administrator," when used in 40 CFR 60, shall mean the Department. These Municipal Waste Combustors shall also be subject to any provision of this standard that would impose a more restrictive emission limit or requirement.

C. Sources burning more than one type of waste are subject to the most restrictive requirements of this standard for the wastes being burned.

D. Hospital/medical/infectious waste incinerators are subject to Standard No. 3.1 of Regulation 61–62.5.

E. Hospital/medical/infectious waste incinerators burning other waste in addition to medical waste are subject to the requirements of this standard that are more restrictive than those found in Standard No. 3.1 for the waste being burned.

F. Municipal waste combustors subject to 40 CFR 60, Subpart Ea; 40 CFR 60, Subpart Eb; or 40 CFR 60, Subpart Cb are subject to more restrictive requirements of this standard applicable to the waste being burned.

G. Municipal waste combustors, excluding air curtain incinerators, subject to this standard that meet the definition of retail business incinerators or commercial incinerators are subject only to the requirements of this standard applicable to those units.

H. Any unit that burns tires as its only MSW is not subject to the portions of this standard applicable to Municipal Waste Combustors if the owner or operator of the unit:

1. Notifies the Department of an exemption claim; and

2. Provides data documenting that the unit qualifies for this exemption.

I. Air curtain incinerators subject to this standard whose only municipal solid waste being burned is yard waste are subject only to those requirements of this standard applicable to air curtain incinerators. Air curtain incinerators subject to this standard that burn any other municipal solid waste other than yard waste are subject only to the requirement of having refractory lined pits that is applicable to air curtain incinerators and to all the requirements of this standard applicable to municipal waste combustors.

J. Exemptions

1. Industrial furnaces and boilers at pulp and paper facilities burning only black liquor, only total reduced sulfur (TRS) compounds, or only black liquor and/or TRS compounds and/or virgin fuel are not subject to this standard. Also, total reduced sulfur control devices burning only gaseous TRS and virgin fuel are not subject to this standard. Gaseous process streams containing TRS compounds that are regulated in accordance with Section XI of Regulation 61–62.5, Standard No. 4, Emissions from Process Industries, and/or 40 CFR 60, Subpart BB, Standards of Performance for Kraft Pulp Mills, are also not subject to this standard. Exemptions for additional process streams will be considered on a case-by-case basis. Additions to black liquor for the purpose of waste disposal shall not be exempt from this standard.

2. Facilities utilizing a renewable energy resource burned for energy recovery may request an exemption from this standard by: 1) submitting a site-specific chemical analysis of the renewable energy resource and/or source testing results to the Department for review, and 2) providing additional documentation as necessary so that the Department can confirm that the exemption will be protective of human health and the environment. The Department reserves the right to deny a request for an exemption to Standard No. 3 for any renewable energy resource(s) that does not satisfy the above conditions.

3. A facility with an emission unit and/or control device that complies with all the requirements of an applicable Maximum Achievable Control Technology (MACT) Standard under 40 CFR 63, including the testing and reporting requirements, may request an exemption from this standard.

Facilities requesting such an exemption shall provide any documentation as necessary in order for the Department to make a determination. Upon review of such a request, the Department may grant an exemption from this standard if it determines that compliance with the applicable MACT Standard(s) would be as protective of human health and the environment as the requirements of this standard. Any new waste and/or process stream must be evaluated by the Department in order to maintain this exemption. Also, any operational change that may impact emissions from the waste must be evaluated by the Department in order to maintain this exemption.

K. Space heaters engineered to burn used oil will be exempt from this standard provided the used oil is generated on-site or originates from "do-it-yourself" oil changes and provided also that the burners are rated at no more than 0.5×10^6 British thermal unit per hour (Btu/hr) heat input and the exhaust is vented to the ambient air. No construction or operating permit will be required.

L. This standard was effective on the date of publication in the State Register, which was originally February 26, 1988. Subsequent dates of effective revisions published in the State Register will be indicated at appropriate places as necessary in this standard.

M. For the purpose of this standard, existing sources are sources that are "in existence" on February 26, 1988, unless otherwise noted herein.

SECTION II - GENERAL

This standard will not supersede any other state or federal requirements including but not limited to federal New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP), state or federal Prevention of Significant Deterioration (PSD) Regulations, Hazardous Waste Management Regulations, nor special permit conditions, unless a more restrictive emission limit or requirement is imposed by this standard.

SECTION III - EMISSION LIMITATIONS AND OPERATING REQUIREMENTS

A. Case-by-Case Limitations - Emission limitations other than those stated below, determined in part by material being incinerated or burned and/or by source testing, may be set on a case-by-case basis.

B. **Retail Business Incinerators**

1. Opacity shall not exceed 20 percent.
2. Particulate Matter (PM) - No established limit.

C. **Crematory Incinerator**

1. Opacity shall not exceed 10 percent.
2. PM - No established limit.

D. **Sludge Incinerators**

1. Opacity shall not exceed 20 percent.
2. Particulate matter emissions shall not exceed 1.3 pounds per ton (lb/ton) of dry sludge.
3. Mercury (Hg) emissions shall not exceed 3200 grams/day.

E. **Hazardous Waste Incinerators**

1. Opacity shall not exceed 10 percent.
2. Hydrochloric acid (HCl) emissions may exceed 4 pounds per hour (lb/hr) only if they are controlled with an efficiency of at least 99 percent.
3. Particulate matter emissions shall not exceed 0.08 grains/Dry Standard Cubic Feet (DSCF) corrected to 7 percent oxygen (O_2) measured on a dry basis.
4. Other emission limits are as follows:

TABLE I

Material	Emission Limit[a]
Nickel (Ni)	6.0×10^{-3} lb / 10^6 Btu total heat input
Cadmium (Cd)	1.0×10^{-4} lb / 10^6 Btu total heat input
Chromium (Cr)	5.0×10^{-4}lb / 10^6 Btu total heat input
Arsenic (As)	2.5×10^{-4} lb / 10^6 Btu total heat input

Material	Emission Limit[a]
Lead (Pb)	5.0×10^{-3} lb / 10^6 Btu total heat input

[a] The total heat input value shall include the Btu from the waste and virgin fuel used for production. Furthermore, the total heat input value shall not exceed the Btu used to affect the combustion of the waste and shall not include any Btu input from auxiliary burners located outside of the primary combustion chamber such as those found in secondary combustion chambers, tertiary combustion chambers or afterburners unless those auxiliary burners are fired with waste. In the case where waste is fired in the auxiliary burners located outside of the primary combustion chamber, only the Btu value of the fuel for the auxiliary burner which is from waste shall be added to the total heat input value.

5. All principal organic hazardous constituents (POHC) must be destroyed with an efficiency of at least 99.99 percent.

6. All POHC must be destroyed with an efficiency of at least 99.9999 percent when the waste being burned is hazardous wastes F020, F021, F022, F023, F026, or F027 as specified in the South Carolina Hazardous Waste Management Regulation 61–79.264.343(a)(2). A demonstration of this efficiency must be performed as specified in the referenced paragraph. The definitions of hazardous wastes F020, F021, F022, F023, F026, and F027 can be found in the South Carolina Hazardous Waste Management Regulation 61–79.261.31(a).

F. Municipal Waste Combustors (effective June 25, 1999)

1. Opacity shall not exceed 20 percent.

2. Particulate matter (PM) emissions shall not exceed:

a. Existing sources - 0.08 grains/DSCF corrected to 7 percent O_2

b. New sources - "Best Available Control Technology" (BACT) as defined in Regulation 61–62.5, Standard No. 7, (b)(8).

3. Carbon monoxide (CO) emissions, as measured at a location upstream of the control devices, shall not exceed those values listed in Table II, corrected to 7 percent O_2 on a dry basis except as provided in paragraph 4 below.

TABLE II

Municipal Waste Combustor Technology[a]	CO emission limit (ppmv)[b]	Averaging time (hrs)
Mass burn waterwall	100	4
Mass burn refractory	100	4
Mass burn rotary refractory	100	24
Mass burn rotary waterwall	250	24
Modular starved air	50	4
Modular excess air	50	4
Refuse-derived fuel stoker	200	24
Bubbling fluidized bed combustor	100	4
Circulating fluidized bed combustor	100	4
Pulverized coal/refuse-derived fuel mixed fuel-fired combustor	150	4
Spreader stoker coal/refuse-derived fuel mixed fuel-fired combustor	200	24
Other	100	4

[a] As defined in 40 CFR 60 Subpart Eb

[b] Measured at the combustor outlet in conjunction with a measurement of oxygen concentration, corrected to 7 percent O_2, CO and O_2 shall be measured on a dry basis.

4. Cement kilns burning municipal solid waste may exceed the values listed in Table II provided they do not exceed 20 parts per million by volume (ppmv) total hydrocarbons (THC) hourly average, as propane (as determined by Environmental Protection Agency (EPA) Reference Method 25A (40 CFR 60, Appendix A) or from Continuous Emission Monitors (CEMs) meeting

Performance Specification 2.2 of 40 CFR 266, Appendix IX), measured at the kiln outlet corrected to 7 percent O_2, both measured on a dry basis.

5. Hydrochloric acid (HCl) emissions shall not exceed:

a. Existing sources - 250 ppmv corrected to 7 percent O_2, both measured on a dry basis, hourly average; or a 50 percent reduction by weight or volume, whichever is less stringent.

b. New sources - 30 ppmv, hourly average, corrected to 7 percent O_2, both measured on a dry basis; or the facility shall install emission controls that, on the date of the permit to construct, meet the criteria of BACT as defined in Regulation 61–62.5, Standard No. 7, (b)(8).

6. Combustion efficiency (C.E.) shall be at least 99.9 percent on an hourly basis, computed as follows:

$$C.E. = [CO_2]/([CO_2] + [CO]) \times 100$$

where:

$[CO_2]$ = Concentration of carbon dioxide (ppmv corrected to 7 percent O_2) measured on a dry basis; and [CO] = Concentration of carbon monoxide (ppmv corrected to 7 percent O_2) measured on a dry basis.

7. The combustor shall maintain the combustion chamber exit gases at a required temperature greater than the temperature at which compliance was demonstrated through source test for particulate matter emissions, CO emissions and combustion efficiency. The combustor shall be equipped with automatically controlled auxiliary fuel burners to maintain the combustion at the required temperature under all waste firing conditions and to ensure that the combustor will reach the required temperature prior to the introduction of waste. To confirm the temperature, a thermocouple shall be appropriately located at the exit of the combustion chamber such that the flames do not impinge on the sensor.

8. The firing of the burners and the combustion air shall be modulated automatically to maintain the required combustion chamber exit temperature.

9. Large, bulky non-combustibles (for example, water heaters, refrigerators) and difficult to burn, bulky combustible materials (for example, mattresses, sofas) shall not be charged to the combustor.

10. Tipping areas shall be enclosed and maintained at a negative pressure. The evacuated air from the tipping area shall be used as primary combustion air in the combustor. Open storage of municipal waste is prohibited.

11. Open storage of ash is prohibited. Ash shall be loaded in an enclosed area or handled wet in enclosed containers.

12. Any visible emissions of ash from an ash conveying system including conveyor transfer points shall not exceed 5 percent of the observation period (that is, 9 minutes per 3-hour period), as determined by EPA Reference Method 22 (40 CFR 60, Appendix A) observations. The minimum observation time shall be a series of three one-hour observations that include times when the facility is transferring ash from the municipal waste combustor to the area where ash is stored or loaded into containers or trucks. The average duration of visible emissions per hour shall be calculated from the three one-hour observations. This emission limit does not cover visible emissions discharged inside buildings or enclosures of ash conveying systems; however, this emission limit does cover visible emissions discharged to the atmosphere from buildings or enclosures of ash conveying systems.

13. The source owner or operator shall prepare and submit for Department approval an inspection and maintenance plan and a plan of action for the facility prior to startup. The inspection and maintenance plan shall include calibration, inspection and maintenance schedules along with operating and monitoring parameters for the combustor, associated control equipment and monitoring devices. The plan of action shall identify the steps and procedures the operator will follow to avoid exceedances of the emission limits and operating conditions specified in paragraphs F.1 thru F.7 and F.12 of this section. The plan shall include descriptions of startup and shutdown procedures, actions to be taken to correct anomalous operating conditions and training of plant operators.

14. The combustor shall be equipped with an automatic loader or a sealed feeding device and equipped with the interlocks specified in paragraph 15 below.

15. The charging of waste to the combustor shall automatically cease through the use of an interlock system when any of the following conditions exist:

a. The average combustion chamber exit temperature drops below the required temperature for a rolling 15-minute period;

b. The average flue gas oxygen level drops below 3 percent (dry basis) for a rolling 15-minute period;

c. The average opacity of the visible emissions is equal to or greater than 20 percent for a rolling 15-minute period;

d. The average combustion efficiency drops below 99.5 percent for a rolling 15- minute period; or

e. The monitoring equipment required by Section VI.A.2.e of this standard is not functioning.

16. Some deviation from the above temperature, flue gas oxygen, and CO limits may be permissible for those combustors utilizing advanced combustion technologies or burning specially prepared municipal solid wastes.

17. Startup and Shutdown Requirements:

a. No waste shall be charged to the combustor until the required combustion chamber exit temperature reaches equilibrium. Control equipment shall be operating and functioning properly before waste is introduced into the combustor and until all the wastes are combusted or extinguished;

b. During shutdowns, the required combustion chamber exit temperature is to be maintained using auxiliary burners until the wastes are completely combusted or extinguished; and

c. A detailed procedure for normal system startup and shutdown shall be submitted as a part of the application for approval including the duration of preheat and burnout cycles.

G. **Air Curtain Incinerator**

1. Opacity shall not exceed 20 percent, except that an opacity level of up to 35 percent is permitted during startup periods during the first 30 minutes of operation of the unit.

2. Air curtain incinerators shall be required for the burning of yard waste (excluding plastic bags), land clearing waste consisting of only untreated natural wood debris, and untreated or unfinished woodwaste that does not occur on the premises on which it originates. This requirement may be waived for non-reoccurring instances.

3. Refractory lined pits shall be required.

4. **Performance Requirements:**

a. The amount of material to be incinerated shall not exceed 38,325 tons per year without a PSD review. Records of tons per year incinerated shall be kept and maintained for at least two years and made available to the Department upon request;

b. Onsite storage of debris to be incinerated shall be kept to a minimum;

c. Material to be incinerated shall be incinerated within one week of storage unless otherwise approved by the Department;

d. This air curtain incinerator is permitted to burn only yard waste (excluding plastic bags), land clearing waste consisting of only untreated natural wood debris, untreated or unfinished woodwaste, and clean wood;

e. An operation and maintenance program shall be developed and adhered to at all times to ensure the proper operation of this facility;

f. Good operation practices shall be exercised to minimize emissions from incineration. This shall include the wetting of ash prior to removal from the air curtain incinerator;

g. Winds during the time of burning or ash removal must be away from any area in which the ambient air may be significantly affected by the smoke or ash from this operation if that area contains a public roadway or a residential, commercial, or industrial site;

h. All ash shall be stored in compliance with the requirements of the South Carolina Solid Waste Management Regulation 61–107.12;

i. No burning shall take place if the air curtain incinerator is not operating properly or at its design air flow;

j. The air curtain incinerator shall be used at all times that the pit contains burning permitted material except during startup to get the fire ignited;

k. The air curtain incinerator shall be located so as to maximize the distance to business and residential areas and shall be located at least 500 feet from any business or residence located on adjacent properties;

l. Access roads and loader work areas shall be maintained in such a manner so as to minimize fugitive emissions. This shall include the use of water sprays, dust controlling chemicals (but not volatile organic compounds) or other Department approved dust suppression systems;

m. Stacking rakes or similar devices shall be utilized on loader equipment when loaders are used to charge the pit in order to minimize dirt on the material to be burned; and

n. Any change in location of the air curtain incinerator must have prior written approval from the Department.

5. PM - No established limit.

H. Commercial Incinerators (effective June 25, 1999)

1. Opacity shall not exceed 20 percent.

2. Particulate matter emissions shall not exceed 0.15 grains / DSCF corrected to 7 percent O_2 on a dry basis.

3. CO emissions shall not exceed 100 ppmv hourly average corrected to 7 percent O_2. CO and O_2 shall be measured on a dry basis.

4. The unit shall maintain the combustion gases at a temperature greater than the temperature at which compliance was demonstrated through source test for particulate matter and CO emissions. The unit shall be equipped with automatically controlled auxiliary fuel burners to maintain the combustion gases at the required temperature under all waste firing conditions and to ensure that the unit will reach the required temperature prior to the introduction of waste. To confirm the temperature, a thermocouple shall be appropriately located at the exit of the combustion chamber such that the flames do not impinge on the sensor.

5. The firing of the burners and the combustion air shall be modulated automatically to maintain the required temperature.

6. Open storage of ash is prohibited. Ash shall be loaded in an enclosed area or handled wet in enclosed containers.

7. Startup and Shutdown Requirements:

a. No waste shall be charged to the incinerator until the required combustion chamber exit temperature reaches equilibrium;

b. During shutdowns, the required combustion chamber exit temperature is to be maintained using auxiliary burners until the wastes are completely combusted or extinguished; and

c. A detailed procedure for normal system startup and shutdown shall be submitted as a part of the application for approval including the duration of preheat and burnout cycles.

I. **Industrial Incinerators**

1. Opacity shall not exceed 20 percent.

2. Particulate matter emissions shall not exceed 0.5 lbs/10^6 Btu total heat input. The total heat input value from waste and virgin fuel used for production shall not exceed the Btus used to affect the combustion of the waste and shall not include any Btu input from auxiliary burners located

outside of the primary combustion chamber such as those found in secondary combustion chambers, tertiary combustion chambers or afterburners unless those auxiliary burners are fired with waste. In the case where waste is fired in the auxiliary burners located outside of the primary combustion chamber, only the Btu value of the fuel for the auxiliary burner which is from waste shall be added to the total heat input value.

3. Industrial incinerators with a total design capacity of less than $1x10^6$ Btu/hr including auxiliary devices used to recondition parts shall be exempt from all requirements of this standard except for the following:

a. Opacity shall not exceed 20 percent; and

b. Records documenting the contaminant being removed and possible emissions from the process shall be maintained and made available for Department review.

J. **Industrial Boilers and Utility Boilers**

1. Emission limits as stated in Table III shall apply. More restrictive opacity and/or mass emission limits than specified in Regulation 61–62.5, Standard No. 1 may be imposed based on source test results to ensure compliance with these limits.

TABLE III[b]

Material	Emission Limit[a]
Nickel (Ni)	6.0×10^{-3} lb / 10^6 Btu total heat input
Cadmium (Cd)	1.0×10^{-4} lb / 10^6 Btu total heat input
Chromium (Cr)	7.4×10^{-4} lb / 10^6 Btu total heat input
Arsenic (As)	1.7×10^{-3} lb / 10^6 Btu total heat input
Lead (Pb)	5.0×10^{-3} lb / 10^6 Btu total heat input
Hydrochloric Acid (HCl)	0.45 lb / 10^6 Btu total heat input

[a] The total heat input value shall include the Btu from the waste and virgin fuel used for production. Furthermore, the maximum total heat input value to be used in determining the emission limitations shall be limited to the Btus necessary to maintain production. The Btu from other sources such as afterburners shall not be considered in determining this total heat input value unless those auxiliary burners are fired with waste. In the case where waste is fired in the auxiliary burners located outside of the primary combustion chamber, only the Btu value of the fuel for the auxiliary burner which is from waste shall be added to the total heat input value.

[b] Source testing for metals or HCl will not be required at facilities burning waste with no metals or chlorine in the waste. Analysis showing these constituents to be nondetectible by reference method in the waste would be an alternative method for determining compliance with emission limits as allowed by Regulation 61–62.5, Standard No. 3, Section VIII(A).

2. HCl emissions may exceed 0.45 lb/10^6 Btu total heat input only if the HCl emissions are controlled with an efficiency of at least 99 percent.

3. All principal organic hazardous constituents (POHC) must be destroyed with an efficiency of at least 99.99 percent (only if burning hazardous waste).

4. All POHC must be destroyed with an efficiency of at least 99.9999 percent when the waste being burned is hazardous wastes F020, F021, F022, F023, F026, or F027 as specified in the South Carolina Hazardous Waste Management Regulation 61–79.264.343(a)(2). A demonstration of this efficiency must be performed as specified in the referenced paragraph. The definitions of hazardous wastes F020, F021, F022, F023, F026, and F027 can be found in the South Carolina Hazardous Waste Management Regulation 61–79.261.31(a).

5. Any boiler less than 10×10^6 Btu/hr rated heat input will be restricted to the use of virgin fuel and/or spec. oil.

6. Sources burning small quantities of waste that is generated by the owner/operator and is burned as described in Table IV below, are exempt from the requirements of this standard except as follows:

a. There must be a valid permit for the boiler which specifies the exact waste to be burned;

b. Analysis may be required to prove that the material to be burned is one of the substances authorized by the permit; and

c. Records of the material being burned (that is, gallons per month or tons per month) and its firing rate must be kept and made available to the Department upon request.

TABLE IV

Boiler Size (1×10^6 Btu/hr)	Waste Firing Rate (heat input of waste/ design heat input of unit)
>10 - 50	0.1
>50	0.06

7. Sources burning specification used oil are exempt from the emissions limitations listed in Table III, provided paragraphs 6a and 6b above are complied with.

K. Non-Industrial Boilers - Regardless of size, non-industrial boilers, with the exception of utility boilers, are restricted to the use of virgin fuels and/or spec. oil.

L. **Industrial Furnaces**

1. Emission limits as stated in Section III, Table III, shall apply. More restrictive opacity and/or mass emission limits than specified in Regulation 61–62.5, Standard No. 4 may be required based on source test results to ensure compliance with these limits.

2. All principal organic hazardous constituents (POHC) must be destroyed with an efficiency of at least 99.99 percent (only if burning hazardous waste).

3. All POHC must be destroyed with an efficiency of at least 99.9999 percent when the waste being burned is hazardous wastes F020, F021, F022, F023, F026, or F027 as specified in the South Carolina Hazardous Waste Management Regulation 61–79.264.343(a)(2). A demonstration of this efficiency must be performed as specified in the referenced paragraph. The definitions of hazardous wastes F020, F021, F022, F023, F026, and F027 can be found in the South Carolina Hazardous Waste Management Regulation 61–79.261.31(a).

4. Any furnace less than 10×10^6 Btu/hr rated heat input will be restricted to the use of virgin fuel and/or spec. oil.

5. Sources burning small quantities of waste that is generated by the owner/operator and is burned as described in Table V below, are exempt from the requirements of this standard except as follows:

a. There must be a valid permit for the furnace which specifies the exact waste to be burned;

b. Analysis may be required to prove that the material to be burned is one of the substances authorized by the permit; and

c. Records of the material being burned (that is, gallons per month or tons per month) and its firing rate must be kept and made available to the Department upon request.

TABLE V

Furnace Size (1×10^6 Btu/hr)	Waste Firing Rate (heat input of waste/ design heat input of unit)
>10 - 50	0.1
>50	0.06

6. Sources burning specification used oil are exempt from the emissions limitations listed in Table III, provided paragraphs 5a and 5b above are complied with.

7. HCl emissions may exceed 0.45 lb/10^6 Btu total heat input only if the HCl emissions are controlled with an efficiency of at least 99 percent.

M. Non-Industrial Furnaces - Regardless of size, non-industrial furnaces are restricted to the use of virgin fuels and/or spec. oil.

N. Combination Sources - When a source engages in activities that can be construed as being in more than one classification, the more restrictive limitations will apply.

SECTION IV - NOTIFICATION REQUIREMENTS AND COMPLIANCE SCHEDULES

A. Sources in Existence on the Effective Dates of the Standard

1. All sources subject to source testing must be in compliance within one year of February 26, 1988, unless otherwise stated in this standard. Other requirements for specific source types are listed below.

2. Specific Source Types

a. Retail Business Incinerators - Compliance will be required as of February 26, 1988.

b. Crematory Incinerator - Compliance will be required as of February 26, 1988.

c. Sludge Incinerators - Compliance with the opacity limitation will be required as of February 26, 1988.

d. Hazardous Waste Incinerators

(i) All hazardous waste incinerators must notify the Department in writing of their intent to operate, including information regarding the fuel and waste (amount, type(s), specification/analyses) and method of operation within 60 days of February 26, 1988, unless otherwise stated in this standard. The Department will notify the source within 30 days of receipt of this information if a formal permit application is needed.

(ii) Hazardous waste incinerators that require a permit application must make this submittal within 90 days of notification by the Department that a permit application is required.

(iii) Compliance with the opacity limitation will be required as of February 26, 1988.

e. Municipal Waste Combustors

(i) All municipal waste combustors must notify the Department in writing of their intent to operate, including information regarding the fuel and waste (amount, type(s), specification/analyses) and method of operation within 60 days of June 25, 1999, unless otherwise stated in this standard. The Department will notify the source within 30 days of receipt of this information if a formal permit application is needed.

(ii) Municipal waste combustors that require a permit application must make this submittal within 90 days of notification by the Department that a permit application is required.

(iii) Compliance with the opacity limitation will be required as of February 26, 1988.

f. Air Curtain Incinerators

(i) Compliance with Section III.G.1 will be required as of February 26, 1988.

(ii) Compliance with Section III.G.2. and G.4. will be required within 180 days of May 25, 1990.

(iii) Compliance with Section III.G.3. shall be required within 180 days of May 25, 1990, for all permanent sites (that is, sites used more than six months) and within three years of May 25, 1990, for all portable air curtain incinerators used at temporary sites.

g. Commercial Incinerators

(i) All commercial incinerators must notify the Department in writing of their intent to operate, including information regarding the fuel and waste (amount, type(s), specification/analyses) and method of operation within 60 days of June 25, 1999, unless otherwise stated in this standard. The Department will notify the source within 30 days of receipt of this information if a formal permit application is needed.

(ii) Commercial incinerators that require a permit application must make this submittal within 90 days of notification by the Department that a permit application is required.

(iii) Compliance with the opacity limitation will be required as of February 26, 1988.

h. Industrial Incinerators

(i) All industrial incinerators must notify the Department in writing of their intent to operate, including information regarding the fuel and waste (amount, type(s), specification/analyses) and method of operation within 60 days of February 26, 1988, unless otherwise stated in this standard. The Department will notify the source within 30 days of receipt of this information if a formal permit application is needed.

(ii) Industrial incinerators that require a permit application must make this submittal within 90 days of notification by the Department that a permit application is required.

(iii) Compliance with the opacity limitation will be required as of February 26, 1988.

i. Industrial Boilers and Utility Boilers

(i) All industrial boilers and utility boilers must notify the Department in writing of their intent to operate, including information regarding the fuel and waste (amount, type(s), specification/analyses) and method of operation within 60 days of February 26, 1988, unless otherwise stated in this standard. The Department will notify the source within 30 days of receipt of this information if a formal permit application is needed.

(ii) Industrial boilers and utility boilers that require a permit application must make this submittal within 90 days of notification by the Department that a permit application is required.

j. Non-Industrial Boilers - Compliance will be required as of February 26, 1988.

k. Industrial Furnaces

(i) All industrial furnaces must notify the Department in writing of their intent to operate, including information regarding the fuel and waste (amount, type(s), specification/analyses) and method of operation within 60 days of February 26, 1988, unless otherwise stated in this standard. The Department will notify the source within 30 days of receipt of this information if a formal permit application is needed.

(ii) Industrial furnaces that require a permit application must make this submittal within 90 days of notification by the Department that a permit application is required.

l. Non-Industrial Furnaces - Compliance will be required as of February 26, 1988.

B. New Sources - Any source to which this standard is applicable and which is not in existence on the effective dates of this standard must be in compliance with the applicable portions of this standard on the date operation of the source begins.

SECTION V - WASTE ANALYSIS (effective June 25, 1999)

A. Regardless of the type source involved, each waste stream (if the waste is deemed to be consistent in composition) or each waste batch/shipment (if the waste is deemed inconsistent in composition) that is to be burned shall be classified hazardous or non-hazardous utilizing the South Carolina Hazardous Waste Management Regulation 61–79.261. This classification decision may be based on generator knowledge of the waste determined from Material Safety Data Sheets (MSDS), waste profiles, or other process information.

B. Regardless of the type of source involved, with the exception of crematory and air curtain incinerators, each waste stream (if the waste is deemed to be consistent in composition) or each waste batch/shipment (if the waste is deemed inconsistent in composition) that is to be burned shall be analyzed for heat value (British thermal unit per gallon (Btu/gal) and/or British thermal unit per pound (Btu/lb), total halogen, percent nitrogen and percent sulfur.

C. Regardless of the type of source involved (except retail business, crematory and air curtain incinerators), each waste stream (if the waste is deemed to be consistent in composition) or each waste batch/shipment (if the waste is deemed inconsistent in composition) that is to be burned shall be identified by waste analysis or special knowledge of the waste (MSDS, waste profiles, etc.) for those air toxic compounds identified in Regulation 61–62.5, Standard No. 8 that can reasonably be expected to be in the waste stream.

D. Regardless of the type of source involved, each burner of used oil shall have each batch or shipment of used oil analyzed in order to determine if the used oil is spec. oil or non-spec. oil.

E. If a source has an air pollutant emission rate established in a permit other than opacity, particulate matter, nitrogen oxides (NOx), sulfur dioxide (SO_2), and/or carbon monoxide, each waste stream (if the waste is deemed to be consistent in composition) or each waste batch/shipment (if the waste is deemed inconsistent in composition) that is to be burned shall be analyzed for those pollutants for which the emission rate was established that may reasonably be expected to be in the waste. When an HCl emission rate is set, HCl testing shall be required. Total halogens analysis may be performed as an alternative to HCl testing although this method will yield a high HCl bias.

F. Other analyses as may be required by the Department in order to demonstrate compliance with applicable state or federal regulations and/or permit conditions.

G. Waste may be exempted from all or part of the analyses required in paragraphs A-F above on a case-by-case basis for any of the following reasons at the facility's discretion, unless the Department has a valid reason to require the analyses:

1. Special knowledge of the waste;

2. The waste composition is deemed to be consistent through prior analysis or special knowledge;

3. The waste constitutes less than 0.1 percent by weight of the daily design capacity throughput;

4. Ambient air modeling for compliance with Regulation 61–62.5, Standards No. 2 and No. 8 indicates that at the maximum waste firing rate and storage volume a particular constituent at its maximum potential concentration will be in compliance with the applicable standard; or

5. The waste is non-hazardous municipal solid or hospital/medical/infectious waste.

H. Analytical methods to be utilized in paragraphs A-F above include but are not limited to ASTM Standard Test Methods; those methods contained in the South Carolina Hazardous Waste Management Regulation 61–79.261 Subpart C and Subpart D which are incorporated by reference in the South Carolina Hazardous Waste Management Regulation 61–79.260.11; and/or other methodologies (that is, Standard Methods, state or federal regulations, or proposed methods) approved by the Department as long as proper QA/QC is provided.

I. All waste analyses shall be performed by a laboratory certified by the Department to perform the methodology or in accordance with a Department approved methodology.

J. All information used to determine compliance with this section (that is, MSDS, waste manifests, waste analyses) must be kept on-site for a period of five years and made available to the Department upon request.

K. The Department reserves the right to require a facility to cease combustion of any waste stream which creates an undesirable level as determined by the Department.

L. The Department reserves the right to conduct quality assurance audits by 'spiking', splitting samples, or any other methods deemed appropriate.

M. Combustion of any new or modified waste stream must be consistent with terms and conditions of any applicable regulation or permit requirement. Written notification shall be submitted to the Director of the Division of Engineering Services of the Department's Bureau of Air Quality at least 30 days prior to combusting any new or modified waste stream unless otherwise approved through permit conditions.

SECTION VI - CONTINUOUS MONITORING REQUIREMENTS

A. **Monitoring**

1. The owner/operator shall install, calibrate, maintain and operate monitoring devices as indicated below within one year from February 26, 1988. Required monitoring devices must meet the specifications of Section VII of this standard. Alternative site-specific methods of monitoring, other than those cited below, may be used provided prior approval from the Department is obtained. Other monitors may be required by permits as conditions warrant.

2. Specific Source Types

a. Retail Business Incinerators - None.

b. Crematory Incinerator - None.

c. Sludge Incinerator (effective June 25, 1999) - Monitoring devices if required by 40 CFR 60 Subpart O.

d. Hazardous Waste Incinerators

(i) The temperature must be continuously recorded as measured at the point of incineration.

(ii) The pressure drop across baghouses and scrubbers must be continuously measured and recorded.

(iii) The concentration of carbon monoxide in the effluent gas stream must be continuously measured and recorded.

(iv) The concentration of oxygen in the effluent gas stream must be continuously measured and recorded.

(v) The waste feed rate to the incinerator must be continuously measured and recorded.

e. Municipal Waste Combustor (effective June 25, 1999)

(i) The combustion chamber exit temperature shall be continuously measured and recorded. Sensors shall be located such that flames from the burners do not impinge on the sensors.

(ii) Pollution control performance gauges or meters as required by permit conditions.

(iii) Instruments for the continuous monitoring and recording of O_2, CO, CO_2, and opacity.

(iv) For cement kilns wishing to comply with the THC limit, instruments for the continuous monitoring and recording of THC.

(v) The Department reserves the right to require HCl monitors at any time if it is determined to be necessary.

(vi) The O_2, CO and CO_2 (and THC if applicable) monitors shall be co-located upstream of the air pollution control devices. If the applicant chooses to comply with the HCl emission limitations by meeting the percent reduction or BACT reduction requirement, the HCl monitors, when required, shall be located upstream and downstream from the air pollution control device. If the applicant chooses to monitor the two locations with a single detector, the two locations should be sampled at an interval previously approved by the Department.

(vii) The Department reserves the right to require, at a later date, the owner/operator to provide telemetering of continuous monitoring data to the Department.

f. Air Curtain Incinerator - None.

g. Commercial Incinerator (effective June 25, 1999) - The combustion chamber exit temperature shall be continuously measured and recorded. Sensors shall be located such that flames from the burners do not impinge on the sensors.

h. Industrial Incinerators - Monitoring may be required as in item d. or e. above depending on the material being incinerated or burned and source test results.

i. Industrial Boilers and Utility Boilers - Monitoring may be required as in item d. or e. above depending on the material being incinerated or burned and source test results.

j. Non-Industrial Boilers - None.

k. Industrial Furnaces - Monitoring may be required as in item d. or e. above depending on the material being incinerated or burned and source test results.

l. Non-Industrial Furnaces - None.

B. **Measurement and Recording Frequencies for Continuous Monitoring Systems**

1. Temperature:

Monitors subject to this requirement shall take a minimum of one measurement every 15 seconds with this data recorded at least every successive 60 seconds. The minimum data recorder resolution shall be 50 degrees F (Fahrenheit).

2. Pressure Drop:

Monitors subject to this requirement shall take a minimum of one measurement every 15 minutes with this data recorded at least every successive 15 minutes. The minimum data recorder resolution shall be 0.2 inches of H_2O (water).

3. Waste Flowmeters:

Monitors subject to this requirement shall take a minimum of one measurement every 60 seconds with this data recorded at least every successive 5 minutes. The minimum data recorder resolution shall be 5 percent of the design flow rate.

4. O_2 Monitor:

Monitors subject to this requirement shall take a minimum of one measurement every 15 minutes with this data recorded at least every successive 15 minutes. The minimum data recorder resolution shall be 0.2 percent O_2.

5. CO Monitor:

Monitors subject to this requirement shall take a minimum of one measurement every 15 minutes with this data recorded at least every successive 15 minutes. The minimum data recorder resolution shall be 5 parts per million (ppm).

6. CO_2 Monitor:

Monitors subject to this requirement shall take a minimum of one measurement every 15 minutes with this data recorded at least every successive 15 minutes. The minimum data recorder resolution shall be 0.2 percent CO_2.

7. HCl Monitor:

Monitors subject to this requirement shall take a minimum of one measurement every 15 minutes with this data recorded at least every successive 15 minutes. The minimum data recorder resolution shall be 5 ppm.

8. Opacity Monitor:

Monitors subject to this requirement shall complete a minimum of one cycle of sampling and analysis for each successive 10-second period and one cycle of data recording for each successive 6-minute period. The minimum data recorder resolution shall be 0.5 percent opacity.

9. THC Monitor:

Monitors subject to this requirement shall take a minimum of one measurement every 15 minutes with the data recorded at least every successive 15 minutes. The minimum data recorder resolution shall be 1 ppm.

C. **Recordkeeping**

1. Any owner or operator subject to any of the provisions of this standard shall maintain a file of all measurements, data and correspondence relating to continuous monitoring systems, other monitoring devices, performance testing measurements, all continuous monitoring system performance evaluations, all continuous monitoring system or monitoring device calibration checks, and adjustments and maintenance performed on these systems or devices.

2. The owner or operator of any source subject to any of the provisions of this standard shall record the daily waste(s) charge rates and hours of operation (effective June 25, 1999).

3. Copies of all records and reports required under this section shall be available for inspection during normal working hours and copies shall be furnished within 10-working days after receipt of a written request from the Department.

4. Copies of all records and reports required under this section shall be retained by the owner/operator for five years after the date on which the record was made or the report submitted.

D. **Reporting and Corrective Action**

1. All sources subject to the monitoring provisions of this section will be required to report quarterly all exceedances of limits specified in the source's permit and this standard. All quarterly reports must be postmarked by the 30th day following the end of each calendar quarter.

2. Any source subject to this standard must report any changes in operating or monitoring parameters and/or any equipment malfunctions which result in exceedances of the emissions limitations herein, within 24 hours after the occurrence unless otherwise approved in a Department approved malfunction plan. This report shall be made to the appropriate Regional Environmental Quality Control Office. In addition, the flow of hazardous waste fed to the combustion source must be stopped until proper operating conditions are restored.

3. For those sources not required to have a continuous emission monitor for the specified pollutant, a detailed report shall be submitted to the Department within 30 days following any exceedance of limits specified in the source's permit and/or this standard unless otherwise approved in a Department approved malfunction plan. The report shall include at a minimum all of the elements listed in Regulation 61-62.1, Section II.J.1.c.

SECTION VII - CALIBRATION AND QUALITY ASSURANCE OF MONITORING DEVICES

A. Provisions of this section or other procedures approved by the Department, unless superseded by federal air regulations, are applicable to monitoring devices required under Section VI or required by permit conditions to establish compliance with this standard. The daily zero and span calibrations for all categories of continuous emission monitors shall comply with the requirements of 40 CFR 60.13(d)(1) and (d)(2) unless superseded by federal air regulations.

B. Specific Monitoring Devices

1. **Thermometers/Thermocouples**

a. **Initial Calibration:**

(i) **Range:** 3 points over the expected range of use.

(ii) Accuracy: plus or minus (±) 2.5 percent.

(iii) **Method:** Calibrate using National Institute of Standards and Technology (NIST) traceable methods and manufacturer's specifications or other methods approved by the Department.

b. Quality Assurance:

Conduct weekly single or multipoint reference checks against NIST traceable thermometers/thermocouples or other methods approved by the Department, and recalibrate according to paragraph B.1.a above if this difference is greater than 2.5 percent.

2. **Baghouse and Scrubber Pressure Drop Gauges**

a. **Initial Calibration:**

(i) **Range:** 3 points over the expected range of use.

(ii) Accuracy: ± 5 percent.

(iii) **Method:** Calibrate against a certified gauge-oil manometer or other methods approved by the Department.

b. Quality Assurance:

Conduct weekly single point reference checks against a certified gauge-oil manometer and recalibrate according to paragraph B.2.a. above if the difference is greater than 5 percent.

3. **Waste Flowmeters**

a. **Initial Calibration:**

(i) **Range:** 3 flowrates over the expected range of use.

(ii) Accuracy: ± 3.0 percent.

(iii) Method: NIST traceable dynamic calibration procedure or other methods approved by the Department.

b. Quality Assurance:

Conduct weekly single point flowrate checks using a gravimetric vs. time procedure as described in manufacturer's specifications or other methods approved by the Department, and recalibrate according to paragraph B.3.a. above if the difference is greater than 3 percent.

4. **O_2 Monitor**

a. Initial Calibration:

The O_2 monitor must meet Performance Specifications 3, in 40 CFR 60, Appendix B and 40 CFR 60.13 (c), (d)(1), (e), (e)(2), and (f).

b. Quality Assurance (To Be Done Quarterly):

Challenge the monitor with low (25 percent of instrument span) and mid (50 percent of instrument span) EPA Protocol Number 1 or NIST traceable audit gases or challenge the monitor as prescribed in 40 CFR 60, Appendix F, Section 5.1.2. Recalibration according to paragraph B.4.a. above is required if the quarterly audit deviates by more than plus or minus (±) 15 percent from the audit gas concentrations. **NOTE**: Sufficient time for instrument stabilization must be allowed when challenging the monitor with audit gases.

5. **CO Monitor**

a. Initial Calibration:

The CO monitor must meet Performance Specification 4 or 4A if applicable, in 40 CFR 60, Appendix B, and 40 CFR 60.13 (c), (d)(1), (e), (e)(2), and (f).

b. Quality Assurance (To Be Done Quarterly):

Challenge the monitor with low (25 percent of instrument span) and mid (50 percent of instrument span) EPA Protocol Number 1 or NIST traceable audit gases or challenge the monitor as prescribed in 40 CFR 60, Appendix F, Section 5.1.2. Recalibration according to paragraph B.5.a. above is required if the quarterly audit deviates by more than plus or minus (±) 15 percent from the audit gas concentrations. **NOTE:** Sufficient time for instrument stabilization must be allowed when challenging the monitor with audit gases.

6. **CO_2 Monitor**

a. Initial Calibration:

The CO_2 monitor must meet Performance Specifications 3, in 40 CFR 60, Appendix B, and 40 CFR 60.13 (c), (d)(1), (e), (e)(2), and (f).

b. Quality Assurance (To Be Done Quarterly):

Challenge the monitor with low (25 percent of instrument span) and mid (50 percent of instrument span) EPA Protocol Number 1 or NIST traceable audit gases or challenge the monitor as prescribed in 40 CFR 60, Appendix F, Section 5.1.2. Recalibration according to paragraph B.6.a. above is required if the quarterly audit deviates by more than plus or minus (±) 15 percent from the audit gas concentrations. **NOTE:** Sufficient time for instrument stabilization must be allowed when challenging the monitor with audit gases.

7. HCl Monitor:

Reserved (HCl continuous emission monitor performance specification currently under EPA development).

8. **Opacity Monitor**

a. Initial Calibration:

The opacity monitor must meet Performance Specification 1, in 40 CFR 60, Appendix B and 40 CFR 60.13 (c), (d)(1), (d)(2), (e), (e)(1), and (f).

b. Quality Assurance (To Be Done Annually):

Must be audited with low, medium and high neutral density filters.

9. **THC Monitor**

a. Initial Calibration:

The THC monitor must meet the Performance Specification 2.2 in 40 CFR 266, Appendix IX.

b. Quality Assurance and Recalibration:

As specified in Performance Specification 2.2 in 40 CFR 266, Appendix IX.

C. For monitoring devices not specified above, calibration and quality assurance of monitoring devices shall be approved by the Department on a case-by-case basis.

SECTION VIII - PERIODIC TESTING

A. An owner or operator of any source listed in paragraph D below shall ensure that scheduled periodic tests for the parameters associated with that source are conducted in accordance with Regulation 61–62.1, Section IV, Source Tests. These tests shall be performed within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility and every two years thereafter, except as otherwise noted herein. This requirement to conduct tests may be waived if an alternative method for determining compliance with emission limits can be developed which is acceptable to the Department. Department approval of the alternative method for determining compliance must be given prior to the compliance demonstration.

B. Unless more frequent testing is required by an applicable federal requirement, sources subject to a more restrictive requirement in Resource Conservation and Recovery Act (RCRA) or a promulgated Maximum Achievable Control Technology (MACT) Standard shall be excluded from the testing frequency requirements of Section VIII provided any additional parameters required by this section (for example, nickel) are tested and compliance demonstrations are performed at least every three years. Compliance demonstrations must be performed with a maximum frequency of three years for all pollutants listed in Section VIII, as applicable. Spiking for metals and HCl are not required for these periodic retests, but sources must conduct these tests on their normal highest metals and HCl containing waste streams.

C. Other tests may be required by special permit conditions as indicated by a case-by-case evaluation of material being incinerated or burned and by source testing.

D. Tests Required

Sources	Parameters
1. Sludge Incinerators	a. Particulate Matter (PM) b. Mercury (Hg)
2. Hazardous Waste Incinerators	a. Hydrochloric Acid (HCl) b. PM c. Oxygen (O_2) initially only d. Carbon Monoxide (CO) initially only e. Metals f. POHC Destruction & Removal Efficiency (DRE) initially only
3. Municipal Waste Combustors	a. PM b. HCl (effective 5/25/90) c. CO (effective 5/25/90) d. O_2 (effective 5/25/90) e. CO_2 (effective 5/25/90)
4. Commercial Incinerator (effective June 25, 1999)	a. PM b. CO
5. Industrial Incinerators	PM
6. Industrial Boilers and Utility Boilers	a. PM b. Metals c. POHC Destruction & Removal Efficiency (DRE) initially only if burning hazardous waste d. CO if burning hazardous waste e. O_2 if burning hazardous waste f. HCl
7. Industrial Furnaces	a. PM b. Metals c. POHC Destruction & Removal Efficiency (DRE) initially only if burning hazardous waste d. CO if burning hazardous waste e. O_2 if burning hazardous waste f. HCl

E. A waiver of the POHC DRE test requirement may be granted for boilers operating under special conditions that ensure 99.99 percent DRE. Such conditions may include but are not limited to the following:

1. >50 percent of boiler heat input from fuel oil, natural gas, or pulverized coal;
2. Minimum waste heat value of 8000 Btu/lb;
3. Waste must be fired with an atomization system;
4. Boiler must be operated at >25 percent load; and
5. CO and O_2 flue gas limits with continuous monitoring requirements.

F. POHC DRE shall be determined by the following equation using mass emissions rates:

DRE = [(Inlet Organics - Stack Outlet Organics) ÷ Inlet Organics] x 100

SECTION IX - Operator Training Requirements

A. Prior to the startup for new facilities and within one year of May 25, 1990, for existing facilities, all incinerator operators shall be trained by the equipment manufacturers' representatives and/or other Department approved qualified individuals and/or organizations as to proper operating practices and procedures. The content of the training program shall be submitted to the Department for approval. The applicant shall submit certification verifying the satisfactory completion of a training program prior to issuance of the operating permit. The applicant shall not operate the incinerator without an operator on-site who has satisfactorily completed the training program.

B. The operator training requirement in paragraph A above is also applicable to all municipal waste combustors effective June 25, 1999.

C. An incinerator operator training program should include but not be limited to:

1. A summary of the applicable standards under this standard;
2. A description of basic combustion theory applicable to an incinerator;
3. Procedures for receiving, handling, and feeding waste as appropriate;
4. Incinerator startup, shutdown, and malfunction procedures;
5. Procedures for maintaining proper combustion air supply levels;
6. Procedures for operating the incinerator within the standards established under this standard;
7. Procedures for responding to periodic upset or off-specification conditions;
8. Procedures for minimizing particulate matter carryover;
9. Procedures for handling ash;
10. Procedures for monitoring incinerator emissions; and
11. Reporting and recordkeeping procedures.

D. The Department may exempt a facility from any or all of the above Operator Training Requirements on a case-by-case basis.

HISTORY: Amended by State Register Volume 36, Issue No. 4, eff April 27, 2012 (errata); State Register Volume 36, Issue No. 9, eff September 28, 2012 (errata); State Register Volume 7, Issue No. 4, eff April 26, 2013; State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016.

STANDARD NO. 3.1

HOSPITAL/MEDICAL/INFECTIOUS WASTE INCINERATORS (HMIWI)

Section I - Applicability and General Requirements.

(a) This standard applies to any device, regardless of type or construction, which combusts hospital/medical/infectious waste.

(b) This standard is not applicable to crematory incinerators.

(c) Beginning September 15, 2000, existing facilities subject to this standard and not listed as an exempt source for 40 Code of Federal Regulations (CFR) 60 Subpart Ec, Standards of Performance for Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996 (September 15, 1997, 60 FR 48348), shall operate pursuant to a Title V permit issued by the Department.

(d) An owner or operator shall not combust hospital/medical/infectious waste except in a multiple-chamber incinerator with a solid hearth, or in a device found to be equally effective for the purpose of air contaminant control as an approved multiple-chamber incinerator as determined by the Department.

(e) Physical or operational changes to an existing HMIWI unit, for which construction was commenced on or before June 20, 1996, that are made solely for the purpose of complying with this standard are not considered a modification and do not result in an existing HMIWI unit becoming subject to the provisions of 40 CFR 60 Subpart Ec, Standards of Performance for Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996 (September 15, 1997, 60 FR 48348).

(f) All HMIWI are subject to this standard. Those HMIWI for which construction or reconstruction commenced after June 20, 1996, are also subject to the provisions of 40 CFR 60 Subpart Ec, Standards of Performance for Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996 (September 15, 1997, 60 FR 48348).

(g) This standard is not applicable to combustors which burn hospital waste and do not burn any medical/infectious waste and are subject to all provisions of 40 CFR 60 Subpart Eb, Standards of Performance for Municipal Waste Combustors for Which Construction is Commenced After September 20, 1994, or for Which Modification or Reconstruction is Commenced After June 19, 1996; Subpart Cb, Emission Guidelines and Compliance Times for Large Municipal Waste Combustors that are Constructed on or Before September 20, 1994; or Subpart Ea, Standards of Performance for Municipal Waste Combustors for Which Construction is Commenced After December 20, 1989, and on or Before September 20, 1994.

Section II - Definitions.

Unless stated otherwise, the definitions that appear in this section shall apply only to this standard.

(a) Batch HMIWI - Means a HMIWI that is designed such that neither waste charging nor ash removal can occur during combustion.

(b) Continuous HMIWI - Means a HMIWI that is designed to allow waste charging and ash removal during combustion.

(c) Dry Scrubber - Means an add-on air pollution control system that injects dry alkaline sorbent (dry injection) or sprays an alkaline sorbent (spray dryer) to react with and neutralize acid gases in the HMIWI exhaust stream forming a dry powder material.

(d) Fabric Filter or Baghouse - Means an add-on air pollution control system that removes particulate matter and nonvaporous metals emissions by passing flue gas through filter bags.

(e) Facilities Manager - Means the individual in charge of purchasing, maintaining, and operating the HMIWI or the owner's or operator's representative responsible for the management of the HMIWI. Alternative titles may include director of facilities or vice president of support services.

(f) High-Air Phase - Means the stage of the batch operating cycle when the primary chamber reaches and maintains maximum operating temperatures.

(g) Hospital/Medical/Infectious Waste Incinerator Operator or HMIWI Operator - Means any person who operates, controls, or supervises the day-to-day operation of a HMIWI.

(h) Infectious Agent - Means any organism (such as a virus, bacteria or prion) that is capable of being communicated by invasion and multiplication in body tissues and capable of causing disease or adverse health impacts in humans.

(i) Intermittent HMIWI - Means a HMIWI that is designed to allow waste charging, but not ash removal, during combustion.

(j) Large HMIWI - Means:

(1) Except as provided in paragraph (j)(2) below,

(i) A HMIWI whose maximum design waste burning capacity is more than 500 pounds per hour (lbs/hr); or

(ii) A continuous or intermittent HMIWI whose maximum charge rate is more than 500 lbs/hr; or

(iii) A batch HMIWI whose maximum charge rate is more than 4,000 pounds per day (lbs/day).

(2) The following are not large HMIWI:

(i) A continuous or intermittent HMIWI whose maximum charge rate is less than or equal to 500 lbs/hr; or

(ii) A batch HMIWI whose maximum charge rate is less than or equal to 4,000 lbs/day.

(k) Maximum Charge Rate - Means:

(1) For continuous and intermittent HMIWI, 110 percent of the lowest three-hour average charge rate measured during the most recent performance test demonstrating compliance with all applicable emission limits.

(2) For batch HMIWI, 110 percent of the lowest daily charge rate measured during the most recent performance test demonstrating compliance with all applicable emission limits.

(*l*) Maximum Design Waste Burning Capacity - Means:

(1) For intermittent and continuous HMIWI,

$C = P_V \times 15,000/8,500$

where:

C = HMIWI capacity, lb/hr

P_V = Primary chamber volume, cubic foot (ft^3)

15,000 = Primary chamber heat release rate factor, British thermal unit per cubic foot per hour ($Btu/ft^3/hr$)

8,500 = Standard waste heating value, Btu/lb;

(2) For batch HMIWI,

$C = P_V \times 4.5/8$

where:

C = HMIWI capacity, lb/hr

P_V = Primary chamber volume, ft^3

4.5 = Waste density, lb/ft^3

8 = Typical hours of operation of a batch HMIWI, hours.

(m) Maximum Fabric Filter Inlet Temperature - Means 110 percent of the lowest three-hour average temperature at the inlet to the fabric filter (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the dioxins/furans emission limit.

(n) Maximum Flue Gas Temperature - Means 110 percent of the lowest three-hour average temperature at the outlet from the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the mercury (Hg) emission limit.

(*o*) Medium HMIWI - Means:

(1) Except as provided in paragraph (*o*)(2) below,

(i) A HMIWI whose maximum design waste burning capacity is more than 200 lbs/hr but less than or equal to 500 lbs/hr; or

(ii) A continuous or intermittent HMIWI whose maximum charge rate is more than 200 lbs/hr but less than or equal to 500 lbs/hr; or

(iii) A batch HMIWI whose maximum charge rate is more than 1,600 lbs/day but less than or equal to 4,000 lbs/day.

(2) The following are not medium HMIWI:

(i) A continuous or intermittent HMIWI whose maximum charge rate is less than or equal to 200 lbs/hr or more than 500 lbs/hr; or

(ii) A batch HMIWI whose maximum charge rate is more than 4,000 lbs/day or less than or equal to 1,600 lbs/day.

(p) Minimum Dioxins/Furans Sorbent Flow Rate - Means 90 percent of the highest three-hour average dioxins/furans sorbent flow rate (taken, at a minimum, once every hour) measured during the most recent performance test demonstrating compliance with the dioxins/furans emission limit.

(q) Minimum Mercury (Hg) Sorbent Flow Rate - Means 90 percent of the highest three-hour average Hg sorbent flow rate (taken, at a minimum, once every hour) measured during the most recent performance test demonstrating compliance with the Hg emission limit.

(r) Minimum Hydrogen Chloride (HCl) Sorbent Flow Rate - Means 90 percent of the highest three-hour average HCl sorbent flow rate (taken, at a minimum, once every hour) measured during the most recent performance test demonstrating compliance with the HCl emission limit.

(s) Minimum Horsepower or Amperage - Means 90 percent of the highest three-hour average horsepower or amperage to the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the applicable emission limits.

(t) Minimum Pressure Drop Across the Wet Scrubber - Means 90 percent of the highest three-hour average pressure drop across the wet scrubber PM control device (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the PM emission limit.

(u) Minimum Scrubber Liquor Flow Rate - Means 90 percent of the highest three-hour average liquor flow rate at the inlet to the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with all applicable emission limits.

(v) Minimum Scrubber Liquor pH - Means 90 percent of the highest three-hour average liquor pH at the inlet to the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the HCl emission limit.

(w) Minimum Secondary Chamber Temperature - Means 90 percent of the highest three-hour average secondary chamber temperature (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the PM, carbon monoxide (CO), or dioxins/furans emission limits.

(x) Modification or Modified HMIWI - Means any change to a HMIWI unit after the effective date of these standards such that:

(1) The cumulative costs of the modifications, over the life of the unit, exceed 50 percent of the original cost of the construction and installation of the unit (not including the cost of any land purchased in connection with such construction or installation) updated to current costs; or

(2) The change involves a physical change in or change in the method of operation of the unit which increases the amount of any air pollutant emitted by the unit for which standards have been established under Section 129 or Section 111 of the Clean Air Act (Act).

(y) Operating Day - Means a 24-hour period between 12:00 midnight and the following midnight during which any amount of hospital waste or medical/infectious waste is combusted at any time in the HMIWI.

(z) Operation - Means the period during which waste is combusted in the incinerator excluding periods of startup or shutdown.

(aa) Particulate Matter or PM - Means the total particulate matter emitted from a HMIWI as measured by Environmental Protection Agency (EPA) Reference Method 5 or EPA Reference Method 29.

(bb) Primary Chamber - Means the chamber in a HMIWI that receives waste material, in which the waste is ignited, and from which ash is removed.

(cc) Prion - Means a small infectious pathogen containing protein which is resistant to procedures that modify or hydrolyze nucleic acids.

(dd) Secondary Chamber - Means a component of the HMIWI that receives combustion gases from the primary chamber and in which the combustion process is completed.

(ee) Shutdown - Means the period of time after all waste has been combusted in the primary chamber. For continuous HMIWI, shutdown shall commence no less than two hours after the last charge to the incinerator. For intermittent HMIWI, shutdown shall commence no less than four hours after the last charge to the incinerator. For batch HMIWI, shutdown shall commence no less than five hours after the high-air phase of combustion has been completed.

(ff) Small HMIWI - Means:

(1) Except as provided in paragraph (ff)(2) below,

(i) An HMIWI whose maximum design waste burning capacity is less than or equal to 200 lbs/hr; or

(ii) A continuous or intermittent HMIWI whose maximum charge rate is less than or equal to 200 lbs/hr; or

(iii) A batch HMIWI whose maximum charge rate is less than or equal to 1,600 lbs/day.

(2) The following are not small HMIWI:

(i) A continuous or intermittent HMIWI whose maximum charge rate is more than 200 lbs/hr;

(ii) A batch HMIWI whose maximum charge rate is more than 1,600 lbs/day.

(gg) Standard Conditions - Means a temperature of 20 degrees Celsius (C) and a pressure of 101.3 kilopascals.

(hh) Startup - Means the period of time between the activation of the system and the first charge to the unit. For batch HMIWI, startup is the period of time between activation of the system and ignition of the waste.

(ii) Wet Scrubber - Means an add-on air pollution control device that utilizes an alkaline scrubbing liquor to collect PM (including nonvaporous metals and condensed organics) and/or to absorb and neutralize acid gases.

Section III - Emission Limitations.

(a) On and after the date on which the initial performance test is completed or is required to be completed as per Section VII of this standard, whichever date comes first, no owner or operator of an affected facility shall cause to be discharged into the atmosphere from that affected facility any gases that contain stack emissions in excess of the limits presented in Table I below.

Table I

Emission Limitations for Small, Medium, and Large Hospital/Medical/Infectious Waste Incinerators

Pollutant	Units (7 percent oxygen (O_2) basis, dry basis)	Small	Medium	Large
PM	Milligrams per dry standard cubic meter (gr/dscf)	115 (0.05)	69 (0.03)	34 (0.015)
CO	ppmv	40	40	40
Dioxins/Furans	Nanograms per dry standard cubic meter total dioxins/furans (grains per billion dry standard cubic feet) or nanograms per dry standard cubic meter TEQ (grains per billion dry standard cubic feet)	125 (55) or 2.3 (1.0)	125 (55) or 2.3 (1.0)	125 (55) or 2.3 (1.0)
HCl	ppmv or percent reduction	100 or 93 percent	100 or 93 percent	100 or 93 percent
Sulfur Dioxide (SO_2)	ppmv	55	55	55
Nitrogen Oxide (NO_X)	ppmv	250	250	250
Lead (Pb)	Milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet) or percent reduction	1.2 (0.52) or 70 percent	1.2 (0.52) or 70 percent	1.2 (0.52) or 70 percent
Cadmium (Cd)	Milligrams per dry standard cubic meter (grains per thousand	0.16 (0.07) or 65 per-	0.16 (0.07) or 65 per-	0.16 (0.07) or 65 per-

	dry standard cubic feet) or percent reduction	cent	cent	cent
Hg	Milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet) or percent reduction	0.55 (0.24) or 85 percent	0.55 (0.24) or 85 percent	0.55 (0.24) or 85 percent

gr/dscf = grains per dry standard cubic foot

ppmv = parts per million by volume

TEQ = Toxic Equivalents Quantity

(b) No owner or operator of an affected facility shall cause to be discharged into the atmosphere from the stack of that affected facility any gases that exhibit greater than 10 percent opacity (six-minute rolling average) or equal to or greater than 30 percent at any time.

(c) No small HMIWI which is located more than 50 miles from the boundary of the nearest Standard Metropolitan Statistical Area (defined in 40 CFR 60.31e, September 15, 1997, 60 FR 48348), and which burns less than 2,000 pounds per week of hospital waste and medical/infectious waste shall cause to be discharged into the atmosphere from that affected facility any gases that contain stack emissions in excess of the limits presented in Table II below. The 2,000 lbs/week limitation does not apply during performance tests.

Table II

Emission Limitations for Small Rural Hospital/Medical/Infectious Waste Incinerators

Pollutant	Units (7 percent O_2 basis, dry basis)	Small (Rural)
PM	Milligrams per dry standard cubic meter (gr/dscf)	197 (0.086)
CO	ppmv	40
Dioxins/Furans	Nanograms per dry standard cubic meter total dioxins/furans (grains per billion dry standard cubic feet) or nanograms per dry standard cubic meter TEQ (grains per billion dry standard cubic feet)	800 (350) or 15 (6.6)
HCl	ppmv	3100
SO_2	ppmv	55
NO_X	ppmv	250
Pb	Milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet) or percent reduction	10 (4.4)
Cd	Milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet) or percent reduction	4 (1.7)
Hg	Milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet) or percent reduction	7.5 (3.3)
Opacity	6 minute average	10 percent

gr/dscf = grains per dry standard cubic foot

ppmv = parts per million by volume

TEQ = Toxic Equivalents Quantity

(d) Large HMIWI with capacity greater than 2,000 lbs/hr for continuous and 16,000 lbs/day for batch shall complete an ambient impact analysis for: arsenic and compounds expressed as arsenic; beryllium and compounds expressed as beryllium; hexavalent chromium and compounds expressed as chromium; and nickel and compounds expressed as nickel.

(1) Using available emission factors, the emissions from the facility shall be estimated and the analysis shall be conducted by performing dispersion modeling using the facility's exhaust characteristics. The analysis shall be conducted in accordance with the procedures stipulated in the Air Quality Modeling Guidelines.

(2) The required analysis must show that predicted concentrations do not exceed the following applicable annual ambient concentrations.

Table III

Allowable Ambient Concentrations

Pollutant	Units	Allowable Ambient Concentration
Arsenic (As)	$\mu g/m^3$	2.3e-04
Beryllium (Be)	$\mu g/m^3$	4.2e-04
Hexavalent Chromium (Cr (+6))	$\mu g/m^3$	8.3e-05
Nickel (Ni)	$\mu g/m^3$	3.3e-03

$\mu g/m^3$ = micrograms per cubic meter

(3) Compliance shall be verified by stack sampling as described in Section VII of this standard. Using the actual stack parameters and emission rates from the most recent source test and Department approved modeling techniques, the calculated maximum annual ambient concentrations shall not exceed the above levels. The modeling methodology shall be submitted with the source test plans required by Regulation 61–62.1, Section IV, Source Tests. The applicant shall submit a Modeling Protocol to the Department and receive approval prior to starting any modeling study.

(e) Large HMIWI with capacity greater than 2,000 lbs/hr for continuous and 16,000 lbs/day for batch shall maintain a combustion efficiency of 99.9 percent or greater on an hourly basis. The combustion efficiency shall be calculated as follows:

$$C.E. = \frac{[CO_2]}{[CO_2]+[CO]} \times 100$$

C.E. = Combustion efficiency

$[CO_2]$ = Concentration of carbon dioxide (ppmv corrected to 7 percent O_2)

[CO] = Concentration of carbon monoxide (ppmv corrected to 7 percent O_2)

Note: O_2, CO_2, and CO determined on a dry basis.

(f) Upon mutual agreement of an owner or operator of a HMIWI and the Department, an emission limit more restrictive than that otherwise specified in this standard and/or an emission limit for any air contaminant discharged from the HMIWI that is not specified in this standard may be established. Also, upon mutual agreement of the owner or operator of an affected source and the Department, operating hours, process flow rates, or any other operating parameter may be established as a binding limit for the affected source. Any items mutually agreed to shall be stated as a special condition for any permit or order concerning the source. Violation of this mutual agreement will be considered a violation and will be subject to appropriate enforcement.

Section IV - Performance Specifications.

(a) The owner or operator of an affected facility shall ensure that:

(1) The secondary chamber is maintained at a temperature equal to or greater than 1800 degrees Fahrenheit (F). A thermocouple is appropriately located at the exit of the chamber to confirm the temperature.

(2) The temperature equal to or greater than 1800 degrees F is maintained for at least one second (secondary chamber residence time). The ducting between the secondary chamber and heat recovery system or the breaching and portion of the stack (tertiary chamber) may not be included for the residence time demonstration.

(3) The auxiliary (secondary and/or tertiary) burners of the incinerator are designed such that without the assistance of the heat content of the waste, a minimum temperature of 2000 degrees F can be maintained for at least one second. (See Appendix B)

(4) Appendix B of this standard shall be used to demonstrate compliance with paragraphs (a)(2) and (3) above.

(b) Owners or operators which have an incinerator facility with a continuous capacity greater than 2000 lbs/hr or a batch capacity of less than 16,000 lbs/day in existence on or before May 25, 1990,

equipped with a secondary chamber and/or an afterburner operated at a minimum temperature equal to or greater than 1800 degrees F may choose to meet a more restrictive visible emission standard of zero percent opacity in lieu of meeting the residence time requirements in paragraph (a) above. However, a residence time of at least 0.5 seconds will be required if the facility is permitted to burn hazardous waste or antineoplastic drugs.

(c) The firing of the burners and the combustion air shall be modulated automatically to maintain a secondary chamber exit or after burner temperature of at least 1800 degrees F.

(d) The incinerator shall be equipped with an automatic loader except for units with capacities less than or equal to 300 lbs/hr and equipped with the interlocks specified in paragraphs (e) or (g) below or as provided in paragraph (f) below. However, a sealed feeding device capable of preventing combustion upsets during charging will be required for the units with capacity less than 300 lbs/hr.

(e) For batch fed incinerators (fully loaded while cold and never opened until burn cycle is completed), interlocks should be provided to prevent (1) ignition of the waste until the secondary chamber exit or afterburner temperature is established at equal to or greater than 1800 degrees F; and (2) recharging until the combustion cycle is complete. No waste shall be incinerated if the required interlock system is not operational.

(f) The owner or operator of an incinerator, except a batch incinerator in existence on or before May 25, 1990, which is manually fed may submit a written request to the Department that manual feeding be allowed. The request must include a plan detailing the methods and operating procedure to be employed in manually charging the incinerator. The Department shall determine if the plan provided is acceptable.

(1) The owner or operator of the incinerator must post or file on the operating premises a copy of the approved plan.

(2) The plan shall not relieve the owner or operator of the duty of meeting all other emission requirements.

(3) Any violation of the conditions under which the plan was approved or any violation of other requirements of this standard may result in the Department requiring that an automatic mechanical loading device be installed.

(g) For non-batch fed incinerators, the charging of waste to the incinerator shall automatically cease through the use of an interlock system when any of the following conditions exist: [Note: The only monitors required in the interlock system are those required for a specific incinerator size facility in Section V below.]

(1) The incinerator's secondary chamber exit or afterburner temperature drops below 1800 degrees F; and/or

(2) The carbon monoxide emissions are equal to or greater than 150 ppmv (dry basis), corrected to seven percent O_2 on a dry basis for a 15 minute period; and/or

(3) The flue gas O_2 level drops below six percent (dry basis) for a 15 minute period; and/or

(4) The opacity of the visible emissions is equal to or greater than 10 percent for a period of 15 minutes; and/or

(5) The required monitoring equipment is not functioning.

(h) Startup and Shutdown Requirements

(1) The owner or operator of an affected facility shall ensure that:

(i) No waste is charged to an incinerator other than a batch incinerator until the secondary chamber or afterburner has achieved a minimum temperature of 1800 degrees F.

(ii) The secondary chamber or afterburner has achieved and maintained the required minimum temperature for 15 minutes before charging begins.

(iii) The control equipment (if equipped) is operational and functioning properly, prior to the ignition of waste and until all the waste is incinerated.

(2) The owner or operator of an affected facility shall ensure that during shutdowns the secondary chamber or afterburner minimum temperature of 1800 degrees F is to be maintained using auxiliary burners until "shutdown" as defined in Section II of this standard has been met.

(3) The owner or operator of an affected facility shall ensure that a detailed procedure for normal system startup and shutdown, including the duration of preheat and burnout cycles, is submitted as part of the application for approval.

(i) Storage.

(1) The owner or operator of an affected facility shall ensure that the storage of hospital/medical/infectious waste shall be in a manner approved by the Department to prevent the escape of malodor.

(2) The owner or operator of an affected facility shall ensure that hospital/medical/infectious waste and ash are stored only in enclosed, leaktight containers or areas.

(3) The owner or operator of an affected facility shall ensure that ash is loaded in an enclosed area or handled wet in enclosed containers.

Section V - Monitoring Requirements.

(a) General.

(1) The owner or operator of an affected facility shall ensure that all monitoring devices are maintained in accordance with Section VI of this standard.

(2) The owner or operator of an affected facility shall ensure that all data recorder resolutions are sufficient to display the data recording frequencies required in Table IV, and Section V(d) of this standard.

(b) Small (Rural) HMIWI facilities.

(1) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a device for measuring and recording the temperature of the secondary chamber on a continuous basis, the output of which shall be recorded, at a minimum, once every minute throughout operation.

(2) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a device which automatically measures and records the date, time, and weight of each charge fed into the HMIWI.

(3) The owner or operator of an affected facility shall obtain monitoring data at all times during HMIWI operation except during periods of monitoring equipment malfunction, calibration, or repair. At a minimum, valid monitoring data shall be obtained for 75 percent of the operating hours per day and for 90 percent of the operating hours per calendar quarter that the affected facility is combusting hospital waste and/or medical/infectious waste.

(c) Small (Urban), Medium, and Large HMIWI facilities

(1) The owner or operator of an affected facility shall install, calibrate, maintain, and operate devices (or establish methods) for monitoring the applicable maximum and minimum operating parameters listed in Table IV of this standard such that these devices (or methods) measure and record values for these operating parameters at the frequencies indicated in Table IV of this standard at all times except during periods of startup and shutdown.

(2) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a device or method for measuring the use of the bypass stack including date, time, and duration.

(3) The owner or operator of an affected facility using something other than a dry scrubber followed by a fabric filter, a wet scrubber, or a dry scrubber followed by a fabric filter and a wet scrubber to comply with the emission limits under this standard shall install, calibrate, maintain, and operate the equipment necessary to monitor the site-specific operating parameters developed pursuant to Section VII(c)(8) of this standard.

(4) The owner or operator of an affected facility shall obtain monitoring data at all times during HMIWI operation except during periods of monitoring equipment malfunction, calibration, or repair. At a minimum, valid monitoring data shall be obtained for 75 percent of the operating hours per day and for 90 percent of the operating days per calendar quarter that the affected facility is combusting hospital waste and/or medical/infectious waste.

(5) The owner or operator of an affected facility shall ensure that:

(i) The secondary chamber or afterburner temperatures are continuously monitored and recorded.

(ii) Sensors are installed, maintained, and operated such that the flames from the burners do not impinge upon the sensors.

(iii) The secondary chamber temperature is measured at or beyond the chamber exit.

(6) The Department reserves the right to require the owner/operator to provide telemetering of continuous monitoring data to the Department.

(d) Large HMIWI facilities with capacity equal to or greater than 2,000 lbs/hr

The owner or operator of an affected facility shall ensure that:

(1) Continuous monitors are installed on each HMIWI emission stack for O_2, CO, CO_2, and opacity.

(2) The O_2, CO, and CO_2 monitors are co-located upstream of any air pollution control devices unless otherwise approved by the Department.

(3) Each O_2 monitor takes at a minimum of one measurement every 60 seconds and that this data is recorded at least every successive five minutes.

(4) Each CO monitor takes a minimum of one measurement every 60 seconds and that this data recorded at least every successive five minutes.

(5) Each CO_2 monitor takes a minimum of one measurement every 60 seconds and that this data recorded at least every successive five minutes.

(6) Each opacity monitor completes a minimum of one cycle of sampling and analysis for each 10 second period and one cycle of data recording for each successive six-minute period.

Table IV

Operating Parameters to be Monitored and Minimum Measurement and Recording Frequencies

Operating parameters to be monitored	Minimum frequency		Control system		
	Data measurement	Data recording	Dry scrubber followed by fabric filter	Wet scrubber	Dry scrubber followed by fabric filter and wet scrubber
Maximum operating parameters:					
Max. charge rate	Continuous	1 time/hour	X	X	X
Max. fabric filter inlet temperature	Continuous	1 time/minute	X	.....	X
Max. flue gas temperature	Continuous	1 time/minute	X	X	X
Minimum operating parameters:					
Min. secondary chamber temperature	Continuous	1 time/minute	X	X	X
Min. dioxins/furans sorbent flow rate	Hourly	1 time/hour	X	.....	X
Min. HCl sorbent flow rate	Hourly	1 time/hour	X	.....	X
Min. mercury (Hg) sorbent flow rate	Hourly	1 time/hour	X	.....	X
Min. pressure drop across the wet scrubber or min. horsepower or amperage to wet scrubber	Continuous	1 time/minute	.....	X	X
Min. scrubber liquor flow rate	Continuous	1 time/minute	.....	X	X
Min. scrubber liquor pH	Continuous	1 time/minute	.....	X	X

X = applicable

Section VI - Calibration and Quality Assurance of Monitoring Devices.

(a) Provisions of this section, or other procedures approved by the Department, are applicable to monitoring devices which are required under Section V of this standard or which are required by

permit conditions to establish compliance with Regulation 61–62.5, Standard No. 3.1. The daily zero and span calibration for all categories of continuous emission monitors shall comply with the requirements of 40 CFR 60.13(d)(1) and (d)(2), July 1, 1988.

(b) The owner or operator of an affected facility shall ensure that any monitoring devices required by this standard, but not included in this section, conform to the manufacturers specifications for initial calibration and quality assurance unless otherwise stated in regulation or permit requirements. Likewise, those monitors specifically mentioned may be subject to other, more stringent, regulatory and permit requirements.

(c) The owner or operator of an affected facility shall ensure that CO, CO_2, O_2, and opacity monitors are recalibrated annually in accordance with paragraph (b) above. Opacity monitors must be audited with low, medium, and high neutral density filters that are National Institute of Science and Technology (NIST) traceable.

Section VII - Testing Requirements.

(a) General

(1) The owner or operator of an affected HMIWI facility constructed on or before June 20, 1996, shall ensure that an initial source test is conducted no later than 12 months following the effective date of this standard.

(2) For incinerator facilities where construction commenced after June 20, 1996, or modification began after March 16, 1998, the owner or operator shall ensure that an initial source test is conducted within 60 days after achieving the maximum production rate at which the incinerator will be operated, but no later than 180 days after initial startup.

(3) The owner or operator of an affected facility shall ensure that source testing is conducted in the manner prescribed in Section 60.37e of Subpart Ce (40 CFR 60) and in accordance with Regulation 61–62.1 Section IV, Source Tests. The use of the bypass stack during a performance test shall invalidate the performance test.

(4) The Department may require air contaminant source testing as determined to be necessary to assure continuous compliance with the requirements of this standard and any emission limit stipulated as a permit condition.

(5) The emission limits under this standard apply at all times except during periods of startup, shutdown, or malfunction, provided that no hospital waste or medical/infectious waste is charged to the affected facility during startup, shutdown, or malfunction.

(b) Existing Sources

(1) Small (Rural) HMIWI facilities.

(i) The owner or operator of an affected facility shall ensure that an initial source test is conducted for the following:

(A) Particulate matter;

(B) CO;

(C) Hg;

(D) Dioxins/furans; and

(E) Opacity.

(ii) The Department reserves the right to require the owner or operator to conduct further source tests at any time if it is determined to be necessary by the Department after the initial compliance test. In addition to paragraph (b)(1)(i) above, these tests may include:

(A) HCl;

(B) Arsenic and compounds expressed as arsenic;

(C) Beryllium and compounds expressed as beryllium;

(D) Cadmium and compounds expressed as cadmium;

(E) Hexavalent chromium and compounds expressed as chromium;

(F) Lead and compounds expressed as lead; and

(G) Nickel and compounds expressed as nickel.

(iii) The owner or operator of an affected facility shall establish maximum charge rate and minimum secondary chamber temperature as site-specific operating parameters during the initial performance test to determine compliance with applicable emission limits.

(iv) Following the date on which the initial performance test is completed or is required to be completed under this standard, whichever date comes first, the owner or operator of an affected facility shall ensure that the designated facility does not operate above the maximum charge rate or below the minimum secondary chamber temperature measured as three-hour rolling averages (calculated each hour as the average of the previous three operating hours) at all times except during periods of startup, shutdown and malfunction. Operating parameter limits do not apply during performance tests. Operation above the maximum charge rate or below the minimum secondary chamber temperature shall constitute a violation of the established operating parameter(s).

(v) Except as provided in paragraph (b)(1)(vi) below, operation of the designated facility above the maximum charge rate and below the minimum secondary chamber temperature (each measured on a three-hour rolling average) simultaneously shall constitute a violation of the PM, CO, and dioxins/furans emission limits.

(vi) The owner or operator of an affected facility may conduct a repeat performance test within 30 days of violation of applicable operating parameter(s) to demonstrate that the designated facility is not in violation of the applicable emission limit(s). The owner or operator of an affected facility shall ensure that repeat performance tests are conducted pursuant to this paragraph using the identical operating parameters that indicated a violation under paragraph (b)(1)(v) above.

(vii) The owner or operator of an affected facility shall demonstrate compliance with the opacity limit by conducting an annual performance test (no more than 12 months following the previous performance test) using the applicable procedures and test methods.

(2) Small (Urban) HMIWI facilities

(i) The owner or operator of an affected facility shall ensure that an initial source test is conducted for the following:

(A) Particulate matter;

(B) HCl;

(C) CO;

(D) Cadmium;

(E) Lead;

(F) Hg;

(G) Dioxins/furans; and

(H) Opacity.

(ii) The Department reserves the right to require the owner or operator to conduct further source tests at any time if it is determined to be necessary by the Department after the initial compliance test. In addition to paragraph (b)(2)(i) above, these tests may include:

(A) Arsenic and compounds expressed as arsenic;

(B) Beryllium and compounds expressed as beryllium;

(C) Hexavalent chromium and compounds expressed as chromium; and

(D) Nickel and compounds expressed as nickel.

(iii) Following the date on which the initial performance test is completed or is required to be completed, whichever date comes first, the owner or operator of an affected facility shall:

(A) Demonstrate compliance with the opacity limit by conducting an annual performance test (no more than 12 months following the previous performance test) using the applicable procedures and test methods.

(B) Demonstrate compliance with the PM, CO, and HCl emission limits by conducting an annual performance test (no more than 12 months following the previous performance test)

using the applicable procedures and test methods in accordance with paragraph (a)(3) of this section. If all three performance tests over a three-year period indicate compliance with the emission limit for a pollutant (PM, CO, or HCl), the owner or operator may forego a performance test for that pollutant for the subsequent two years. At a minimum, a performance test for PM, CO, and HCl shall be conducted every third year (no more than 36 months following the previous performance test). If a performance test conducted every third year indicates compliance with the emission limit for a pollutant (PM, CO, or HCl), the owner or operator may forego a performance test for that pollutant for an additional two years. If any performance test indicates noncompliance with the respective emission limit, a performance test for that pollutant shall be conducted annually until all annual performance tests over a three-year period indicate compliance with the emission limit. The use of the bypass stack during a performance test shall invalidate the performance test.

(3) Medium HMIWI facilities

(i) The owner or operator of an affected facility shall ensure that an initial source test is conducted for the following:

(A) Particulate matter;

(B) HCl;

(C) CO;

(D) Cadmium;

(E) Lead;

(F) Hg;

(G) Dioxins/furans; and

(H) Opacity.

(ii) The Department reserves the right to require the owner or operator to conduct further source tests at any time if it is determined to be necessary by the Department after the initial compliance test. In addition to paragraph (b)(3)(i) above, these tests may include:

(A) Arsenic and compounds expressed as arsenic;

(B) Beryllium and compounds expressed as beryllium;

(C) Hexavalent chromium and compounds expressed as chromium; and

(D) Nickel and compounds expressed as nickel.

(iii) Following the date on which the initial performance test is completed or is required to be completed, whichever date comes first, the owner or operator of an affected facility shall:

(A) Demonstrate compliance with the opacity limit by conducting an annual performance test (no more than 12 months following the previous performance test) using the applicable procedures and test methods.

(B) Demonstrate compliance with the PM, CO, and HCl emission limits by conducting an annual performance test (no more than 12 months following the previous performance test) using the applicable procedures and test methods in accordance with paragraph (a)(3) of this section. If all three performance tests over a three-year period indicate compliance with the emission limit for a pollutant (PM, CO, or HCl), the owner or operator may forego a performance test for that pollutant for the subsequent two years. At a minimum, a performance test for PM, CO, and HCl shall be conducted every third year (no more than 36 months following the previous performance test). If a performance test conducted every third year indicates compliance with the emission limit for a pollutant (PM, CO, or HCl), the owner or operator may forego a performance test for that pollutant for an additional two years. If any performance test indicates noncompliance with the respective emission limit, a performance test for that pollutant shall be conducted annually until all annual performance tests over a three-year period indicate compliance with the emission limit. The use of the bypass stack during a performance test shall invalidate the performance test.

(4) Large HMIWI facilities with capacity < 2000 lbs/hr

(i) The owner or operator of an affected facility shall ensure that an initial source test is conducted for the following:

(A) Particulate matter;

(B) HCl;

(C) CO;

(D) Cadmium;

(E) Lead;

(F) Hg;

(G) Dioxins/furans; and

(H) Opacity.

(ii) The Department reserves the right to require the owner or operator to conduct further source tests at any time if it is determined to be necessary by the Department after the initial compliance test. In addition to paragraph (b)(4)(i) above, these tests may include:

(A) Arsenic and compounds expressed as arsenic;

(B) Beryllium and compounds expressed as beryllium;

(C) Hexavalent chromium and compounds expressed as chromium; and

(D) Nickel and compounds expressed as nickel.

(iii) Following the date on which the initial performance test is completed or is required to be completed, whichever date comes first, the owner or operator of an affected facility shall:

(A) Demonstrate compliance with the opacity limit by conducting an annual performance test (no more than 12 months following the previous performance test) using the applicable procedures and test methods.

(B) Demonstrate compliance with the PM, CO, and HCl emission limits by conducting an annual performance test (no more than 12 months following the previous performance test) using the applicable procedures and test methods in accordance with paragraph (a)(3) of this section. If all three performance tests over a three-year period indicate compliance with the emission limit for a pollutant (PM, CO, or HCl), the owner or operator may forego a performance test for that pollutant for the subsequent two years. At a minimum, a performance test for PM, CO, and HCl shall be conducted every third year (no more than 36 months following the previous performance test). If a performance test conducted every third year indicates compliance with the emission limit for a pollutant (PM, CO, or HCl), the owner or operator may forego a performance test for that pollutant for an additional two years. If any performance test indicates noncompliance with the respective emission limit, a performance test for that pollutant shall be conducted annually until all annual performance tests over a three-year period indicate compliance with the emission limit. The use of the bypass stack during a performance test shall invalidate the performance test.

(5) Large HMIWI facilities with capacity equal to or greater than 2000 lbs/hr

(i) The owner or operator of an affected facility shall ensure that an initial source test is conducted for the following:

(A) Particulate matter;

(B) HCl;

(C) CO;

(D) Cadmium;

(E) Lead;

(F) Hg;

(G) Dioxins/furans; and

(H) Opacity.

(ii) The Department reserves the right to require the owner or operator to conduct further source tests at any time if it is determined to be necessary by the Department after the initial compliance test. In addition to paragraph (b)(5)(i) above, these tests may include:

(A) Arsenic and compounds expressed as arsenic;

(B) Beryllium and compounds expressed as beryllium;

(C) Hexavalent chromium and compounds expressed as chromium;

(D) Nickel and compounds expressed as nickel; and

(E) SO_2.

(iii) Following the date on which the initial performance test is completed or is required to be completed, whichever date comes first, the owner or operator of an affected facility shall:

(A) Demonstrate compliance with the opacity limit by conducting an annual performance test (no more than 12 months following the previous performance test) using the applicable procedures and test methods.

(B) Demonstrate compliance with the PM, CO, HCl, and dioxins/furans emission limits by conducting an annual performance test (no more than 12 months following the previous performance test) using the applicable procedures and test methods in accordance with paragraph (a)(3) of this section. If all four performance tests over a three-year period indicate compliance with the emission limit for a pollutant (PM, CO, HCl, or dioxins/furans), the owner or operator may forego a performance test for that pollutant for the subsequent two years. At a minimum, a performance test for PM, CO, HCl, and dioxins/furans shall be conducted every third year (no more than 36 months following the previous performance test). If a performance test conducted every third year indicates compliance with the emission limit for a pollutant (PM, CO, HCl, or dioxins/furans), the owner or operator may forego a performance test for that pollutant for an additional two years. If any performance test indicates noncompliance with the respective emission limit, a performance test for that pollutant shall be conducted annually until all annual performance tests over a three-year period indicate compliance with the emission limit. The use of the bypass stack during a performance test shall invalidate the performance test.

(c) Additional Testing Requirements for New, Existing, and Modified Sources

(1) An owner or operator of a facility using a Continuous Emission Monitoring System (CEMS) to demonstrate compliance with any of the emission limits under Section III of this standard shall:

(i) Determine compliance with the appropriate emission limit(s) using a 12-hour rolling average, calculated each hour as the average of the previous 12 operating hours (not including startup, shutdown, or malfunction).

(ii) Operate all CEMS in accordance with the applicable procedures under Section V of this standard and 40 CFR 60, Appendices B and F.

(2) The owner of an affected facility shall demonstrate to the Department and maintain a combustible carbon content not to exceed six percent (dry basis) in the ash residue (ash and non-combustibles). Such a demonstration shall use the test method outlined in ASTM Method D 3178 "Carbon & Hydrogen Analysis of Coal and Coke," ASTM Method D 5373, or other methods approved by this Department and be performed at least once per year. The Department reserves the right to require more frequent demonstrations when it is determined to be necessary. The Department also reserves the right to alter the frequency of the required demonstrations as a data base is established and the ash quality consistently shows compliance for a specific facility.

(3) The owner or operator of an affected facility equipped with a dry scrubber followed by a fabric filter, a wet scrubber, or a dry scrubber followed by a fabric filter and wet scrubber shall:

(i) Establish the appropriate maximum and minimum operating parameters, indicated in Table IV of this standard for each control system, as site specific operating parameters during the initial performance test to determine compliance with the emission limits; and

(ii) Following the date on which the initial performance test is completed or is required to be completed under this standard, whichever date comes first, the owner or operator shall ensure that the affected facility does not operate above any of the applicable maximum operating

parameters or below any of the applicable minimum operating parameters listed in Table IV of this standard and measured as three-hour rolling averages (calculated each hour as the average of the previous three operating hours) at all times except during periods of startup, shutdown and malfunction. Operating parameter limits do not apply during performance tests. Operation above the established maximum or below the established minimum operating parameter(s) shall constitute a violation of established operating parameter(s).

(4) Except as provided in paragraph (c)(7) of this section, for affected facilities equipped with a dry scrubber followed by a fabric filter:

(i) Operation of the affected facility above the maximum charge rate and below the minimum secondary chamber temperature (each measured on a three-hour rolling average) simultaneously shall constitute a violation of the CO emission limit.

(ii) Operation of the affected facility above the maximum fabric filter inlet temperature, above the maximum charge rate, and below the minimum dioxins/furans sorbent flow rate (each measured on a three-hour rolling average) simultaneously shall constitute a violation of the dioxins/furans emission limit.

(iii) Operation of the affected facility above the maximum charge rate and below the minimum HCl sorbent flow rate (each measured on a three-hour rolling average) simultaneously shall constitute a violation of the HCl emission limit.

(iv) Operation of the affected facility above the maximum charge rate and below the minimum Hg sorbent flow rate (each measured on a three-hour rolling average) simultaneously shall constitute a violation of the Hg emission limit.

(v) Use of the bypass stack (except during startup, shutdown, or malfunction) shall constitute a violation of the PM, dioxins/furans, HCl, Pb, Cd and Hg emission limits.

(5) Except as provided in paragraph (c)(7) of this section, for affected facilities equipped with a wet scrubber:

(i) Operation of the affected facility above the maximum charge rate and below the minimum pressure drop across the wet scrubber or below the minimum horsepower or amperage to the system (each measured on a three-hour rolling average) simultaneously shall constitute a violation of the PM emission limit.

(ii) Operation of the affected facility above the maximum charge rate and below the minimum secondary chamber temperature (each measured on a three-hour rolling average) simultaneously shall constitute a violation of the CO emission limit.

(iii) Operation of the affected facility above the maximum charge rate, below the minimum secondary chamber temperature, and below the minimum scrubber liquor flow rate (each measured on a three-hour rolling average) simultaneously shall constitute a violation of the dioxins/furans emission limit.

(iv) Operation of the affected facility above the maximum charge rate and below the minimum scrubber liquor pH (each measured on a three-hour rolling average) simultaneously shall constitute a violation of the HCl emission limit.

(v) Operation of the affected facility above the maximum flue gas temperature and above the maximum charge rate (each measured on a three-hour rolling average) simultaneously shall constitute a violation of the Hg emission limit.

(vi) Use of the bypass stack (except during startup, shutdown, or malfunction) shall constitute a violation of the PM, dioxins/furans, HCl, Pb, Cd and Hg emission limits.

(6) Except as provided in paragraph (c)(7) of this section, for affected facilities equipped with a dry scrubber followed by a fabric filter and a wet scrubber:

(i) Operation of the affected facility above the maximum charge rate and below the minimum secondary chamber temperature (each measured on a three-hour rolling average) simultaneously shall constitute a violation of the CO emission limit.

(ii) Operation of the affected facility above the maximum fabric filter inlet temperature, above the maximum charge rate, and below the minimum dioxins/furans sorbent flow rate (each

measured on a three-hour rolling average) simultaneously shall constitute a violation of the dioxins/furans emission limit.

(iii) Operation of the affected facility above the maximum charge rate and below the minimum scrubber liquor pH (each measured on a three-hour rolling average) simultaneously shall constitute a violation of the HCl emission limit.

(iv) Operation of the affected facility above the maximum charge rate and below the minimum Hg sorbent flow rate (each measured on a three-hour rolling average) simultaneously shall constitute a violation of the Hg emission limit.

(v) Use of the bypass stack (except during startup, shutdown, or malfunction) shall constitute a violation of the PM, dioxins/furans, HCl, Pb, Cd and Hg emission limits.

(7) The owner or operator of an affected facility may conduct a repeat performance test within 30 days of violation of applicable operating parameter(s) to demonstrate that the affected facility is not in violation of the applicable emission limit(s). Repeat performance tests conducted pursuant to this paragraph shall be conducted using the identical operating parameters that indicated a violation under paragraph (c)(4), (c)(5), or (c)(6) of this section.

(8) The owner or operator of an affected facility using an air pollution control device other than a dry scrubber followed by a fabric filter, a wet scrubber, or a dry scrubber followed by a fabric filter and a wet scrubber to comply with the emission limits under this standard shall contact the EPA in writing for approval of other site-specific operating parameters to be established during the initial performance test and continuously monitored thereafter. The owner or operator shall not conduct the initial performance test until after the request has been approved by the EPA.

(9) The owner or operator of an affected facility may conduct a repeat performance test at any time, in accordance with the requirements of Regulation 61–62.1, Section IV, Source Test, to establish new values for the operating parameters. The Department may request a repeat performance test at any time.

Section VIII - Recordkeeping and Reporting Requirements.

(a) The owner or operator of an affected facility shall ensure that:

(1) Inspection and maintenance schedules for incinerators are posted or kept on-site at or near the incinerator.

(2) Operating procedures, startup procedures, and shutdown procedures for incinerators are approved by the Department and posted on-site at or near the incinerator.

(b) In addition to an inspection and maintenance plan, the owner or operator shall prepare a plan of action for approval by the Department. The plan of action shall identify the steps and procedures the operator will follow to avoid exceedances of the emission limitations and operating conditions specified in this standard or specific permit conditions. The plan shall include descriptions of startup and shutdown procedures; actions to be taken to correct anomalous operating conditions and training of plant operators.

(c) The owner or operator of an affected facility shall maintain the following information (as applicable) for a period of at least five years:

(1) Calendar date of each record;

(2) Records of the following data:

(i) Concentrations of any pollutant listed in this standard or measurements of opacity as determined by the continuous emission monitoring system (if applicable);

(ii) HMIWI charge dates, times, and weights and hourly charge rates;

(iii) Fabric filter inlet temperatures during each minute of operation, as applicable;

(iv) Amount and type of dioxins/furans sorbent used during each hour of operation, as applicable;

(v) Amount and type of Hg sorbent used during each hour of operation, as applicable;

(vi) Amount and type of HCl sorbent used during each hour of operation, as applicable;

(vii) Secondary chamber temperatures recorded during each minute of operation;

(viii) Liquor flow rate to the wet scrubber inlet during each minute of operation, as applicable;

(ix) Horsepower or amperage to the wet scrubber during each minute of operation, as applicable;

(x) Pressure drop across the wet scrubber system during each minute of operation, as applicable;

(xi) Temperature at the outlet from the wet scrubber during each minute of operation, as applicable;

(xii) pH at the inlet to the wet scrubber during each minute of operation, as applicable;

(xiii) Records indicating use of the bypass stack, including dates, times, and durations; and

(xiv) For affected facilities complying with Section VII(c)(8) and Section V(c)(3) of this standard, the owner or operator shall maintain all operating parameter data collected.

(3) Identification of calendar days for which data on emission rates or operating parameters specified under paragraph (c)(2) of this section have not been obtained, with an identification of the emission rates or operating parameters not measured, reasons for not obtaining the data, and a description of corrective actions taken.

(4) Identification of calendar days, times and durations of malfunctions, a description of the malfunction and the corrective action taken.

(5) Identification of calendar days for which data on emission rates or operating parameters specified under paragraph (c)(2) of this section exceeded the applicable limits, with a description of the exceedances, reasons for such exceedances, and a description of corrective actions taken.

(6) The results of the initial, annual, and any subsequent performance tests conducted to determine compliance with the emission limits and/or to establish operating parameters, as applicable.

(7) Records showing the names of HMIWI operators who have completed review of the information in Section IX(h) as required by Section IX(g) of this standard, including the date of the initial review and all subsequent annual reviews.

(8) Records showing the names of the HMIWI operators who have completed the operator training requirements, including documentation of training and the dates of the training.

(9) Records showing the names of the HMIWI operators who have met the criteria for qualification under Section IX of this standard and the dates of their qualification.

(10) Records of calibration of any monitoring devices as required under Sections V(b), (c), and (d) of this standard.

(d) The owner or operator of an affected facility shall submit the information specified in paragraphs (d)(1) through (d)(3) of this section no later than 30 days following the initial performance test. All reports shall be signed by the facilities manager.

(1) The initial performance test data as recorded under Section VII of this standard, as applicable.

(2) The values for the site-specific operating parameters established pursuant to Section VII of this standard, as applicable.

(3) The waste management plan as specified in Section X of this standard.

(e) The owner or operator of an affected facility shall ensure that an annual report is submitted one year following the submission of the information in paragraph (d) of this section. Subsequent reports shall be submitted no more than 12 months following the previous report (once the unit is subject to permitting requirements under Title V of the Clean Air Act, the owner or operator of an affected facility must submit these reports semi-annually). The annual report shall include the information specified in paragraphs (e)(1) through (e)(8) of this section. All reports shall be signed by the facilities manager.

(1) The values for the site-specific operating parameters established pursuant to Section VII of this standard, as applicable.

(2) The highest maximum operating parameter and the lowest minimum operating parameter, as applicable, for each operating parameter recorded for the calendar year being reported, pursuant to Section VII of this standard, as applicable.

(3) The highest maximum operating parameter and the lowest minimum operating parameter, as applicable for each operating parameter recorded pursuant to Section VII of this standard for the calendar year preceding the year being reported, in order to provide the Department with a summary of the performance of the affected facility over a two-year period.

(4) Any information recorded under paragraphs (c)(3) through (c)(5) of this section for the calendar year being reported.

(5) Any information recorded under paragraphs (c)(3) through (c)(5) of this section for the calendar year preceding the year being reported, in order to provide the Department with a summary of the performance of the affected facility over a two-year period.

(6) If a performance test was conducted during the reporting period, the results of that test.

(7) If no exceedances or malfunctions were reported under paragraphs (c)(3) through (c)(5) of this section for the calendar year being reported, a statement that no exceedances occurred during the reporting period.

(8) Any use of the bypass stack, the duration, reason for malfunction, and corrective action taken.

(f) The owner or operator of an affected facility shall submit semi-annual reports containing any information recorded under paragraphs (c)(3) through (c)(5) of this section no later than 60 days following the reporting period. The first semi-annual reporting period ends six months following the submission of information in paragraph (d) of this section. Subsequent reports shall be submitted no later than six-calendar months following the previous report. All reports shall be signed by the facilities manager.

(g) All records specified under paragraph (c) of this section shall be maintained on-site in either paper copy or computer-readable format, unless an alternative format is approved by the Department.

(h) The owner or operator of each small rural HMIWI subject to the emission limits in Table II of this standard shall:

(1) Maintain records of the annual equipment inspections, any required maintenance, and any repairs not completed within 10 days of an inspection or the time frame established by the Department; and

(2) Submit an annual report containing information recorded under paragraph (h)(1) of this section no later than 60 days following the year in which data were collected. Subsequent reports shall be sent no later than 12 calendar months following the previous report (once the unit is subject to permitting requirements under Title V of the Act, the owner or operator must submit these reports semi-annually). The report shall be signed by the facilities manager.

(i) The owner or operator of an affected facility shall ensure that copies of all records and reports required under this section are available for inspection during normal working hours and copies are furnished within 10-working days after receipt of a written request from the Department.

(j) The owner or operator of an affected facility subject to the monitoring provisions of this standard will be required to report quarterly all exceedances of limits specified in the source's operating permit. All quarterly reports must be postmarked by the 30th day following the end of each calendar quarter.

(k) The owner or operator of an affected facility shall ensure the appropriate Regional Environmental Quality Control Office is notified by telephone immediately following any failure of process equipment, failure of any air pollution control equipment, failure of any monitoring equipment, or a process operational error which results in an increase in emissions above any allowable emission rate. In addition, the owner or operator of an affected facility shall ensure that the Department is notified in writing of the problem and measures taken to correct the problem as expeditiously as possible in accordance with South Carolina Air Pollution Control Regulation 61 62.1, Section II.J.1.c.

Section IX - Operator Training and Qualification Requirements.

(a) No owner or operator of an affected facility shall allow the affected facility to operate at any time unless a fully trained and qualified HMIWI operator is accessible, either at the facility or available within one hour. The trained and qualified HMIWI operator may operate the HMIWI directly or be the direct supervisor of one or more HMIWI operators.

(b) The owner or operator of an affected facility shall ensure that operator training and qualification is obtained through a program approved by the Department and which shall include the requirements contained in paragraphs (c) through (g) of this section.

(c) Training shall be obtained by completing an HMIWI operator training course that includes, at a minimum, the following provisions:

(1) 24 hours of training on the following subjects:

(i) Environmental concerns, including pathogen destruction and types of emissions;

(ii) Basic combustion principles, including products of combustion;

(iii) Operation of the type of incinerator to be used by the operator, including proper startup, waste charging, and shutdown procedures;

(iv) Combustion controls and monitoring;

(v) Operation of air pollution control equipment and factors affecting performance (if applicable);

(vi) Methods to monitor pollutants (continuous emission monitoring systems and monitoring of HMIWI and air pollution control device operating parameters) and equipment calibration procedures (where applicable);

(vii) Inspection and maintenance of the HMIWI, air pollution control devices, and continuous emission monitoring systems;

(viii) Actions to correct malfunctions or conditions that may lead to malfunction;

(ix) Bottom and fly ash characteristics and handling procedures;

(x) Applicable federal, state, and local regulations;

(xi) Work safety procedures;

(xii) Pre-startup inspections; and

(xiii) Recordkeeping requirements.

(2) An examination designed and administered by the instructor.

(3) Reference material distributed to the attendees covering the course topics.

(d) Qualification shall be obtained by:

(1) Completion of a training course that satisfies the criteria under paragraph (c) of this section; and

(2) Either six months experience as an HMIWI operator, six months experience as a direct supervisor of an HMIWI operator, or completion of at least two burn cycles under the observation of two qualified HMIWI operators.

(e) Qualification is valid from the date on which the examination is passed or the completion of the required experience, whichever is later.

(f) To maintain qualification, the trained and qualified HMIWI operator shall complete and pass an annual review or refresher course of at least four hours covering, at a minimum, the following:

(1) Update of regulations;

(2) Incinerator operation, including startup and shutdown procedures;

(3) Inspection and maintenance;

(4) Responses to malfunctions or conditions that may lead to malfunction; and

(5) Discussion of operating problems encountered by attendees.

(g) A lapsed qualification shall be renewed by one of the following methods:

(1) For a lapse of less than three years, the HMIWI operator shall complete and pass a standard annual refresher course described in paragraph (f) of this section.

(2) For a lapse of three years or more, the HMIWI operator shall complete and pass a training course with the minimum criteria described in paragraph (c) of this section.

(h) The owner or operator of an affected facility shall maintain documentation at the facility that addresses the following:

(1) Summary of the applicable requirements under this standard;

(2) Description of basic combustion theory applicable to an HMIWI;

(3) Procedures for receiving, handling, and charging waste;

(4) HMIWI startup, shutdown, and malfunction procedures;

(5) Procedures for maintaining proper combustion air supply levels;

(6) Procedures for operating the HMIWI and associated air pollution control systems within the requirements established under this standard;

(7) Procedures for responding to periodic malfunction or conditions that may lead to malfunction;

(8) Procedures for monitoring HMIWI emissions;

(9) Reporting and recordkeeping procedures; and

(10) Procedures for handling ash.

(i) The owner or operator of an affected facility shall establish a program for reviewing the information listed in paragraph (h) of this section annually with each HMIWI operator.

(1) The initial review of the information listed in paragraph (h) of this section shall be conducted within six months after the effective date of this subpart or prior to assumption of responsibilities affecting HMIWI operation, whichever date is later.

(2) Subsequent reviews of the information listed in paragraph (h) of this section shall be conducted annually.

(j) The information listed in paragraph (h) of this section shall be kept in a readily accessible location for all HMIWI operators. This information, along with records of training shall be available for inspection by the Department.

Section X - Waste Management Plan.

The owner or operator of an affected facility shall prepare a waste management plan. The waste management plan shall identify both the feasibility and the approach to separate certain components of solid waste from the health care waste stream in order to reduce the amount of toxic emissions from incinerated waste. A waste management plan may include, but is not limited to, elements such as paper, cardboard, plastics, glass, battery, or metal recycling; or purchasing recycled or recyclable products. A waste management plan may include different goals or approaches for different areas or departments of the facility and need not include new waste management goals for every waste stream. It should identify, where possible, reasonably available additional waste management measures, taking into account the effectiveness of waste management measures already in place, the costs of additional measures, the emission reductions expected to be achieved, and any other environmental or energy impacts they might have. The American Hospital Association publication entitled "An Ounce of Prevention: Waste Reduction Strategies for Health Care Facilities" (incorporated by reference, see 40 CFR 60.17, September 15, 1997), shall be considered in the development of the waste management plan.

Section XI - Inspection Guidelines.

(a) The owner or operator of an affected facility shall ensure that the HMIWI has an initial equipment inspection performed within one year of the effective date of this standard. The inspection shall not relieve the owner or operator from any detected violations.

(1) At a minimum, an inspection shall include the following:

(i) Inspect all burners, pilot assemblies, and pilot sensing devices for proper operation; clean pilot flame sensor, as necessary;

(ii) Ensure proper adjustment of primary and secondary chamber combustion air, and adjust as necessary;

(iii) Inspect hinges and door latches and lubricate as necessary;

(iv) Inspect dampers, fans, and blowers for proper operation;

(v) Inspect HMIWI door and door gaskets for proper sealing;

(vi) Inspect motors for proper operation;

(vii) Inspect primary chamber refractory lining; clean and repair/replace lining as necessary;

(viii) Inspect incinerator shell for corrosion and/or hot spots;

(ix) Inspect secondary/tertiary chamber and stack, clean as necessary;

(x) Inspect mechanical loader, including limit switches, for proper operation, if applicable;

(xi) Visually inspect waste bed (grates), and repair/seal, as appropriate;

(xii) For the burn cycle that follows the inspection, document that the incinerator is operating properly and make any necessary adjustments;

(xiii) Inspect air pollution control device(s) for proper operation, if applicable;

(xiv) Inspect waste heat boiler systems to ensure proper operation, if applicable;

(xv) Inspect bypass stack components;

(xvi) Ensure proper calibration of thermocouples, sorbent feed systems and any other monitoring equipment; and

(xvii) Generally observe that the equipment is maintained in good operating condition.

(2) Within 10-operating days following an equipment inspection, the owner or operator of an affected facility shall ensure that all necessary repairs shall be completed. In order to exceed the 10 days, the owner or operator must justify the extension and obtain written approval from the Department establishing a date whereby all necessary repairs of the designated facility shall be completed.

(b) The owner or operator of an affected facility shall ensure that the HMIWI has an equipment inspection performed annually (no more than 12 months following the previous annual equipment inspection), as outlined in paragraphs (a)(1) and (a)(2) of this section.

Appendix A

Toxic Equivalency Factors

Dioxins/Furans Congener	Toxic Equivalency Factor
2,3,7,8-tetrachlorinated dibenzo-p-dioxin	1
1,2,3,7,8-pentachlorinated dibenzo-p-dioxin	0.5
1,2,3,4,7,8-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,7,8,9-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,6,7,8-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,4,6,7,8-heptachlorinated dibenzo-p-dioxin	0.01
Octachlorinated dibenzo-p-dioxin	0.001
2,3,7,8-tetrachlorinated dibenzofuran	0.1
2,3,4,7,8-pentachlorinated dibenzofuran	0.5
1,2,3,7,8-pentachlorinated dibenzofuran	0.05
1,2,3,4,7,8-hexachlorinated dibenzofuran	0.1

1,2,3,6,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,7,8,9-hexachlorinated dibenzofuran	0.1
2,3,4,6,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,4,6,7,8-heptachlorinated dibenzofuran	0.01
1,2,3,4,7,8,9-heptachlorinated dibenzofuran	0.01
Octachlorinated dibenzofuran	0.001

Appendix B

Residence Time Calculation Guidance

The review of all incinerators shall include verification of the residence time stated on the application. This guidance shall be followed to assure that these calculations are handled in a uniform manner.

STEP 1. Estimate the total heat input to the system:

Total system heat input (Btu/hr) = [Maximum waste firing rate (lbs/hr) x Maximum heating value (Btu/lb)] + Average primary burner heat input + Average secondary burner input.

NOTE: Use the average burner inputs required after the onset of waste burning.

Use a waste heating value of 8,500 Btu/lb.

STEP 2. Estimate the system heat loss (prior to heat recovery):

System heat loss = Shell loss + Sensible heat in ash + Sensible heat in unburned carbon + Latent heat. The heat loss may be assumed to be 20 percent of total heat input.

STEP 3. Calculate the net heat available (Q) to raise the temperature of the products of combustion: Q (Btu/hr) = (Total system heat input) - (System heat loss).

STEP 4. Calculate the weight of product of combustion (M):

$M = Q / \{C_p \times (T_o - T_i)\}$

C_p = Average specific heat (Btu/lb degrees F), assume a value of 0.28.

T_o = Exit temperature (degrees F), use the design temperature of 2000 degrees F as T_o.

T_i = Ambient air temperature (degrees F), assume the ambient temperature to be 70 degrees F.

STEP 5. Calculate the volume of product of combustion (F):

$$F\ (\text{scfs}) = \frac{M}{d \times 60 \times 60}$$

d (lb/ft^3) = Density of exhaust gases at 70 degrees F, use a value of 0.075.

$$F^1\ (\text{acfs}) = F \times \frac{(T_o + 460)}{530}$$

$$F^1 \text{ design temperature} = F \times \frac{2460}{530}$$

scfs = standard cubic feet per second

acfs = actual cubic feet per second

STEP 6. Calculate the volume of secondary chamber.

STEP 7. Residence time = $\frac{\text{chamber volume}}{F^1}$

For a minimum 1 second (sec) secondary chamber residence time and design temperature 2000 degrees F,

$$\frac{\text{Secondary chamber volume}}{F^1} \quad m = > 1$$

APPENDIX C

Deleted by State Register Volume 24, Issue No. 5, eff May 26, 2000.

HISTORY: Amended by State Register Volume 36, Issue No. 12, eff December 28, 2012 (errata); State Register Volume 37, Issue No. 12, eff December 27, 2013; State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016.

Editor's Note

Scrivener errors corrected in 2012.

Scrivener's error corrected in 2017, adding "and" at the end of Section VII(b)(2)(ii)(C).

STANDARD NO. 4

EMISSIONS FROM PROCESS INDUSTRIES

SECTION I—GENERAL

A. The method which is approved by the Department for determining compliance with opacity limitations under this standard is Environmental Protection Agency (EPA) Reference Method 9 (40 Code of Federal Regulations (CFR) 60, Appendix A, as revised July 1, 1984). Alternate methods may be utilized only if approved in advance by the Department and by the EPA.

B. This standard will not supersede any requirements imposed by Federal New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP), Federal or State Prevention of Significant Deterioration (PSD) Regulations, nor special permit conditions, unless this standard would impose a more restrictive emission limit.

SECTION II—SULFURIC ACID MANUFACTURING

A. The rate of emission of sulfur dioxide (SO_2) from sulfuric acid manufacturing shall be limited to no more than four (4) pounds of SO_2 per ton of 100 percent sulfuric acid produced and emissions of acid mist to 0.5 pounds of sulfuric acid per ton of 100 percent acid produced.

B. The maximum allowable stack outlet opacity from any source under this category is twenty (20) percent.

SECTION III—KRAFT PULP AND PAPER MANUFACTURING

The opacity from kraft pulp and paper manufacturing shall be limited to the following:

	Maximum Allowable Stack Opacity
Recovery Furnace	40 percent
Dissolving Tank	20 percent
Lime Kiln	20 percent

SECTION IV—[RESERVED]

SECTION V - COTTON GINS

A. Definitions

1. 1D-3D cyclone - Any cyclone-type collector of the 1D-3D configuration. This designation refers to the ratio of the cylinder to cone length, where D is the diameter of the cylinder portion. A 1D-3D cyclone has a cylinder length of 1xD and a cone length of 3xD.

2. 2D-2D cyclone - Any cyclone-type collector of the 2D-2D configuration. This designation refers to the ratio of the cylinder to cone length, where D is the diameter of the cylinder portion. A 2D-2D cyclone has a cylinder length of 2xD and a cone length of 2xD.

3. Bale - A compressed package of cotton lint weighing nominally 500 pounds.

4. Gin yard - The land upon which a cotton gin is located and all contiguous land having common ownership or use.

5. Ginning operation - Any facility or plant that separates cotton lint from cotton seed. This process typically includes cleaning (removing plant material, dirt, and other foreign matter) and packaging the lint into bales.

6. Ginning season - The period of time during which the gin is in operation; usually between (but not limited to) September of the current year and January of the following year.

7. High pressure exhausts - The exhaust air systems at a cotton gin preceding the gin stand (including unloading, drying, extracting, cleaning, and overflow handling systems) in which material is conveyed by a higher pressure air and is typically controlled by cyclones.

8. Low pressure exhausts - The exhaust air systems at a cotton gin following the gin stand (including lint cotton cleaning and battery formation process) in which material is conveyed by low pressure air and is typically controlled by condensers.

9. Removal efficiency - Percent of total particulate matter removed from the gas stream between a cyclone's inlet and outlet.

B. Applicability

1. This rule applies to all existing, new, and modified cotton ginning operations in South Carolina. These facilities will be subject to registration permit conditions as specified in Regulation 61–62.1, Section II.I.

2. Existing facilities with a maximum gin stand rated capacity (or documented equipment limitation) of less than twenty (20) bales per hour that do not have cyclones on lint cleaning system exhausts and battery condenser exhausts as of promulgation date of this rule, will not be required to add the emission control devices in paragraph C.2 below to lint cleaning exhausts or battery condenser exhausts if emissions from these exhausts are controlled by fine mesh screens.

C. Emission Control Requirements

1. New facilities will be required to apply for a registration permit before commencement of construction. Existing facilities will be required to apply for a registration permit within ninety (90) days of the promulgation date of this rule. Until such time that a registration permit is issued by the Department, existing cotton ginning operations should operate with existing permits.

2. Each cotton ginning operation shall install and operate a particulate emission control system on all high and low pressure exhausts and lint cleaning system exhausts that includes one (1) or more 1D-3D or 2D-2D cyclones meeting the cylinder diameter requirements to produce a 3.5 to 6.0 or 3.0 to 5.5 inches of water pressure drop (respectively) as illustrated in Figure 6–20 and 6–21 of the Agricultural Handbook Number 503, Cotton Ginners Handbook, dated December 1994. Existing facilities shall comply with these control equipment requirements by August 31, 2012.

3. Air pollutant emissions shall not exceed twenty (20) percent opacity.

4. Stacks shall not be equipped with raincaps or other devices that deflect the emissions downward or outward.

5. Trash stacker areas shall contain one (1) of the following:

a. A three (3) sided enclosure with a roof whose sides are high enough above the opening of the dumping device to prevent wind from dispersing dust or debris; or

b. A device to provide wet suppression at the dump area of the trash cyclone and minimize free fall distance of waste material exiting the trash cyclone.

6. The owner or operator shall ensure that all trucks transporting gin trash material are covered and that the trucks are cleaned of over-spill material before trucks leave the trash hopper dump area.

7. Reasonable precautions should be taken when operating or maintaining storage piles, materials, equipment, or vehicles in order to prevent any substance from being scattered by the wind or air in order to prevent fugitive dust emissions in accordance with Regulation 61–62.6, Section II.

D. Alternative Control Measures

1. The owner or operator of a cotton ginning operation may petition the Department to use alternative control measures to those specified in this rule. The petition shall include:

a. The name and address of the petitioner;

b. The location and description of the cotton ginning operation;

c. A description of the alternative control measure; and

d. A demonstration that the alternative control measure is at least as effective as the control device or method specified in this rule.

2. Once approved, repairs and maintenance of such devices will not require notification to the Department.

E. Monitoring

1. To ensure that the minimum required removal efficiency is maintained, the owner or operator shall establish, based on manufacturer's recommendations or industry standards, an inspection and maintenance schedule for the control devices, other emission processing equipment, and monitoring devices that are used pursuant to this rule. The inspection and maintenance schedule shall be followed throughout the ginning season. The results of the inspections and any maintenance performed on the control equipment, emission processing equipment, or monitoring devices shall be documented in an on-site logbook and made available to the Department upon request. The owner or operator should keep a copy of the manufacturer's specifications for each type of control device installed.

2. On a weekly basis, the owner or operator shall measure and calculate the pressure drops across all cyclones. Measurements shall be made using a manometer, a Magnahelic® gauge, or other device that the Department has approved as being equivalent to a manometer. These measurements should be recorded in the logbook referred to in paragraph E.1 above. If the owner or operator measures a static pressure out of the range indicated in paragraph C.2 above, the owner or operator shall initiate corrective action. Corrective action shall be recorded in the logbook. If corrective action will take more than forty-eight (48) hours to complete, the owner or operator shall notify the Department no later than the end of the day such static pressure is measured.

3. During the ginning season, the owner or operator shall weekly inspect for structural integrity of the control devices and other emissions processing systems and shall ensure that the control devices and emission processing systems conform to normal and proper operation of the gin. Fine mesh screens should be inspected daily throughout the ginning season and any clogs should be removed. If a problem is found, corrective action shall be taken and recorded in the logbook required in paragraph E.1 above.

4. If control devices are repaired or replaced with equivalent control equipment, the facility must maintain on-site documentation showing compliance with the conditions specified in Section V.C of this standard or previously allowed for under Section V.D of this standard.

5. The owner or operator shall retain all records required by this rule for three (3) years from the date of recording.

SECTION VI—HOT MIX ASPHALT MANUFACTURING

A. The rate of emissions of particulate matter from hot mix asphalt manufacturing shall be limited to the following:

Production Rate (Tons Per Hour)	Maximum Allowable Emission Rate (Pounds Per Hour)
20	22
50	31
100	38
150	45
200	51
250	56
300	61
350 and above	65

B. All hot mix asphalt plants shall be equipped with a fugitive dust and/or fugitive emissions control system which shall be operated and maintained in such a manner as to reduce to a minimum the emissions of particulate matter from any point other than the stack outlet.

C. The maximum allowable stack opacity from hot mix asphalt manufacturing shall be twenty (20) percent.

SECTION VII—METAL REFINING

The maximum allowable opacity from any furnace building and/or operations building (including but not limited to pollution control systems, louvers, doors, openings, etc.) shall be twenty (20) percent.

SECTION VIII—OTHER MANUFACTURING

A. Particulate matter emissions where not specified elsewhere shall be limited to the rate specified in Table A (modified using the effect factors (F) of Table B as required). Kraft Pulp and Paper Manufacturing facilities are excluded from Section VIII.

B. Interpolation of the data in Table A for process weights up to thirty (30) tons per hour shall be accomplished by use of the equation:

$$E = (F)\ 4.10\ P^{0.67}$$

and interpolation and extrapolation of the data for process weight rates greater than thirty (30) tons per hour shall be accomplished by using the equation:

$$E = (F)\ (55.0\ P^{0.11} - 40)$$

Where: E = the allowable emission rate in pounds per hour
P = process weight rate in tons per hour
F = effect factor from Table B

TABLE A

Allowable Rate of Emission Based on Process Weight Rate*

Process Weight Rate (Tons/Hour)	Rate of Emission (Pounds/Hour)	Process Weight Rate (Tons/Hour)	Rate of Emission (Pounds/Hour)
0.05	0.551	8	16.5
0.10	0.877	9	17.9
0.20	1.40	10	19.2
0.30	1.83	15	25.2
0.40	2.22	20	30.5
0.50	2.58	25	35.4
0.75	3.38	30	40.0
1.00	4.10	35	41.3
1.25	4.75	40	42.5
1.50	5.38	45	43.6
1.75	5.96	50	44.6
2.00	6.52	60	46.3
2.50	7.58	70	47.8
3.00	8.56	80	49.0
3.50	9.49	100	51.2
4.00	10.4	500	69.0
4.50	11.2	1000	77.6
5.00	12.0	3000	92.7

TABLE B

Effect Factor for Particulate Matter Emissions**

(To Be Used with Standard 4 - Section VIII)

Material	Effect Factor (F)
a. All materials not specifically listed hereunder	1.0
b. Elements and their compounds on the basis of the element contained therein***	none assigned
c. Specific Materials: Acid Mists	0.25

* Please note that certain small operations may not require a permit (see exemptions under Regulation 62.1, Section II).

** The Board will make additions to this table as required from time to time to preserve public health and property in South Carolina.

*** When a material contains two (2) or more elements, the effect factor of the element having the lowest effect factor shall apply.

SECTION IX—VISIBLE EMISSIONS (WHERE NOT SPECIFIED ELSEWHERE)

A. Where construction or modification began on or before December 31, 1985, emissions (including fugitive emissions) shall not exhibit an opacity greater than forty (40) percent.

B. Where construction or modification began after December 31, 1985, emissions (including fugitive emissions) shall not exhibit an opacity greater than twenty (20) percent.

SECTION X—NON-ENCLOSED OPERATIONS

A. All non-enclosed operations shall be conducted in such a manner that a minimum of particulate matter becomes airborne. In no case shall established ambient air quality standards be exceeded at or beyond the property line.

B. The owner or operator of all such operations shall maintain dust control of the premises and any roadway owned or controlled by the owner or operator by paving or other suitable measures. Oil treatment is prohibited.

C. All crushing, drying, classification, and like operations shall employ a suitable control device acceptable to the Department, and shall discharge no more particulate matter than that specified in Section VIII of this standard.

SECTION XI—TOTAL REDUCED SULFUR (TRS) EMISSIONS OF KRAFT PULP MILLS

A. Applicability and Designation of Affected Sources

1. The provisions of this subpart are applicable to the following affected sources in kraft pulp mills which commenced construction prior to September 24, 1976: digester system, brown stock washer system, multiple-effect evaporator system, black liquor oxidation system, recovery furnace, smelt dissolving tank, lime kiln, and condensate stripper system.

2. The effective date of this section is February 22, 1980.

B. Total Reduced Sulfur (TRS) Emission Standards

The rate of TRS emissions from existing kraft pulp mills shall be limited to the following:

	Maximum Allowable Emission of TRS as Hydrogen Sulfide (H_2S) by Dry Volume, Averaged Over Twelve (12) Hours
Recovery Furnace	
Cross Recovery Furnaces	25 ppm (corrected to 8 percent oxygen)
Old Design Furnaces[1]	20 ppm (corrected to 8 percent oxygen)
New Design Furnaces[2]	5 ppm (corrected to 8 percent oxygen)
Digester System	5 ppm
Multiple-Effect Evaporator System	5 ppm
Lime Kiln	20 ppm (corrected to 10 percent oxygen)
Brown Stock Washer System	no control

Black Liquor Oxidation System	no control
Condensate Stripper System	5 ppm
Smelt Dissolving Tank	0.016 gram per kilogram (g/kg) BLS[3]

[1] Old design furnaces are defined as furnaces without welded wall or membrane wall construction or emission control designed air systems.
[2] New design furnaces are defined as furnaces with either welded wall or membrane wall construction and also with emission control designed air systems.
[3] Black liquor solids (dry weights).

C. Case-by-Case Exceptions to Provisions of Section XI.B Above

1. If the owner or operator of a source of TRS compounds regulated by this standard can demonstrate that compliance with applicable portions of Section XI.B would not be economically feasible, the Department may, on a case-by-case basis, allow emission limitations less stringent than those required by applicable parts of Section XI.B. All data pertinent to the showing of economic infeasibility must accompany a petition for this relief, and shall include a present value analysis showing economic infeasibility.

2. Exceptions granted under this part are not effective until submitted to and approved by the Administrator as a revision of the Implementation Plan for Control of Designated Pollutants, pursuant to Section 111(d) of the Clean Air Act as amended November 1990.

D. Monitoring, Recordkeeping, and Reporting

1. The owner/operator shall:

a. Calibrate, maintain, and operate continuous monitoring equipment to monitor and record the concentration of TRS emissions on a dry basis and the percent of oxygen by volume on a dry basis in the gases discharged into the atmosphere from any lime kiln, recovery furnace, digester system, multiple-effect evaporator system, or condensate stripper system, except where these gases are subjected to a minimum temperature of 1200 degrees Fahrenheit (F) for at least 0.5 seconds in an incinerator or other device which does not generate TRS. The location of each monitoring system must be approved by the Department.

b. Install, calibrate, maintain, and operate a monitoring device which measures the combustion temperature at the point of incineration of effluent gases which are emitted from any lime kiln, recovery furnace, digester system, multiple-effect evaporator system, or condensate stripper system unless TRS monitors are required in paragraph D.1.a above. The monitoring device is to be certified by the manufacturer to be accurate within plus or minus one (1) percent of the temperature being measured.

c. Calibrate, maintain, and operate continuous monitoring equipment for any smelt dissolving tank.

(i) For the continuous measurement of the pressure loss of the gas stream through the control equipment. The monitoring device is to be certified by the manufacturer to be accurate to within a gauge pressure of plus or minus two (2) inches water.

(ii) For the continuous measurement of the scrubbing liquid supply pressure to the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within plus or minus fifteen (15) percent of design scrubbing liquid supply pressure. The pressure sensor or tap is to be located close to the scrubber liquid discharge point. The Department may be consulted for approval of alternative locations.

d.(i) Continuously monitored operating and/or stack parameters may be used as substitutes for TRS monitors provided that it is demonstrated to the satisfaction of the Department that a correlation exists between the monitored parameter and TRS concentration and the other requirements in paragraph D.1 above are fulfilled.

(ii) Alternative equivalent methods of monitoring must be approved by the Department and EPA.

2. Any owner or operator subject to the provisions of this section shall:

a. Calculate and record on a daily basis 12-hour average TRS concentrations for the two (2) consecutive periods of each operating day. Each 12-hour average shall be determined as the

arithmetic mean of the appropriate twelve (12) contiguous 1-hour average TRS concentrations provided by each continuous monitoring system installed under paragraph D.1.a above.

b. Calculate and record on a daily basis 12-hour average oxygen concentrations for the two (2) consecutive periods of each operating day for the recovery furnace and lime kiln. These 12-hour averages shall correspond to the 12-hour average TRS concentrations under paragraph D.2.a above and shall be determined as an arithmetic mean of the appropriate twelve (12) contiguous 1-hour average oxygen concentrations provided by each continuous monitoring system installed under paragraph D.1.a above.

c. Correct all 12-hour average TRS concentrations to ten (10) volume percent oxygen, except that all 12-hour average TRS concentrations from a recovery furnace shall be corrected to eight (8) volume percent using the following equation:

$$C_{corr} = C_{uncorr} \times (21 - X/21 - Y)$$

where: C_{corr} = the concentration corrected for oxygen
C_{uncorr} = the concentration uncorrected for oxygen
X = the volumetric oxygen concentration percentage to be corrected to eight (8) percent for recovery furnaces and ten (10) percent for lime kilns, incinerators, or other devices
Y = the measured 12-hour average volumetric oxygen concentration

3. Each owner or operator required to install a continuous monitoring system shall submit a written report of excess emissions (as defined in applicable subparts) to the Department for every semi-annual period unless specified on a more frequent cycle by the Department. All semi-annual reports shall be postmarked by the 30th day following the end of each semi-annual period and shall include the following information:

a. For emissions from any recovery furnace, periods of excess emissions are all 12-hour average TRS concentrations above twenty (20) parts per million by volume (ppmv) for old design recovery furnaces, five (5) ppmv for new design recovery furnaces, and above twenty-five (25) ppmv for cross recovery furnaces;

b. For emissions from any lime kiln, periods of excess emissions are all 12-hour average TRS concentrations above twenty (20) ppmv;

c. For emissions from any digester system, multiple-effect evaporator system, or condensate stripper system, periods of excess emissions are:

(i) All 12-hour average TRS concentrations above five (5) ppmv unless the provisions of paragraph D.1.a above apply; or

(ii) All periods in excess of five (5) minutes and their duration during which the combustion temperature is less than 1200 degrees F if the gases are combusted in an incinerator or other device which does not generate TRS.

SECTION XII—PERIODIC TESTING—PARTICULATE MATTER EMISSIONS AND/OR SULFUR DIOXIDE (SO_2)

An owner or operator of a source listed below shall perform scheduled periodic tests for particulate matter emissions and/or SO_2 every two (2) years except as noted, or on a schedule as stipulated by special permit conditions, and shall ensure that source tests are conducted in accordance with Regulation 61–62.1, Section IV, Source Tests.

A. Rotary kilns, clinker coolers, and rotary dryers of Portland Cement plants.

B. Sulfuric acid plants.

C. Metallurgical furnaces greater than ten (10) tons per hour normal output.

D. Asphalt plants. Asphalt plants that have a baghouse operating in a satisfactory manner with sufficiently low visible emissions may be exempted at the discretion of the Department. Asphalt plants will be required to produce "surface mix" during compliance source testing. "Surface mix" is hot laid asphaltic concrete surface courses (except sand asphalt surface mix) as defined in Section 403 of the 1986 edition of the South Carolina State Highway Department's "Standard Specifications for Highway Construction" manual. The Department may, at its discretion, waive this requirement if

sufficient evidence indicates that less than twenty-five (25) percent of the plant's total annual production is surface mix.

E. Fertilizer plants.

F. Any other sources which are deemed necessary.

SECTION XIII—[RESERVED]

HISTORY: Amended by State Register Volume 36, Issue No. 12, eff December 28, 2012 (errata); State Register Volume 37, Issue No. 4, eff April 26, 2013; State Register Volume 38, Issue No. 6, Doc. No. 4388, eff June 27, 2014; State Register Volume 40, Issue No. 6, Doc. No. 4590, eff June 24, 2016; State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016.

Editor's Note

Scrivener's error corrected in 2017, deleting duplicate subscript "2" in Section XII.

STANDARD NO. 5

VOLATILE ORGANIC COMPOUNDS

SECTION I—GENERAL PROVISIONS

Part A. Definitions. Unless specifically defined elsewhere in this Standard, the definitions below and those contained in the South Carolina Pollution Control Act and Regulation 62.1, Section I will apply to this Standard.

1. "Air dried coatings" means coatings which are dried by the use of air at temperatures up to 90 degrees Celsius (C) (194 degrees Fahrenheit (F)).

2. "Air/vapor interface" means the combined areas of the entrance and exit openings of a conveyorized degreaser.

3. "Bead dipping" means the dipping of an assembled tire bead into a solvent based cement.

4. "Bulk gasoline terminal" means a gasoline storage plant which receives gasoline from refineries primarily by pipeline, ship, or barge, and delivers gasoline to bulk plants or to commercial or retail accounts primarily by tank truck, and has a daily throughput of more than 20,000 gallons (gal)(76,000 liters(L)) of gasoline.

5. "Capture system" means the equipment (including hoods, ducts, fans, etc.) used to contain, capture, or transport a pollutant to a control device.

6. "Class II hardboard paneling finish" means a finish which meets the specifications of Voluntary Product Standard PS-59-73 as approved by the American National Standards Institute.

7. "Clear coat" is a coating which lacks color and opacity or is transparent and uses the under coat as a reflectant base or undertone color.

8. "Coating application system" means all operations and equipment which apply, convey, and dry a surface coating, including, but not limited to, spray booths, flow coaters, conveyers, flashoff areas, air dryers, and ovens.

9. "Coil coating" means the coating of any flat metal sheet or strip that comes in rolls or coils. This includes protective, decorative, and functional coatings.

10. "Cold cleaning" means the batch process of cleaning and removing soils from metal surfaces by spraying, brushing, flushing, or immersion while maintaining the solvent below its boiling point. Wipe cleaning is not included in this definition.

11. "Condenser" means a device which cools a gas stream to a temperature which removes specific organic compounds by condensation.

12. "Construction" means onsite fabrication, erection, or installation of an emission source, air pollution control equipment, or a plant.

13. "Control device" means equipment (incinerator, adsorber, or the like) used to destroy, contain, or remove air pollutant(s) prior to discharge.

14. "Control system" means any number of control devices and associated equipment designed and operated to reduce the quantity of Volatile Organic Compound (VOC) emitted.

15. "Conveyorized degreasing" means the continuous process of cleaning metal surfaces using either cold or vaporized solvents.

16. "Cutback asphalt" means asphalt cement which has been liquefied by blending with petroleum solvents (diluents).

17. "Emission" means the release or discharge, directly or indirectly, of any air pollutant from any source.

18. "Existing process" means any process described in any Part of Section II of this Standard which was in existence or under construction on the effective date of that Part.

July 1, 1979 is the effective date for Parts A, B, C, D, E, N, O, S and T. July 1, 1980 is the effective date for Parts F, G, H, P, Q and R.

19. "External floating roof" means a storage vessel cover in an open top tank consisting of a double deck or pontoon single deck which rests upon and is supported by the petroleum liquid being contained and is equipped with a closure seal or seals to close the space between the roof and tank shell.

20. "Extreme environmental conditions" means constant exposure to the weather, exposure to temperatures consistently above 95 degrees C, detergents, scouring, solvents, corrosive atmospheres, or similar environmental conditions.

21. "Extreme performance coatings" means coatings designed for harsh exposure or extreme environmental conditions.

22. "Fabric coating" includes all types of coatings applied to fabric including protective, decorative, and functional coatings.

23. "Flat wood paneling" includes wood construction products made of plywood, particle wood, and hardboard for interior paneling. Not included are tileboard or particleboard used as a furniture component, or exterior siding.

24. "Flexographic printing" means the application of words, designs, and pictures to a substrate by means of a roll printing technique in which the pattern to be applied is raised above the printing roll and the image carrier is made of rubber or other rubber-like synthetic materials.

25. "Freeboard height" means the distance from the top of the vapor zone to the top of the degreaser tank.

26. "Freeboard ratio" means the freeboard height divided by the width of the degreaser.

27. "Functional coating" means a coating that serves a purpose beyond decoration or protection of the substrate being coated. An example of functional coatings could include a layer of light sensitive coating which helps form the photographic image on photographic film. Also, the camouflaging outercoat used by the army on its vehicles is a functional coating.

28. "Gasoline" means a petroleum distillate having a Reid vapor pressure of 4 pounds per square inch (psi) (27.6 kilopascal (kPa)) or greater that is used as fuel for internal combustion engines.

29. "Gasoline tank truck" means tank truck (or trailer equipped with a storage tank) used for the transport of gasoline to or from bulk gasoline terminals.

30. "Green tires" means assembled tires before molding and curing.

31. "Green tire spraying" means the spraying of green tires, both inside and outside, with release compounds which help remove air from the tire during molding and which prevent the tire from sticking to the mold after curing.

32. "Hardboard" means a panel manufactured primarily from inter-elted lingo-cellulosic fibers which are consolidated under heat and pressure in a hot press.

33. "Hardwood plywood" means plywood whose surface layer is a veneer of hardwood.

34. "Heavy coverage" means thick or large areas of a given color.

35. "Internal floating roof" means a cover or roof in a fixed roof tank which rests upon or is floated upon the petroleum liquid being contained, and which is equipped with a closure seal or seals to close the space between the roof edge and tank shell.

36. "Large appliances" means doors, cases, lids, panels and interior support parts of residential and commercial washers, dryers, ranges, refrigerators, freezers, water heaters, dishwashers, trash compactors, air conditioners, and other similar products.

37. "Light coverage" means thin or small areas of a given color.

38. "Liquid-mounted seal" means a primary seal mounted in continuous contact with the liquid between the tank wall and the floating roof around the circumference of the tank.

39. "Low solvent coatings" means coatings which emit organic solvent in amounts equal to or less than that required by the Standard in specified applications.

40. "Magnet wire coating" means the process of applying a coating of electrically insulating varnish or enamel to aluminum or copper wire used in electrical machinery. This includes protective, decorative, and functional coatings.

41. "Manufacture of pneumatic rubber tires" means the production of passenger car tires, light and medium truck tires, and other tires manufactured on assembly lines using automated equipment.

42. "Metal furniture" includes any furniture made of metal or any metal part which will be assembled with other metal, wood, fabric, plastic, or glass parts to form a furniture piece.

43. "Natural finish hardwood plywood panels" means panels whose original grain pattern is enhanced by essentially transparent finishes frequently supplemented with fillers and toner.

44. "Nonattainment county" means a county which is determined by the Department to exceed any National Ambient Air Quality Standard.

45. "Non-designated county" means any county which has neither been exempted in Section I. Part B nor listed as a nonattainment county.

46. "Open top vapor degreasing" means the batch process of cleaning metal surfaces by condensing hot solvent vapor on the colder metal parts.

47. "Organic material" means a chemical compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate.

48. "Oven" means a heated chamber used to bake, cure, polymerize, and/or dry a surface coating.

49. "Overall emission reduction efficiency" means the weight (per unit of time) of VOC removed by a control device divided by the weight (per identical unit of time) of VOC emissions generated by a source, expressed as a percentage.

50. "Owner or operator" means any person who owns, leases, controls, operates, or supervises a plant, emission source, or air pollution control equipment.

51. "Packaging rotogravure printing" means rotogravure printing upon paper, paper board, metal foil, plastic film, and other substrates, which are, in subsequent operations, formed into containers and/or labels for articles to be sold.

52. "Paper coating" means a coating put on paper and pressure sensitive tapes regardless of substrate. Related web coating processes on plastic film, decorative coatings on metal foil, and functional coatings are included in this definition.

53. "Passenger type tire" means agricultural, airplane, industrial, mobile home, light and medium duty truck, and passenger vehicle tires with a bead diameter up to 20.0 inches and cross section dimension up to 12.8 inches.

54. "Petroleum liquids" means petroleum, condensate, and any finished or intermediate products manufactured in a petroleum refinery but does not mean Number 2 through Number 6 fuel oils as specified in A.S.T.M. D396-80, gas turbine fuel oils Numbers 2-GT through 4-GT as specified in A.S.T.M. D2880-82, or diesel fuel oils Numbers 2-D and 4-D as specified in A.S.T.M. D975-82.

55. "Prime coat" means the first film of coating applied in a multicoat operation.

56. "Printed interior panels" means panels whose grain or natural surface is obscured by fillers and basecoats upon which a simulated grain or decorative pattern is printed.

57. "Production equipment exhaust system" means a device for collecting and directing out of the work area VOC fugitive emissions from reactor openings, centrifuge openings, and other vessel openings for the purpose of protecting workers from excessive VOC exposure.

58. "Publication rotogravure printing" means printing upon paper which is subsequently formed into books, magazines, catalogues, brochures, directories, newspaper supplements, or similar types of printed materials.

59. "Roll printing" means the application of words, designs, and pictures to a substrate by means of hard rubber or steel rolls, each with only partial coverage.

60. "Saturation process" - Saturation processes include coatings which saturate throughout the body of a web, fabric, or paper and do not merely coat the surface of the web. Textile dyeing processes are not included.

61. "Reactor" means a vat or vessel, which may be jacketed to permit temperature control, designed to contain chemical reactions.

62. "Separation operation" means a process that separates a mixture of compounds and solvents into two or more components. Specific mechanisms include extraction, centrifugation, filtration, and crystallization.

63. "Single coat" means only one film of coating applied on the metal substrate.

64. "Solvent" means organic materials which are liquid at standard conditions and which are used as dissolvers, viscosity reducers, or cleaning agents.

65. "Solvent metal cleaning" means the process of cleaning soils from metal surfaces by cold cleaning or open top vapor degreasing or conveyorized degreasing.

66. "Synthesized pharmaceutical manufacturing" means manufacture of pharmaceutical products by one or more chemical reactions followed by a series of purifying operations. Organic chemicals are used as raw materials and as solvents.

67. "Thin particleboard" means a manufactured board one-quarter inch or less in thickness made of individual wood particles which have been coated with a binder and formed into flat sheets by pressure.

68. "Tileboard" means paneling that has a colored waterproof surface coating.

69. "Topcoat" means the final film of coating applied in a multicoat operation.

70. "Total potential emissions" means the maximum capacity of a plant or portion of a plant (of a type governed by this regulation) to emit a pollutant under its physical or operational design, in the absence of air pollution control equipment. Any physical or operational limitations which affect the capacity of the plant to emit a pollutant, including restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is enforceable.

71. "True vapor pressure" means the equilibrium partial pressure exerted by a petroleum liquid as determined in accordance with methods described in American Petroleum Institute Bulletin 2517, "Evaporation Loss From Floating Roof Tanks," 1962.

72. "Tread end cementing" means the application of a solvent based cement to the tire tread ends.

73. "Undertread cementing" means the application of a solvent based cement to the underside of a tire tread.

74. "Vapor collection system" means a vapor transport system which uses direct displacement by the gasoline being transferred to force vapors from the vessels being loaded into either a vessel being unloaded or a vapor control system or vapor holding tank.

75. "Vapor control system" means a system that prevents release to the atmosphere of at least 90 percent by weight of organic compounds in the vapors displaced from a vessel during transfer of gasoline.

76. "Vapor-mounted seal" means any primary seal mounted so that there is an annular space underneath the seal. The annular vapor space is bounded by the bottom of the primary seal, the tank wall, the liquid surface, and the floating roof.

77. "Vinyl coating" means any protective, decorative, or functional topcoat applied over vinyl coated fabric or vinyl sheets. It does not include the application of vinyl plastisol to the fabric (emissions from the application of plastisol are near zero). Also, organisol and plastisol coatings cannot be used to bubble emissions from vinyl printing and topcoating.

78. "Water based sprays" means release compounds, sprayed on the inside and outside of green tires, in which solids, water, and emulsifiers have been substituted for organic solvents for all but 10 percent by weight of the total.

Part B. General Applicability

1. This Standard will apply to existing processes statewide except in the following six counties: Anderson, Bamberg, Barnwell, Chesterfield, Darlington, and Hampton.

2. This Standard will apply to plants described under one of the Parts of Section II below when such a plant has total potential emissions of VOC more than 550 pounds (250 kilograms (kg)) in any one day (nominal size—100 tons per year (tpy)) or more than 150 pounds (68 kg) in any one hour. This Paragraph does not apply to Section II Part N.

3. A plant having an existing process which was not required to be regulated due to plant size will be subject to this Regulation when that plant increases emissions sufficiently to meet the applicability requirements regardless of the time frame. Conversely, a source which is subject to the requirements of this Regulation, but which decreases emissions sufficiently so that their total potential emissions are below the applicability requirements, may petition the Department for relief from the emission limits of this Regulation. Approval of the petition will be based, in part, on a showing that the reductions are not temporary and a consent to be permitted at the reduced level.

4. Further applicability requirements or limitations may be listed under the individual Parts of Section II below.

Part C. Alternatives and Exceptions to Control Requirements

1. Alternative Controls

a. If the owner or operator of a source of VOC regulated by this Standard can demonstrate that compliance with Section II below would not be feasible, he may petition the Department to allow the use of alternative operational and/or equipment controls for the reduction of VOC emissions of such source. Petition must be made for each source within a given plant and nothing herein should be interpreted as permitting a source regulated by this Standard to exceed emission limits for that source as given in Section II below. The petition must be submitted in writing to the Department and must contain:

(i) The name and address of the company and the name, address, and telephone number of a company officer over whose signature the petition is submitted; and

(ii) A description of all operations conducted at the location to which the petition applies and the purpose that the VOC emitting equipment serves within the operations; and

(iii) Reference to the specific operational and/or equipment controls under Section II below for which alternative operational and/or equipment controls are proposed; and

(iv) A detailed description of the proposed alternative operational and/or equipment controls, the magnitude of VOC emission reduction which will be achieved, and the quantity and composition of VOC which will be emitted if the alternative operational and/or equipment controls are instituted; and

(v) A schedule for the installation and/or institution of the alternative operational and/or equipment controls in conformance with Section II below.

b. The Department may approve a Petition for Alternative Control if:

(i) The petition is submitted in accordance with Paragraph (1)(a) above; and

(ii) The Department determines that the petitioner cannot comply with Section II below because of technological infeasibility (considering costs); and

(iii) The petition contains a schedule for achieving and maintaining reduction of VOC emissions to the maximum extent feasible and as expeditiously as practicable; and

(iv) A nuisance condition will not result from operation of the source as proposed in the Petition; and

(v) The alternative control approach must assure control levels at least as stringent as those listed in the appropriate Part of Section II below.

(vi) The petition is approved by the United State Environmental Protection Agency (EPA) as a source-specific State Implementation Plan (SIP) revision.

2. Alternative Emission Limitations

a. If the owner or operator of a source of VOC regulated by this standard can demonstrate that compliance with applicable portions of Section II below would not be economically feasible, the Department may, on a case-by-case basis, allow emission limitations less stringent than those required by applicable parts of Section II below.

b. All data pertinent to the showing of economic infeasibility must accompany a petition for this relief, and shall include a present value analysis showing economic infeasibility.

c. Exceptions granted under this Part are not effective until submitted to and approved by the Administrator of the EPA as a revision of the SIP pursuant to Section 110(a)(3)(A) of the Clean Air Act as amended November 1990.

Part D. Compliance Schedules

The following schedules of compliance apply to the individual Parts of Section II below as indicated by the references given in these individual Parts. The ''date of notification'' refers to the date that a plant or source is notified in writing that it is subject to one of the VOC regulations.

1. Schedule No. 1

a. Submit construction permit applications and final plans for the emission control system and/or new process equipment and/or modification of existing process equipment within two (2) months from date of notification.

b. Issue purchase orders and contracts for the emission control systems and/or process equipment and/or modification of existing process equipment to accomplish emission control within five (5) months from date of notification.

c. Initiate on-site construction or installation of the emission control and/or process equipment and/or modification of existing process equipment within eight (8) months from date of notification.

d. Complete on-site construction or installation of the emission control and/or process equipment and/or modification of existing process equipment within sixteen (16) months from the date of notification.

e. Achieve final compliance within eighteen (18) months from date of notification.

2. Schedule No. 2

a. Submit construction permit applications and final plans for the application of low solvent technology within two (2) months from date of notification.

b. Complete evaluation of product quality and commercial acceptance within seven (7) months from date of notification.

c. Issue purchase orders and contracts for low solvent technology and process modifications within nine (9) months from date of notification.

d. Begin process modifications within eleven (11) months from date of notification.

e. Complete process modifications and begin use of low solvent technology within seventeen (17) months from date of notification.

f. Achieve final compliance within eighteen (18) months from date of notification.

3. Schedule No. 3

a. Submit construction permit applications and final plans for the application of low solvent content coating technology within two (2) months from date of notification.

b. Complete research and development of low solvent content coating within eight (8) months from date of notification.

c. Complete evaluation of product quality and commercial acceptance within fourteen (14) months from date of notification.

d. Issue purchase orders and contracts for low solvent content coatings and process modifications within sixteen (16) months from date of notification.

e. Begin process modifications within eighteen (18) months from date of notification.

f. Complete process modifications and begin use of low solvent content coatings within twenty-three (23) months from date of notification.

g. Achieve final compliance within twenty-four (24) months from the date of notification.

Part E. Volatile Organic Compound Compliance Testing

The owner or operator of any VOC source required to comply with Section II below shall, at his own expense, conduct source tests in accordance with the provisions of Regulation 61–62.1, Section IV, Source Tests, to demonstrate compliance unless the Department determines that the compliance status of the source can be monitored as described in Part F below. If tests are required, the following conditions shall apply:

1. Test frequencies for VOC abatement equipment will be as follows:

a. Every four (4) years for sources utilizing solvent recovery emission control devices (for example, carbon adsorption, refrigeration).

b. Every two (2) years for sources utilizing catalytic incineration/destruction.

c. Every four (4) years for sources utilizing flame incineration provided the source operates, calibrates, and maintains a recorder for each incinerator which continuously records the combustion zone temperature and such temperature is maintained at a value no less than that recorded during the last stack test during which compliance was verified.

2. Testing of VOC capture systems will be performed annually. However, only an initial test will be required provided:

a. Capture system flow rate indicators (for example, magnehelic gauges, manometers) are operated, calibrated, and maintained, and

b. The indicated values are maintained at a level no less than that recorded during the last source test during which compliance was verified, and

c. The type and location of the flow rate indicators are approved by this Department, and

d. No process, capture system, nor VOC abatement equipment modifications have been made.

3. Other sources will be placed on a two (2) year test cycle.

4. An owner or operator of a source shall ensure that source tests are conducted in accordance with Regulation 61–62.1, Section IV, Source Tests.

5 to 12. [Deleted]

Part F. Recordkeeping, Reporting, Monitoring

1. The owner or operator of any VOC emission source or control equipment shall maintain, as a minimum: records detailing all activities relating to any compliance schedule under Part D above, records of all compliance testing conducted under Part E above, and records of all monitoring as required by the Department and conducted under Paragraphs (4)(a) and (4)(b) below.

2. The owner or operator of any applicable VOC emission source or control equipment shall, on request make available to the Department, or the EPA, reports detailing the nature, specific sources, and total monthly quantities of all VOC emissions.

3. If the applicable VOC emission source or control equipment is located in an ozone nonattainment area (as designated by the EPA) the owner or operator shall maintain daily records of operations. If the applicable VOC emission source is determined to be in noncompliance with an applicable emission standard, the Department reserves the right to require the owner or operator to maintain daily records of operations. The records, or summaries, shall be made

available to the Department or the EPA upon request. The records shall include, but not be limited to, the following:

a. The standard number and part applicable to the operation for which the records are being maintained.

b. The application method and substrate type (metal, plastic, paper, etc.).

c. The amount and type of adhesive, coatings (including catalyst and reducer for multicomponent coatings), solvent, and/or graphic arts material used at each point of application, including exempt compounds.

d. The VOC content as applied in each adhesive coating, solvent, and/or graphic arts material.

e. The date for each application of adhesive coating, solvent, and/or graphic arts material.

f. The amount of surface preparation, clean-up, or wash-up solvent (including exempt compounds) used and the VOC content of each.

g. Oven temperature (where applicable).

h. Line number (where applicable).

i. For control equipment:

(i). Thermal incinerator—Combustion temperature, inlet and outlet VOC concentration from emission tests, how and when these concentrations were determined, destruction or removal efficiency, and manufacturer data.

(ii). Catalytic incinerator—Exhaust temperature, change in temperature across catalyst bed, date of last change of catalyst bed, inlet and outlet VOC concentration from emission tests, how and when these concentrations were determined, destruction or removal efficiency, and manufacturer data.

(iii). Condenser—Inlet temperature of cooling medium, outlet temperature of cooling medium, inlet and outlet VOC concentrations from emission tests, how and when these concentrations were determined, removal efficiency, and manufacturer data.

j. VOC content shall be calculated using a percent solids basis (less water and exempt solvents) for adhesives, coatings, and inks; using EPA Reference Method 24, July 1, 1989. VOC content and density of rotogravure publication inks shall be determined by EPA Reference Method 24A, July 1, 1989. Once initial VOC content calculations have been made for existing adhesives, coatings, and inks, only new or modified adhesives, coatings, and inks must be tested for VOC content. Records must be kept in units necessary to verify compliance, that is, pound of VOC per gal (lb VOC/gal) of coating less water and exempt solvents for surface coating.

k. Copies of all records and reports required under this Part shall be available for inspection during normal working hours and furthermore, copies of the required records and reports shall be furnished within ten (10) working days after receipt of a written request from the Department.

4. The owner or operator of any VOC emission source or control equipment shall:

a. Install, operate, calibrate, and maintain process and/or control equipment, monitoring instruments, or procedures as required by the Department and as necessary to comply with Paragraphs 1 and 2 above; and

b. Maintain, in writing, data and/or reports relating to monitoring instruments or procedures which will, upon review, document the compliance status of the VOC emission source control equipment to the satisfaction of the Department.

5. Copies of all records and reports under Paragraphs 1, 2, 3, and 4, above, shall be retained by the owner or operator for two (2) years after the date on which the record was made or the reports submitted.

Part G. Equivalency Calculations

In determining the amount of reduction required within coating/printing industries from a noncomplying application, equivalency calculations must be made on a mass of VOC per volume of solids basis in accordance with Department policy and methodology. These determinations must

be made when compliance demonstrations are based on reformulation, alternative emission limitation options or add-on control.

SECTION II—PROVISIONS FOR SPECIFIC SOURCES

Part A. Surface Coating of Cans

1. Emission Limitations

No owner or operator of a can coating application system subject to this Part may cause, allow, or permit the discharge into the atmosphere of any VOC in excess of the following levels:

a. 2.8 pounds per gallon (lb/gal) (0.34 kg per liter (kg/L)) of coating, excluding water and exempt solvents, delivered to the coating applicator from sheet basecoat (exterior and interior) and overvarnish or two-piece can exterior (basecoat and overvarnish) operations.

b. 4.2 lb/gal (0.51 kg/L) of coating, excluding water and exempt solvents, delivered to the coating applicator from two and three-piece can interior body spray and two-piece can exterior end (spray or roll coat) operations.

c. 5.5 lb/gal (0.66 kg/L) of coating, excluding water and exempt solvents, delivered to the coating applicator from three-piece can side-seam spray operations.

d. 3.7 lb/gal (0.44 kg/L) of coating, excluding water and exempt solvents, delivered to the coating applicator from end sealing compound operations.

2. Control Technology

a. The emission limitations in Paragraph 1 of this Part can be achieved by:

(i) The application of low solvent coating technology;

(ii) Incineration, provided that 90 percent of the nonmethane VOC (VOC measured as total combustible carbon) which enter the incinerator are oxidized to carbon dioxide and water; or

(iii) Carbon bed solvent recovery system; or

(iv) Alternative controls as allowed under Section I, Part C above; and

(v) A capture system must be used in conjunction with emission control equipment systems. The design and operation of a capture system must be consistent with good engineering practice, and shall be required to provide for an overall VOC emission reduction efficiency sufficient to meet the emission limitations in Paragraph 1 of this Part.

b. Compliance may be demonstrated by a 24-hour weighted average of emissions from two (2) or more coatings having the same emission limits for the same type of operation on the same line. Averaging times of longer than 24 hours are not allowed.

3. Compliance Schedules

a. The owner or operator of a VOC source subject to this Part shall meet one of the following schedules as applicable:

(i) A source utilizing emission control equipment and/or replacement process equipment and/or modification of existing process equipment to comply with Paragraph 1 of this Part shall comply with Schedule 1 of Section I, Part D above.

(ii) A source utilizing low solvent technology where the Department determines that low solvent content coating technology has been sufficiently researched and developed for a particular application to comply with emission limitations in Paragraph 1 of this Part shall comply with Schedule 2 of Section I, Part D above.

(iii) A source utilizing low solvent technology which does not qualify under (ii) above to comply with emission limitations in Paragraph 1 of this Part shall comply with Schedule 3 of Section I, Part D above.

b. Any owner or operator of a source subject to any compliance schedule shall certify to the Department within five (5) days after the deadline for each increment of progress, whether the required increment of progress has been met.

Part B. Surface Coating of Coils

1. Emission Limitations

No owner or operator of a coil coating application system subject to this Part may cause, allow, or permit the discharge into the atmosphere of any VOC in excess of 2.6 lb/gal (0.31 kg/L) of coating, excluding water, delivered to the coating applicator from prime and topcoat or single coat operations.

2. Control Technology

a. The emission limitation in Paragraph 1 of this Part can be achieved by:

(i) The application of low solvent technology; or

(ii) Incineration, provided that 90 percent of the nonmethane VOC (VOC measured as total combustible carbon) which enter the incinerator are oxidized to carbon dioxide and water; or

(iii) Carbon bed solvent recovery system; or

(iv) Alternative controls as allowed under Section I, Part C above;

(v) A capture system must be used in conjunction with emission control equipment systems. The design and operation of a capture system must be consistent with good engineering practice, and shall be required to provide for an overall VOC emission reduction efficiency sufficient to meet the emission limitations in Paragraph 1 of this Part.

b. Compliance may be demonstrated by 24-hour weighted averaging of emissions for two (2) or more coatings having the same emission limits from the same type of operation on the same line. Averaging times of longer than 24 hours are not allowed.

3. Compliance Schedules

a. The owner or operator of a VOC source subject to this Part shall meet one of the following schedules as applicable:

(i) Sources utilizing emission control equipment and/or replacement process equipment and/or modification of existing process equipment to comply with Paragraph 1 of this Part shall comply with Schedule 1 of Section I, Part D above.

(ii) Sources utilizing low solvent technology where the Department determines that low solvent content coating technology has been sufficiently researched and developed for a particular application to comply with emission limitations in Paragraph 1 of this Part shall comply with Schedule 2 of Section I, Part D above.

(iii) Sources utilizing low solvent technology which does not qualify under (ii) above to comply with emission limitations in Paragraph 1 of this Part shall comply with Schedule 3 of Section I, Part D above.

b. Any owner or operator of a source subject to any compliance schedule shall certify to the Department within five (5) days after the deadline for each increment of progress, whether the required increment of progress has been met.

Part C. Surface Coating of Paper, Vinyl, and Fabric

1. Emission Limitations

No owner or operator of a fabric, vinyl, or paper coating application system, including saturation processes, subject to this Part may cause, allow, or permit the discharge into the atmosphere of any VOC in excess of the following levels;

a. 2.9 lb/gal (0.35 kg/L) of coating, excluding water and exempt solvents, delivered to the fabric or paper coating applicator system;

b. 3.8 lb/gal (0.45 kg/L) of coating, excluding water and exempt solvents, delivered to the vinyl coating applicator system.

2. Control Technology

a. The emission limitations in Paragraph 1 of this Part can be achieved by:

(i) The application of low solvent technology; or

(ii) Incineration, provided that 90 percent of the nonmethane VOC (VOC measured as total combustible carbon) which enter the incinerator are oxidized to carbon dioxide and water; or

(iii) Carbon bed solvent recovery system; or

(iv) Alternative controls as allowed under Section I, Part C above;

(v) A capture system must be used in conjunction with emission control equipment systems. The design and operation of a capture system must be consistent with good engineering practice, and shall be required to provide for an overall VOC emission reduction efficiency sufficient to meet the emission limitations in Paragraph 1 of this Part.

b. Compliance may be demonstrated by a 24-hour weighted average of emissions for two (2) or more coatings having the same emission limits for the same type of operation on the same line. Averaging time of longer than 24 hours are not allowed.

3. Compliance Schedules

a. The owner or operator of a VOC source subject to this Part shall meet one of the following schedules as applicable:

(i) Sources utilizing emission control equipment and/or replacement process equipment and/or modification of existing process equipment to comply with Paragraph 1 of this Part shall comply with Schedule 1 of Section I, Part D above.

(ii) Sources utilizing low solvent technology where the Department determines that low solvent content coating technology has been sufficiently researched and developed for a particular application to comply with emission limitations in Paragraph 1 of this Part shall comply with Schedule 2 of Section I, Part D above.

(iii) Sources utilizing low solvent technology which does not qualify under (ii) above to comply with emission limitations in Paragraph 1 of this Part shall comply with Schedule 3 of Section I, Part D above.

b. Any owner or operator of a source subject to any compliance schedule shall certify to the Department within five (5) days after the deadline for each increment of progress, whether the required increment of progress has been met.

Part D. Surface Coating of Metal Furniture and Large Appliances

1. Emission Limitations

No owner or operator of a metal furniture or a large appliance coating application system subject to this Part may cause, allow, or permit the discharge into the atmosphere of any VOC in excess of the following levels:

a. 3.0 lb/gal (0.36 kg/L) of coating, excluding water and exempt solvents, delivered to the coating applicator from prime and topcoat or single coat operation from a metal furniture coating application system;

b. 2.8 lb/gal (0.34 kg/L) of coating, excluding water and exempt solvents, delivered to the coating applicator from prime, single, or topcoat from a large appliance coating application system. This emission limit will not apply to the use of quick-drying lacquers for repair of scratches and nicks that occur during assembly, provided that the volume of coating does not exceed 1 quart (0.95 liters) in any one 8-hour period.

2. Control Technology

a. The emission limitations in Paragraph 1 of this Part can be achieved by:

(i) The application of low solvent content coating technology; or

(ii) Incineration, provided that 90 percent of the nonmethane VOC (VOC measured as total combustible carbon) which enter the incinerator are oxidized to carbon dioxide and water; or

(iii) Carbon bed solvent recovery system; or

(iv) Alternative controls as allowed under Section I, Part C above;

(v) A capture system must be used in conjunction with emission control equipment systems. The design and operation of a capture system must be consistent with good engineering practice, and shall be required to provide for an overall VOC emission reduction efficiency sufficient to meet the emission limitations in Paragraph 1 of this Part.

b. Compliance may be demonstrated by a 24-hour weighted average of emissions for two (2) or more coatings having the same type of operation on the same line. Averaging times of longer than 24 hours are not allowed.

3. Compliance Schedules

a. The owner or operator of a VOC source subject to this Part shall meet one of the following schedules as applicable:

(i) Sources utilizing emission control equipment and/or replacement process equipment and/or modification of existing process equipment to comply with Paragraph 1 of this Part shall comply with Schedule 1 of Section I, Part D above.

(ii) Sources utilizing low solvent technology where the Department determines that low solvent content coating technology has been sufficiently researched and developed for a particular application to comply with emission limitations in Paragraph 1 of this Part shall comply with Schedule 2 of Section I, Part D above.

(iii) Sources utilizing low solvent technology which does not qualify under (ii) above to comply with emission limitations in Paragraph 1 of this Part shall comply with Schedule 3 of Section I, Part D above.

b. Any owner or operator of a source subject to any compliance schedule shall certify to the Department within five (5) days after the deadline for each increment of progress, whether the required increment of progress has been met.

Part E. Surface Coating of Magnet Wire

1. Emission Limitations

No owner or operator of a magnet wire coating oven subject to this Part may cause, allow, or permit the discharge into the atmosphere of any VOC in excess of 1.7 lb/gal (0.20 kg/L) of coating, excluding water and exempt solvents, delivered to the coating applicator from magnet wire coating operations.

2. Control Technology

a. The emission limitations in Paragraph 1 of this Part can be achieved by:

(i) The application of low solvent content coating technology; or

(ii) Incineration, provided that 90 percent of the nonmethane VOC (VOC measured as total combustible carbon) which enter the incinerator are oxidized to carbon dioxide and water; or

(iii) Carbon bed solvent recovery system; or

(iv) Alternative controls as allowed under Section I, Part C above;

(v) A capture system must be used in conjunction with emission control equipment systems. The design and operation of a capture system must be consistent with good engineering practice, and shall be required to provide for an overall VOC emission reduction efficiency sufficient to meet the emission limitations in Paragraph 1 of this Part.

b. Compliance may be demonstrated by a 24-hour weighted average of emissions for two (2) or more coatings having the same type of operation on the same line. Averaging times of longer than 24 hours are not allowed.

3. Compliance Schedules

a. The owner or operator of a VOC source subject to this Part shall meet one of the following schedules as applicable:

(i) Sources utilizing emission control equipment and/or replacement process equipment and/or modification of existing process equipment to comply with Paragraph 1 of this Part shall comply with Schedule 1 of Section I, Part D above.

(ii) Sources utilizing low solvent technology where the Department determines that low solvent content coating technology has been sufficiently researched and developed for a particular application to comply with emission limitations in Paragraph 1 of this Part shall comply with Schedule 2 of Section I, Part D above.

(iii) Sources utilizing low solvent technology which does not qualify under (ii) above to comply with emission limitations in Paragraph 1 of this Part shall comply with Schedule 3 of Section I, Part D above.

b. Any owner or operator of a source subject to any compliance schedule shall certify to the Department within five (5) days after the deadline for each increment of progress, whether the required increment of progress has been met.

Part F. Surface Coating of Miscellaneous Metal Parts and Products

1. Applicability

a. This Standard will apply to plants whose operations include at least one of the affected sources in Paragraph b below.

b. Affected sources include those which utilize coating application systems for miscellaneous metal parts and products in the following industries:

(i) Large Farm Machinery;

(ii) Small Farm Machinery;

(iii) Small Appliances;

(iv) Commercial Machinery;

(v) Industrial Machinery;

(vi) Fabricated Metal Products;

(vii) Any other industrial category which coats metal parts or products under the Standard Industrial Classification Code of Major Group 33 (primary metal industries), Major Group 34 (fabricated metal products), Major Group 35 (non-electric machinery), Major Group 36 (electric machinery), Major Group 37 (transportation equipment), Major Group 38 (miscellaneous instruments), and Major Group 39 (miscellaneous manufacturing industries);

c. Not included is the surface coating of the following metal parts and products:

(i) Automobiles and light duty trucks;

(ii) Metal cans;

(iii) Flat metal sheets and strips in the form of rolls or coils;

(iv) Magnet wire for use in electrical machinery;

(v) Metal furniture;

(vi) Large appliances;

(vii) Exterior of airplanes;

(viii) Automobile refinishing;

(ix) Customized coating of automobiles and trucks, if production is less than 35 vehicles per day; and

(x) Exterior of marine vessels.

2. Emission Limitations

No owner or operator of a miscellaneous metal parts and products coating application system subject to this Part may cause, allow, or permit the discharge into the atmosphere of any VOC in excess of the following levels;

a. 0.52 kg/L (4.3 lb/gal) of coating, excluding water and exempt solvents, delivered to a coating applicator that applies clear coatings;

b. 0.42 kg/L (3.5 lb/gal) of coating, excluding water and exempt solvents, delivered to a coating applicator in a coating application system that utilizes air dried or forced warm air dried at temperatures up to 90 degrees C (194 degrees F);

c. 0.42 kg/L (3.5 lb/gal) of coating, excluding water and exempt solvents, delivered to a coating applicator that applies extreme performance coatings; and

d. 0.36 kg/L (3.0 lb/gal) of coating, excluding water and exempt solvents, delivered to a coating applicator for all other coatings and coating application systems.

e. If more than one emission limitation in Paragraph 2 applies to a specific coating, then the least stringent emission limitation shall be applied.

3. Control Technology

a. The emission limits set forth in Paragraph 2 can be achieved by:

(i) The application of low solvent content coating technology; or

(ii) Incineration, provided that 90 percent of the nonmethane VOC (VOC measured as total combustible carbon) which enter the incinerator are oxidized to carbon dioxide and water; or

(iii) Carbon bed solvent recovery system; or

(iv) Alternative controls as allowed under Section I, Part C above;

(v) A capture system must be used in conjunction with emission control equipment systems. The design and operation of a capture system must be consistent with good engineering practice, and shall be required to provide for an overall VOC emission reduction efficiency sufficient to meet the emission limitations in Paragraph 2 of this Part.

b. Compliance may be demonstrated by 24-hour weighted average of emissions for two (2) or more coatings having the same emission limits for the same type of operation on the same line. Averaging times of longer than 24 hours are not allowed.

4. Compliance Schedules

a. The owner or operator of a source of VOC subject to this Part shall meet one of the following schedules as applicable:

(i) A source utilizing low solvent content coatings to comply with the emission limitations in Paragraph 2 shall comply with Schedule 2 of Section I, Part D above.

(ii) A source utilizing process equipment changes or add-on control devices, including incineration with or without heat recovery, or process modifications not requiring purchase orders to comply with the emission limitations in Paragraph 2 shall comply with Schedule 1 of Section I, Part D above.

b. Any owner or operator of a source subject to any compliance schedule shall certify to the Department within five (5) days after the deadline for each increment of progress, whether the required increment of progress has been met.

Part G. Surface Coating of Flat Wood Paneling

1. Applicability

Affected plants include all flat wood manufacturing operations which produce:

a. Printed interior panels made of hardwood plywood and thin particleboard; or

b. Natural finish hardwood plywood panels; or

c. Paneling with Class II finishes.

d. Not included is the manufacture of exterior siding, tileboard, or particleboard used as a furniture component.

2. Emission Limitations

No owner or operator of a flat wood paneling coating application system subject to this Part may cause, allow, or permit the discharge into the atmosphere of any VOC in excess of the following levels:

a. 2.9 kg per 100 square meters (kg/100 m^2) of coated finished product (6.0 lb/1,000 square feet (ft^2)) from printed interior panels, regardless of the number of coats applied;

b. 5.8 kg/100 m^2 of coated finished product (12.0 lb/1,000 ft^2) from natural finish hardwood plywood panels, regardless of the number of coats applied; and

c. 4.8 kg/100 m^2 of coated finished product (10.0 lb/1,000 ft^2) from Class II finishes on hardboard panels, regardless of the number of coats applied.

3. Control Technology

a. The emission limits in Paragraph 2 of this Part can be achieved by:

(i) The application of low solvent content coating technology; or

(ii) Incineration, provided that 90 percent of the nonmethane VOC (VOC measured as total combustible carbon) which enter the incinerator are oxidized to carbon dioxide and water; or

(iii) Carbon bed solvent recovery system, or

(iv) Alternative controls as allowed under Section I, Part C above;

(v) A capture system must be used in conjunction with emission equipment control systems. The design and operation of a capture system must be consistent with good engineering practice and shall be required to provide for an overall emission reduction efficiency sufficient to meet the emission limitations in Paragraph 2 of this Part.

b. Compliance may be demonstrated by a 24-hour weighted average of emissions for two (2) or more coatings having the same emission limits for the same type of operation on the same line. Averaging time of longer than 24 hours are not allowed.

4. Compliance Schedules

a. The owner or operator of a source of VOC subject to this Part shall meet one of the following schedules as applicable:

(i) Sources utilizing low solvent content coatings to comply with the emission limitations in Paragraph 2 of this Part shall comply with Schedule 2 of Section I, Part D above.

(ii) Sources utilizing process equipment changes or add-on control devices, including incineration with or without heat recovery, (or process modification not requiring purchase orders) to comply with the emission limitations in Paragraph 2 of this Part shall comply with Schedule 1 of Section I, Part D above.

b. The owner or operator of a source subject to any compliance schedule shall certify to the Department within five (5) days after the deadline for each increment of progress, whether the required increment of progress has been met.

Part H. Graphic Arts—Rotogravure and Flexography

1. Applicability

Affected plants include all packaging rotogravure, publication rotogravure, and flexographic printing operations. Potential emissions are calculated on historical records of actual consumption of solvent and ink.

2. Emission Limitations

No owner or operator of a packaging rotogravure, publication rotogravure, or flexographic printing operation subject to this Part may cause, allow, or permit the discharge into the atmosphere of any VOC unless:

a. The volatile fraction of water-borne inks, as applied to the substrate, contains 25 percent by volume or less of organic solvent and 75 percent by volume or more of water for heavy coverage.

b. The source achieves a 70 percent by volume overall reduction of solvent usage as compared to all solvent-borne ink usage for light coverage.

c. The source prints with high solids ink which contains, less water, 60 percent by volume or more nonvolatile materials.

3. Control Technology

The emission limitations in Paragraph 2 of this Part can be achieved by:

a. The application of low solvent content coating technology;

b. A carbon adsorption system;

c. Incineration;

d. An alternative VOC emission reduction system.

e. A capture system must be used in conjunction with the control equipment systems and provide for an overall VOC emission reduction of at least:

(i) 75 percent where a publication rotogravure process is employed;

(ii) 65 percent where a packaging rotogravure process is employed; and

(iii) 60 percent where a flexographic printing process is employed.

f. Alternative controls as allowed under Section I, Part C above.

4. Compliance Schedules

a. The owner or operator of a source of VOC subject to this Part must comply with Schedule 1 of Section I, Part D above.

b. The owner or operator of a source subject to any compliance schedule shall certify to the Department within five (5) days after the deadline for each increment of progress, whether the required increment of progress has been met.

Part I. through Part M. (Reserved for future use.)

Part N. Solvent Metal Cleaning

1. Applicability

a. This Standard will apply in the following manner:

(i) Control System A shall apply to cold cleaning, open top vapor degreasing and conveyorized degreasing operation, if the plant is located in a non-designated county and uses more than 100 tpy of solvents plant-wide based upon annual solvent purchase records.

(ii) Control System B shall apply to cold cleaning, open top vapor degreasing and conveyorized degreasing operations, if the plant is located in a nonattainment county and uses more than 100 tpy of solvents plant-wide based upon annual solvent purchase records.

b. In lieu of meeting the requirements of Paragraph (1)(a)(i) above, a plant in a non-designated county may choose to retain all solvent purchase and return records, including, making them available to the Department and if the potential loss to the ambient air, by evaporation or by other means, of solvent is less than 100 tpy, then the plant is exempted from Control System A requirements. Potential loss for this purpose shall be determined by subtracting returned solvent from purchased solvent.

c. The provision of this Part shall apply with the following exceptions:

(i) Open top vapor degreasers with an open area smaller than one square meter (10.8 ft^2 shall be exempt from Paragraphs (3)(b)(iii)(b) and (3)(b)(iii)(d) of this Part.

(ii) Conveyorized degreasers with an air/vapor interface smaller than 2.0 square meters (21.6 ft^2) shall be exempt from Paragraph (4)(b)(iii) of this Part.

2. Control Provisions for Cold Cleaning

Except as provided under Paragraph (1)(c) of this Part, the owner or operator of a cold cleaning operation shall:

a. For Control System A;

(i) Equip the cleaner with a cover; and

(ii) Equip the cleaner with some means for draining cleaned parts; and

(iii) Provide a permanent, conspicuous label, summarizing the operating requirements; and

(iv) Drain the cleaned parts for at least 15 seconds or until dripping ceases; and

(v) Close degreaser cover whenever parts are not handled in the cleaner; and

(vi) Store waste solvent only in covered containers; and

(vii) Do not dispose of waste solvent nor transfer it to another party, such that greater than 20 percent of the waste (by weight) can evaporate into the atmosphere.

b. For Control System B;

(i) Equip the cleaner with a cover and the cover shall be so designed that it can be easily operated with one hand; if,

(a) The solvent volatility is greater than 2 kPA (15 millimeters of mercury (mmHg) or 0.3 psi) measured at 38 degrees C (100 degrees F); or

(b) The solvent is agitated; or

(c) The solvent is heated; and

(ii) Equip the cleaner with some means for draining cleaned parts and the drainage mechanism shall be constructed internally so that parts are enclosed under the cover while draining if the solvent volatility is greater than 4.3 kPA (32 mmHg or 0.6 psi) measured at 38 degrees C

(100 degrees F), except that the drainage mechanism may be external for applications where an internal type cannot fit into the cleaning system; and

(iii) Install one of the following control devices if the solvent volatility is greater than 4.3 kPA (33 mmHg or 0.6 psi) measured at 38 degrees C (100 degrees F), or if the solvent is heated above 50 degrees C (122 degrees F);

(a) Freeboard that gives a freeboard ratio greater than or equal to 0.7; or

(b) Water cover (solvent must be insoluble in water and heavier than water); or

(c) Other systems of equivalent control, such as refrigerated chiller or carbon adsorption, approved by the Department; and

(iv) Provide a permanent, conspicuous label, summarizing the operating requirements; and

(v) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, such that greater than 20 percent of the waste solvent (by weight) can evaporate into the atmosphere; and

(vi) Close the cover whenever parts are not being handled in the cleaner; and

(vii) Drain the cleaned parts for at least 15 seconds or until dripping ceases; and

(viii) If used, supply a solvent spray that is a solid fluid stream (not a fine, atomized or shower type spray) at a pressure which does not cause excessive splashing.

3. Control Provisions for Vapor Degreasers

Except as provided under Paragraph (1)(c) of this Part, the owner or operator of an open top degreaser shall:

a. For Control System A;

(i) Equip the vapor degreaser with a cover that can be opened and closed easily without disturbing the vapor zone; and

(ii) Keep the cover closed at all times except when processing work loads through the degreaser; and

(iii) Minimize solvent carryout by:

(a) Racking parts to allow complete drainage; and

(b) Moving parts in and out of the degreaser at less than 3.3 meters per minute (m/min) (11 feet per minute (ft/min)); and

(c) Holding the parts in the vapor zone at least 30 seconds or until condensation ceases; and

(d) Tipping out any pools of solvent on the cleaned parts before removal from the vapor zone; and

(e) Allowing parts to dry within the degreaser for at least 15 seconds or until visually dry; and

(iv) Not degrease porous or absorbent materials, such as cloth, leather, wood, or rope; and

(v) Not occupy more than half of the degreaser's open top area with a workload; and

(vi) Not load the degreaser to the point where the vapor level would drop more than 10 centimeters (4 inches) when the workload is removed from the vapor zone; and

(vii) Always spray below the vapor level; and

(viii) Repair solvent leaks immediately, or shut down the degreaser; and

(ix) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, such that greater than 20 percent of the waste solvent (by weight) can evaporate into the atmosphere; and

(x) Not operate the cleaner so as to allow water to be visually detectable in solvent exiting the water separator; and

(xi) Not use ventilation fans near the degreaser opening, nor provide exhaust ventilation exceeding 20 cubic meters per minute per square meter (65 cubic feet per minute per square foot) of degreaser open area, unless necessary to meet the Occupational Safety and Health Administration (OSHA) requirements.

b. For Control System B;

(i) Equip the vapor degreaser with a cover that can be opened and closed easily without disturbing the vapor zone; and

(ii) Provide the following safety switches:

(a) A condenser flow switch and thermostat which shut off the pump heat if the condenser coolant is either not circulating or too warm; and

(b) A spray safety switch which shuts off the spray pump if the vapor level drops more than 10 centimeters (4 inches); and

(iii) Install one of the following control devices:

(a) Powered cover, if the freeboard ratio is greater than or equal to 0.75, and if the degreaser opening is greater than 1 m^2 (10 ft^2); or

(b) Refrigerated chiller; or

(c) Enclosed design (cover or door opens only when the dry part is actually entering or exiting the degreaser); or

(d) Carbon adsorption system with ventilation greater than or equal to 15 cubic meters per minute per square meter (50 cubic feet per minute per square foot) of air/vapor area (when cover is open), and exhausting less than 25 parts per million (ppm) of solvent averaged over one complete adsorption cycle; or

(e) A control system, demonstrated to have control efficiency equivalent to or greater than any of the above, and approved by the Department; and

(iv) Attach a permanent, conspicuous label, summarizing operating procedures (v) to (x) below.

(v) Keep the cover closed at all times except when processing work loads through the degreaser; and

(vi) Minimize solvent carryout by:

(a) Racking parts to allow complete drainage;

(b) Moving parts in and out of the degreaser at less than 3.3 m/min (11 ft/min); and

(c) Holding the parts in the vapor zone at least 30 seconds or until condensation ceases; and

(d) Tipping out any pools of solvent on the cleaned parts before removal from the vapor zone; and

(e) Allowing parts to dry within the degreaser for at least 15 seconds or until visually dry; and

(vii) Not degrease porous or absorbent materials, such as cloth, leather, wood or rope; and

(viii) Not occupy more than half of the degreaser's open top area with a workload; and

(ix) Not load the degreaser to the point where the vapor level would drop more than 10 centimeters (4 inches) when the workload is removed from the vapor zone; and

(x) Always spray below the vapor level; and

(xi) Repair solvent leaks immediately, or shut down the degreaser; and

(xii) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, such that greater than 20 percent of the waste solvent (by weight) can evaporate into the atmosphere; and

(xiii) Not operate the cleaner so as to allow water to be visually detectable in solvent exiting the water separator; and

(xiv) Not use ventilation fans near the degreaser opening, nor provide exhaust ventilation exceeding 20 cubic meters per minute per square meter (65 cubic feet per minute per square foot) of degreaser open area, unless necessary to meet OSHA requirements.

4. Control Provisions for Conveyorized Degreasers

Except as provided under Paragraph (1)(c) of this Part the owner or operator of the conveyorized degreasers shall:

a. For Control System A;

(i) Not use workplace fans near the degreaser opening, nor provide exhaust ventilation exceeding 20 cubic meters per minute per square meter (65 cubic feet per minute per square foot) of degreaser opening, unless necessary to meet OSHA requirements; and

(ii) Minimize carryout emissions by:

(a) Racking parts for best drainage; and

(b) Maintaining the vertical conveyor speed at less than 3.3 m/min (11 ft/min); and

(iii) Store waste solvent only in covered containers and not dispose of waste solvent nor transfer it to another party, such that greater than 20 percent of the waste solvent (by weight) can evaporate into the atmosphere; and

(iv) Repair solvent leaks immediately, or shut down the degreaser; and

(v) Not operate the cleaner so as to allow water to be visually detectable in solvent exiting the water separator.

b. Or Control System B:

(i) Install one of the following control devices:

(a) Refrigerated chiller; or

(b) Carbon adsorption system, with ventilation greater than or equal to 15 cubic meters per minute per square meter (50 cubic feet per minute per square foot) of air/vapor area (when downtime covers are open), and exhausting less than 25 ppm of solvent by volume averaged over a complete adsorption cycle; or

(c) A system, demonstrated to have a control efficiency equivalent to or greater than Paragraphs (4)(b)(i)(a) or (4)(b)(i)(b) of this Part, and approved by the Department; and

(ii) Equip the cleaner with equipment, such as a drying tunnel or rotating (tumbling) basket, sufficient to prevent cleaned parts from carrying out solvent liquid or vapor; and

(iii) Provide the following safety switches:

(a) A condenser flow switch and thermostat which shuts off the pump heat if the condenser coolant is either not circulating or too warm; and

(b) A spray safety switch which shuts off the spray pump or the conveyor if the vapor level drops more than 10 centimeters (4 inches); and

(c) A vapor level control thermostat which shuts off the pump heat when the vapor level rises too high; and

(iv) Minimize openings during operation so that entrance and exits will silhouette workloads with an average clearance between the parts and the edge of the degreaser opening of less than 10 centimeters (4 inches) or less than 10 percent of the width of the opening; and

(v) Provide downtime covers for closing off the entrance and exit during shutdown hours; and

(vi) Not use workplace fans near the degreaser opening, nor provide exhaust ventilation exceeding 20 cubic meters per minute per square meter (65 cubic feet per minute per square foot) of degreaser opening, unless necessary to meet OSHA requirements; and

(vii) Minimize carryout emissions by:

(a) Racking parts for best drainage; and

(b) Maintaining the vertical conveyor speed at less than 3.3 m/min (11 feet per minute); and

(viii) Store waste solvent only in covered containers and not dispose of waste solvent nor transfer it to another party, such that greater than 20 percent of the waste solvent (by weight) can evaporate into the atmosphere; and

(ix) Repair solvent leaks immediately, or shut down the degreaser; and

(x) Not operate the cleaner so as to allow water to be visually detectable in solvent exiting the water separator; and

(xi) Place downtime covers over entrances and exits of conveyorized degreasers immediately after the conveyors and exhausts are shut down and not remove them until just before start-up.

5. Compliance Schedule

a. The owner or operator of a volatile organic compound source subject to this Part shall comply with Schedule 1 of Section I, Part D above.

b. Any owner or operator of a source subject to any compliance schedule shall certify to the Department within five (5) days after the deadline for each increment of progress, whether the required increment of progress has been met.

Part O. Petroleum Liquid Storage in Fixed Roof Tanks

1. Applicability

Affected sources include all fixed roof storage vessels with capacities of 40,000 gal (151,412 L) and larger which contain volatile petroleum liquids whose true vapor pressure is greater than 1.52 psi (10.5 kPA).

2. Control Provisions

No owner or operator shall permit petroleum liquid storage in fixed roof tanks unless:

a. The source has been retrofitted with an internal floating roof equipped with a closure seal, or seals, to close the space between the roof edge and tank wall; or

b. The source has been retrofitted with equally effective alternative control approved by the Department; and

c. The source is maintained such that there are no visible holes, tears, or other openings in the seal or any seal fabric or materials; and

d. All openings except stub drains are equipped with covers, lids, or seals such that;

(i) The cover, lid, or seal is in the closed position at all times except when in actual use; and

(ii) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports; and

(iii) Rim vents, if provided, are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting; and

e. Routine inspections are conducted through roof hatches once per month; and a complete inspection of cover and seal is conducted whenever the tank is emptied for nonoperational reasons or once per year; and

f. Records are maintained in accordance with Section I, Part F above that shall include:

(i) Reports of results of inspections; and

(ii) Average monthly storage temperatures and true vapor pressures of petroleum liquids stored; and

(iii) Throughput quantities and types of petroleum liquids for each storage vessel.

3. Compliance Schedules

a. The owner or operator of a VOC source subject to this Part shall comply with Schedule 1 of Section I, Part D above.

b. Any owner or operator of source subject to any compliance schedule shall certify to the Department within five (5) days after the deadline for each increment of progress, whether the required increment of progress has been met.

Part P. Petroleum Liquid Storage in External Floating Roof Tanks

1. Applicability

a. Affected sources include all petroleum liquid storage vessels equipped with external floating roofs and having capacities greater than 150,000 L (39,600 gal).

b. This Part does not apply to petroleum liquid storage vessels which:

(i) Contain a petroleum liquid with a true vapor pressure less than 27.6 kPa (4.0 psi) and are of welded construction presently possessing a metallic-type shoe seal, a liquid-mounted foam

seal, a liquid mounted, liquid filled type seal, or other closure device of demonstrated equivalence approved by the Department; or

(ii) Are of welded construction, equipped with a metallic-type shoe primary seal and has a secondary seal from the top of the shoe seal to the tank wall (shoe-mounted secondary seal).

2. Control Provisions

No owner or operator of a petroleum liquid storage vessel subject to this Part shall store a petroleum liquid in that vessel unless:

a. The vessel has been fitted with a continuous secondary seal extending from the floating roof to the tank wall (rim-mounted secondary seal), or a closure or other device of equivalent control efficiency and approved by the Department;

b. All seal closure devices meet the following requirements:

(i) There are no visible holes, tears, or other openings in the seal or seal fabric and the seals are intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall; and

(ii) For vapor-mounted seals, the area of accumulated gaps between the secondary seal and the tank wall shall not exceed 21.2 square centimeters per meter (cm^2) of tank diameter (1.0 square inches (in^2) per foot of tank diameter).

c. All openings in the external floating roof, except for automatic bleeder vents, rim space vents, and leg sleeves, are:

(i) Equipped with covers, seals, or lids in the closed position except when the openings are in actual use; and

(ii) Equipped with projections into the tank which remain below the liquid surface at all times.

d. Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports;

e. Rim vents are set to open only when the roof is being floated off the leg supports or at the manufacturer's recommended setting; and

f. Emergency roof drains are provided with slotted membrane fabric covers or equivalent covers at least 90 percent of the area of the opening;

g. The owner or operator of a petroleum liquid storage vessel subject to this Part shall:

(i) Perform annual inspections to ensure compliance with this Part, including a visual inspection of the secondary seal gap; and

(ii) Measure the secondary seal gap annually when the floating roof is equipped with a vapor-mounted seal; and

(iii) Maintain records of the results of (2)(g)(i) and (ii) above and of the throughput quantities and types of petroleum liquids stored.

3. Compliance Schedules

a. The owner or operator of a VOC source subject to this Part shall comply with Schedule 1 of Section I, Part D above, for installation of a secondary seal, closure, or other VOC emission reduction device:

b. Any owner or operator of a source subject to any compliance schedule shall certify to the Department within five (5) days after the deadline for each increment of progress, whether the required increment of progress has been met.

Part Q. Manufacture of Synthesized Pharmaceutical Products

1. Applicability

All synthesized pharmaceutical manufacturing plants which emit VOC from any source, including reactors, distillation units, dryers, transfer, or storage of VOC, extraction equipment, filters, crystallizers, and centrifuges are affected.

2. Control Technology Provisions

The owner or operator of a synthesized pharmaceutical manufacturing plant having sources subject to this Part shall:

a. Control the VOC emissions from reactors, distillation operations, crystallizers, centrifuges, and vacuum dryers that have the potential to emit 6.80 kg/day (15 lb/day) or more of VOC. Surface condensers or equivalent controls shall be used, provided that:

(i) If surface condensers are used, the condenser outlet gas temperature must not exceed:

(a) Minus (-) 25 degrees C when condensing VOC of vapor pressure greater than 40.0 kPa (5.8 psi) measured at 20 degrees C,

(b) Minus (-) 15 degrees C when condensing VOC of vapor pressure greater than 20.0 kPa (2.9 psi) measured at 20 degrees C,

(c) 0 degrees C when condensing VOC of vapor pressure greater than 10.0 kPa (1.5 psi) measured at 20 degrees C,

(d) 10 degrees C when condensing VOC of vapor pressure greater than 7.0 kPa (1.0 psi) measured at 20 degrees C, or

(e) 25 degrees C when condensing VOC of vapor pressure greater than 3.50 kPa (0.5 psi) measured at 20 degrees C.

(ii) If other controls are used, the VOC emissions must be reduced by the equivalent of a surface condenser which meets the requirements of Part (a)(i) above.

b. Reduce the VOC emissions from air dryers and production equipment exhaust systems;

(i) By at least 90 percent if emissions are 150 kg/day (330 lb/day) or more of VOC; or

(ii) To 15.0 kg/day (33 lb/day) or less if emissions are less than 150 kg/day (330 lb/day) of VOC.

c. For storage tanks:

(i) Provide a vapor balance system or equivalent control that is at least 90 percent effective in reducing emissions from truck or railcar deliveries to storage tanks with capacities greater than 7,500 L (2,000 gallons) that store VOC with vapor pressures greater than 28.0 kPa (4.1 psi) at 20 degrees C; and

(ii) Install pressure/vacuum conservation vents set at plus or minus (±) 0.2 kPa on all storage tanks that store VOC with vapor pressures greater than 10.0 kPa (1.5 psi) at 20 degrees C, unless a more effective control system is used.

d. Enclose centrifuges, rotary vacuum filters, and other filters which process liquids containing VOC with vapor pressures of 3.50 kPa (0.5 psi) or more at 20 degrees C.

e. Install covers on in-process tanks containing a VOC at any time. These covers must remain closed, unless production, sampling, maintenance, or inspection procedures require operator access.

f. Repair leaks from which a liquid containing VOC can be observed running or dripping. The repair shall be completed the first time the equipment is off line for a period of time long enough to complete the repair.

3. Compliance Schedule

a. The owner or operator of a VOC source subject to this Part shall comply with Schedule 1 of Section I, Part D above.

b. Any owner or operator of a source subject to any compliance schedule shall certify to the Department within five (5) days after the deadline for each increment of progress, whether the required increment of progress has been met.

Part R. Manufacture of Pneumatic Rubber Tires

1. Applicability

Affected sources include the following operations in all plants for the "Manufacture of Pneumatic Rubber Tires:" Undertread cementing, tread end cementing, bead dipping, and green tire spraying.

2. Control Technology Provisions

The owner or operator of an undertread cementing, tread end cementing, or bead dipping operation subject to this Part shall:

a. Install and operate a capture system, designed to achieve maximum reasonable capture, up to 85 percent by weight of VOC emitted, from all undertread cementing, tread end cementing and bead dipping operations. Maximum reasonable capture shall be consistent with the following documents:

(i) Industrial Ventilation, A Manual of Recommended Practices, 14th Edition, American Federation of Industrial Hygienists.

(ii) Recommended Industrial Ventilation Guidelines, U.S. Department of Health, Education, and Welfare, National Institute of Occupational Safety and Health.

b. Install and operate a control device that meets the requirements of one of the following:

(i) A carbon adsorption system designed and operated in a manner such that there is at least a 95 percent removal of VOC by weight from the gases ducted to the control device; or

(ii) An incineration system that oxidizes at least 90 percent of the nonmethane VOC (VOC measured as total combustible carbon) which enter the incinerator to carbon dioxide and water.

(iii) An alternative VOC emission reduction system certified by the owner or operator to have at least a 90.0 percent reduction efficiency, measured across the control system, that has been approved by the Department.

3. The owner or operator of a green tire spraying operation subject to this Part must implement one of the following means of reducing VOC emissions:

a. Substitute water-based sprays for the normal solvent-based mold release compound; or

b. Install a capture system designed and operated in a manner that will capture and transfer at least 90 percent of the VOC emitted by the green tire spraying operation to a control device; and

c. In addition to Part b above, install and operate a control device that meets the requirements of one of the following:

(i) A carbon adsorption system designed and operated in a manner such that there is at least 95 percent removal of VOC by weight from the gases ducted to the control device; or

(ii) An incineration system that oxidizes at least 90 percent of the nonmethane VOC (VOC measured as total combustible carbon) to carbon dioxide and water.

(iii) An alternative VOC emission reduction system certified by the owner or operator to have at least a 90.0 percent reduction efficiency, measured across the control system, that has been approved by the Department.

4. Compliance Schedules

a. The owner or operator of a VOC source subject to this Part shall comply with Schedule 1 of Section I, Part D above.

b. The owner or operator of a source subject to any compliance schedule shall certify to the Department within five (5) days after the deadline for each increment of progress, whether the required increment of progress has been met.

Part S. Cutback Asphalt

1. Control Provisions

No person may cause, allow, or permit the use or application of cutback asphalt except:

a. When used solely as a penetrating prime coat; or

b. When long-life asphalt mix stockpile storage is required; or

c. When application is to be made during the months of January, February, or December.

2. Compliance Schedules

a. The owner or operator of a VOC source subject to this Part shall comply with Schedule 1 of Section I, Part D above.

b. Any owner or operator of a source subject to any compliance schedule shall certify to the Department within five (5) days after the deadline for each increment of progress, whether the required increment of progress has been met.

Part T. Bulk Gasoline Terminals and Vapor Collection Systems

1. Applicability

This Standard will apply to all bulk gasoline terminals and the appurtenant equipment necessary to load or unload gasoline tank trucks.

2. Control Technology

No person may load or unload a gasoline tank truck at any bulk gasoline terminal subject to this Part unless:

a. The bulk gasoline terminal is equipped with a vapor control system, properly installed, in good working order, in operation, and consisting of one of the following:

(i) An adsorber or condensation system which may not allow mass emissions of VOC to exceed 4.7 grains per gal (80 milligrams per L) of gasoline loaded; or

(ii) A vapor collection system which directs all vapors to a fuel gas system; or

(iii) Alternative controls as allowed under Section I, Part C above.

b. All displaced vapors and gases are vented only to the vapor control system; and

c. A means is provided to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected; and

d. All loading and vapor lines are equipped with fittings which make vapor-tight connections and which close automatically when disconnected.

3. Sources affected by this Part may not:

a. Allow avoidable visible liquid leaks during loading or unloading operations; nor

b. Allow the pressure in the vapor collection system to exceed the gasoline tank truck pressure relief settings; nor

c. Allow gasoline to be discarded in sewers nor stored in open containers nor handled in any manner that would result in evaporation.

4. Compliance Schedules

a. The owner or operator of a VOC source subject to this Part shall comply with Schedule 1 of Section I, Part D above.

b. Any owner or operator of a source subject to any compliance schedule shall certify to the Department within five (5) days after the deadline for each increment of progress, whether the required increment of progress has been met.

HISTORY: Amended by State Register Volume 36, Issue No. 8, eff August 24, 2012 (errata); State Register Volume 37, Issue No. 4, eff April 26, 2013; State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Editor's Note

Scrivener's error corrected in 2017, in Part N, 4, a, deleting duplicated paragraphs (iii), (iv), and (v).

STANDARD NO. 5.1. Repealed **by State Register Volume 39, Issue No. 6, Doc. No. 4481, eff June 26, 2015.**

Editor's Note

Former R. 61–62.5 St 5.1 was titled **BEST AVAILABLE CONTROL TECHNOLOGY (BACT)/LOWEST ACHIEVABLE EMISSION RATE ("LAER") APPLICABLE TO VOLATILE ORGANIC COMPOUNDS** and had the following history: Amended by State Register Volume 36, Issue No. 9, eff September 28, 2012 (errata); State Register Volume 37, Issue No. 4, eff April 26, 2013.

STANDARD NO. 5.2

CONTROL OF OXIDES OF NITROGEN (NO_X)

SECTION I - APPLICABILITY

A. Except as provided in paragraph B. of this part, the provisions of this regulation shall apply to any stationary source that emits or has the potential to emit oxides of nitrogen (NO_X) generated from fuel combustion. A stationary source becomes an affected source under this regulation upon meeting one or more of the criteria specified in paragraphs (A)(1), (A)(2), and (A)(3) below.

(1) Any new source that is constructed after June 25, 2004;

(2) Any existing source where a burner assembly is replaced with another burner assembly after the effective date of this regulation, regardless of size or age of the burner assembly to be replaced shall become an existing affected source and is subject to sections V, VI, and VII below. The replacement of individual components such as burner heads, nozzles, or windboxes does not trigger affected source status.

(3) Any existing source removed from its presently permitted facility (either from in-state or out-of-state) and moved to another permitted facility in-state after the effective date of this regulation shall be considered a new affected source. Any existing sources relocated between permitted facilities within the State under common ownership shall not become an existing affected source until Section (I)(A)(2) is triggered.

B. Exemptions:

The following sources are exempt from all requirements of this regulation unless otherwise specified:

(1) Any source emitting NO_X listed on the Regulation 61–62.1, Section II(B), Exemptions.

(2) Any source emitting NO_X listed on the Department maintained list under Regulation 61–62.1, Section II (B)(3).

(3) Any source which has undergone a Best Available Control Technology (BACT) analysis or Lowest Achievable Emission Rate (LAER) for NO_X in accordance with Regulation 61–62.5, Standard No. 7, and 7.1, respectively.

(4) Any stationary internal combustion engine with a mechanical power output of less than two hundred (200) brake horsepower (bhp) or 149kW.

(5) Any device functioning solely as a combustion control device. Waste heat recovery from these combustion control devices shall not be considered primary grounds for exclusion from this exemption.

(6) Any equipment that has NO_X limits pursuant to the requirements of 40 Code of Federal Regulations (CFR) 60, 61, or 63 where such limits are equivalent to, or more stringent than, the requirements of this regulation.

(7) Any source that has NO_X limits pursuant to the requirements of Regulation 61–62.96, where such limits are equivalent to, or more stringent than, the requirements of this regulation.

(8) Any source that has NO_X limits pursuant to the requirements of Regulation 61–62.99.

(9) Air Curtain Incinerators.

(10) Engines Test Cells and/or Stands.

(11) Portable and temporary internal combustion (IC) engines such as those associated with generators, air compressors, or other applications provided that they fall in the categories listed in 40 CFR 89, (Control of Emissions from New and In-Use Nonroad Compression-Ignition Engines), 40 CFR 1039 (Control of Emissions From New and In-Use Nonroad Compression-Ignition Engines), and 40 CFR 1068 (General Compliance Provisions For Highway, Stationary, and Nonroad Programs).

(12) Combustion sources that operate at an annual capacity factor of ten (10) percent or less per year.

(13) Special use burners, such as startup/shutdown burners, that are operated less than 500 hours a year are exempt from the existing source replacement requirements.

(14) Liquor guns on a recovery boiler are only exempt from the standard requirements in Section IV below.

(15) Portable sources such as asphalt plants or concrete batch plants are considered existing sources only and become existing affected sources when the burner assembly is replaced under Section (1)(A)(2).

(16) The Department reserves the right to consider any other exemptions from this regulation on a case-by-case basis as appropriate.

SECTION II - DEFINITIONS

For the purposes of this regulation, the following definitions shall apply:

A. Annual Capacity Factor: Means the ratio between the actual heat input to a combustion unit from the fuels during a calendar year and the potential heat input to the steam generating unit had it been operated for 8,760 hours during a calendar year at the maximum steady state design heat input capacity.

B. Burner Assembly: Means any complete, pre-engineered device that combines air (or oxygen) and fuel in a controlled manner and admits this mixture into a combustion chamber in such a way as to ensure safe and efficient combustion. A self-contained chamber such as is found on a combustion turbine is not a burner assembly for the purposes of this regulation.

C. Case-by-Case NO_X Control: Means an emissions limitation based on the maximum degree of reduction for NO_X which would be emitted from any new source which the Department, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source through application of production processes or available methods, systems, and techniques. In no event shall application of NO_X control result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard. If the Department determines that technological or economic limitations on the application of measurement methodology to a particular source would make the impositions of an emission standard infeasible, a design, equipment, work practice, operational standard, or combination thereof, may be prescribed instead to satisfy the requirement for the application of NO_X control. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

D. Combustion Control Device: Means, but is not limited to, any equipment that is used to destroy or remove air pollutant(s) prior to discharge to the atmosphere, excluding boilers, process heaters, dryers, furnaces, digesters, ovens, combustors, and similar combustion devices. Such equipment includes, but is not limited to, thermal oxidizers, catalytic oxidizers, and flares.

E. Constructed: Means the on-site fabrication, erection, or installation of the NO_X emitting source.

F. Equivalent Technology: Means any item that is identical or functionally equivalent to the existing component. This component may serve the same purpose or function as the replaced component, but may be different in some respects or improved in some ways.

G. Existing affected source: Means sources constructed on or before June 25, 2004 and that meet the applicability requirements of Section (1)(A)(2).

H. Fuel: Means the following fuels, any combination of the following fuels, or any combustible material the Department determines to be a fuel including, but not limited to:

(1) Virgin fuel, waste, waste fuel, and clean wood (biomass fuel) as defined in Regulation 61–62.1.

(2) Biodiesel: Means a mono-alkyl ester derived from vegetable oil and animal fat and conforming to ASTM D6751.

(3) Biofuel: Means any biomass-based solid fuel that is not a solid waste. This includes, but is not limited to, animal manure, including litter and other bedding materials; vegetative agricultural and silvicultural materials, such as logging residues (slash), nut and grain hulls and chaff (for example, almond, walnut, peanut, rice, and wheat), bagasse, orchard prunings, corn stalks, coffee bean hulls and grounds.

(4) Digester gas: Means any gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and composed principally of methane and CO_2.

(5) Fossil Fuel: Means natural gas, petroleum, coal, and any form of solid, liquid, or gaseous fuel derived from such material for the purpose of creating useful heat. Petroleum for facilities constructed, reconstructed, or modified before May 4, 2011, means crude oil or a fuel derived from crude oil, including, but not limited to, distillate oil and residual oil. For units constructed, reconstructed, or modified after May 3, 2011, petroleum means crude oil or a fuel derived from crude oil, including, but not limited to, distillate oil, residual oil, and petroleum coke.

(6) Landfill Gas: Means a gaseous by-product of the land application of municipal refuse typically formed through the anaerobic decomposition of waste materials and composed principally of methane and CO_2.

I. New affected source: Means any affected source which has been constructed after June 25, 2004, or meets the applicability requirements of Section (I)(A)(3). A new affected source will not be considered an existing affected source at burner assembly replacement under Section (1)(A)(2).

J. Source: Means an individual NO_X emission unit.

SECTION III - STANDARD REQUIREMENTS FOR NEW AFFECTED SOURCES

A. Those affected sources as defined in Section I(A)(1) and (A)(3) above shall apply NO_X to achieve the limitations provided in Table 1 of this section. Unless otherwise noted, all emission limits for affected sources required to use Continuous Emissions Monitoring (CEMS) shall be based on thirty (30) day rolling averages.

B. An affected source may request an alternate control limitation by submitting a demonstration that the alternate limitation is a Case-by-Case NO_X Control as defined in Section II above.

C. The Department reserves the right to request that the owner or operator submit additional information for those affected sources that request alternate control limitation in accordance with Section III(B) above.

D. Affected sources required to install post combustion technology for the control of NO_X shall be required to use post combustion for the control of NO_X during the ozone season.

Table 1 - NO_X Control Standards

Source Type	Emission Limit
Propane and/or Natural Gas-Fired Boilers	
≥10 million British thermal units per hour (MMBtu/hr) and < 100 MMBtu/hr	Low-NO_X Burners or equivalent technology, shall achieve 0.036 pounds per million metric British thermal units (lb/MMBtu)
≥100 MMBtu/hr	Low-NO_X Burners + Flue Gas Recirculation or equivalent technology, shall achieve 0.036 lb/MMBtu
Distillate Oil-Fired Boilers	
≥10 MMBtu/hr and < 100 MMBtu/hr	Low-NO_X Burners or equivalent technology, shall achieve 0.15 lb/MMBtu
≥100 MMBtu/hr	Low-NO_X Burners + Flue Gas Recirculation or equivalent technology, shall achieve 0.14 lb/MMBtu
Residual Oil-Fired Boilers	
≥10 MMBtu/hr and < 100 MMBtu/hr	Low-NO_X Burners or equivalent technology, shall achieve 0.3 lb/MMBtu
≥100 MMBtu/hr	Low-NO_X Burners + Flue Gas Recirculation or equivalent technology, shall achieve 0.3 lb/MMBtu
Multiple Fuel Boilers	
The emission limits for boilers burning multiple fuels are calculated in accordance with the formulas below. Additional fuels or combination of fuels not otherwise listed in this table shall be addressed on a case-by-case basis.	
≥10 MMBtu/hr and < 100 MMBtu/hr	$E_n = [(0.036 \text{ lb/MMBtu } H_{ng}) + (0.15 \text{ lb/MMBtu } H_{do}) + (0.3 \text{ lb/MMBtu } H_{ro}) + (0.35 \text{ lb/MMBtu } H_c) + (0.2 \text{ lb/MMBtu } H_w)]/(H_{ng} + H_{do} + H_{ro} + H_c + H_w)$ where: E_n is the nitrogen oxides emission limit (expressed as nitrogen dioxide (NO_2)), ng/J (lb/million Btu), H_{ng} is the heat input from combustion of natural gas, H_{do} is the heat input from combustion of distillate oil, H_{ro} is the heat input from combustion of residual oil, H_c is the heat input from combustion of coal, and

Source Type	Emission Limit
	H_w is the heat input from combustion of wood residue.
≥100 MMBtu/hr	E_n = [(0.036 lb/MMBtu H_{ng}) + (0.14 lb/MMBtu H_{do}) + (0.3 lb/MMBtu H_{ro}) + (0.25 lb/MMBtu H_c) + (0.2 lb/MMBtu H_w)]/(H_{ng} + H_{do}+ H_{ro} + H_c + H_w) where: E_n is the nitrogen oxides emission limit (expressed as NO_2), ng/J (lb/million Btu), H_{ng} is the heat input from combustion of natural gas, H_{do} is the heat input from combustion of distillate oil, H_{ro} is the heat input from combustion of residual oil, H_c is the heat input from combustion of coal, and H_w is the heat input from combustion of wood residue.
Wood Residue Boilers	
All types	Combustion controls to minimize NO_X emissions or equivalent technology, shall achieve 0.20 lb/MMBtu
Coal-Fired Stoker Fed Boilers	
< 250 MMBtu/hr	Combustion controls to minimize NO_X emissions or equivalent technology, shall achieve 0.35 lb/MMBtu
≥ 250 MMBtu/hr	Combustion controls to minimize NO_X emissions or equivalent technology, shall achieve 0.25 lb/MMBtu
Pulverized Coal-Fired Boilers	
< 250 MMBtu/hr	Low-NO_X Burners + Combustion controls to minimize NO_X emissions or equivalent technology, shall achieve 0.35 lb/MMBtu
≥ 250 MMBtu/hr	Low-NO_X Burners + Combustion controls to minimize NO_X emissions + Selective Catalytic Reduction (SCR) or equivalent technology, shall achieve 0.14 lb/MMBtu
Municipal Refuse-Fired Boilers	
< 250 MMBtu/hr	Combustion modifications to minimize NO_X emissions + Flue Gas Recirculation or equivalent technology, shall achieve 195 ppmv at 12 percent CO_2 (0.35 lb/MMBtu)
≥ 250 MMBtu/hr	Staged Combustion and Automatic Combustion Air Control + SCR or equivalent technology, shall achieve 0.18 lb/MMBtu
Internal Combustion Engines	
Compression Ignition	Timing Retard ≤ 4 degrees + Turbocharger with Intercooler or equivalent technology, shall achieve 490 ppmv at 15 percent O_2 (7.64 gram per bhp-hour (gm/bhp-hr))
Spark Ignition	Lean-Burn Technology or equivalent technology, shall achieve 1.0 gm/bhp-hr
Landfill or Digester Gas-Fired	Lean-Burn Technology or equivalent technology, shall achieve 1.25 gm/bhp-hr
Gas Turbines	
Simple Cycle - Natural Gas	
< 50 Megawatts	Combustion Modifications (for example, dry low-NO_X combustors) to minimize NO_X emissions or equivalent technology, shall achieve 25 ppmv at 15 percent O_2 Dry Basis
≥ 50 Megawatts	Combustion Modifications (for example, dry low-NO_X combustors) to minimize NO_X emissions or equivalent technology, shall achieve 9.0 ppmv at 15 percent O_2 Dry Basis
Combined Cycle - Natural Gas	
< 50 Megawatts	Dry Low-NO_X Combustors or equivalent technology, shall achieve 9.0 ppmv at 15 percent O_2 Dry Basis
≥ 50 Megawatts	Dry Low-NO_X Combustors + SCR or equivalent technology, shall achieve 3.0 ppmv at 15 percent O_2 Dry Basis

Source Type	Emission Limit
Simple Cycle - Distillate Oil Combustion	
< 50 Megawatts	Combustion Modifications and water injection to minimize NO_X emissions or equivalent technology, shall achieve 42 ppmv at 15 percent O_2 Dry Basis
≥ 50 Megawatts	Combustion Modifications and water injection to minimize NO_X emissions or equivalent technology, shall achieve 42 ppmv at 15 percent O_2 Dry Basis
Combined Cycle - Distillate Oil Combustion	
< 50 Megawatts	Dry Low-NO_X Combustors with water injection or equivalent technology, shall achieve 42 ppmv at 15 percent O_2 Dry Basis
≥ 50 Megawatts	Dry Low-NO_X Combustors, water injection, and SCR or equivalent technology, shall achieve 10 ppmv at 15 percent O_2 Dry Basis
Landfill Gas-Fired	Water or steam injection or low-NO_X turbine design or equivalent technology, shall achieve 25 ppmv at 15 percent O_2 Dry Basis

Fluidized Bed Combustion (FBC) Boiler	
Bubbling Bed	Selective Non-catalytic Reduction (SNCR) shall achieve 0.15 lbs/MMBtu
Circulating Bed	SNCR shall achieve 0.07 lbs/MMBtu
Other	
Recovery Furnaces	Forth (4th) level or air to recovery furnace/good combustion practices or equivalent technology, shall achieve 100 ppmv at 8 percent O_2 Dry Basis
Cement Kilns	Low-NO_X burners or equivalent technology, shall achieve 30 percent reduction from uncontrolled levels.
Lime Kilns	Combustion controls or equivalent technology, shall achieve 175 ppmv at 10 percent O_2 Dry Basis.
Fuel Combustion Sources burning any non-specified fuel not listed in Table above. (Examples include but are not limited to process heaters not meeting the definition of "boiler" in Regulation 61–62.1 Section I, dryers, furnaces, ovens, duct burners, incinerators, and smelters)	Low-NO_X burners or equivalent technology, shall achieve 30 percent reduction from uncontrolled levels.

SECTION IV - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS FOR NEW AFFECTED SOURCES

A. Boilers

With the exception of fuel certification and tune-up requirements, compliance with required NO_X monitoring in 40 CFR 60 shall constitute compliance with the monitoring requirements in this section.

Affected sources that are not subject to 40 CFR 60 shall comply with the applicable requirements in this section.

(1) CEMS

(a) Except as allowed by the Department, the owner or operator of a boiler rated two hundred (200) MMBtu/hr or greater permitted for solid fuel, shall install, calibrate, maintain, and operate CEMS for measuring NO_X, and Oxygen (O_2) or Carbon Dioxide (CO_2) emissions discharged to the atmosphere, and shall record the output of the system.

(b) The CEMS required under this section shall be operated and data recorded during all periods of operation of the affected source except for CEMS breakdowns and repairs. Data is to be recorded during calibration checks and zero and span adjustments.

(c) The CEMS required under this section shall be installed, calibrated, maintained, and operated in accordance with approved methods in Regulation 61–62.60 or 61–62.72, or as approved by the Department.

(d) Excess Emissions

(i) Excess emissions and monitoring systems performance reports shall be submitted semiannually. All reports shall be postmarked by the thirtieth (30th) day following the end of each six (6) month period. Written reports of excess emissions shall include the following information:

(A) The magnitude of excess emissions, any conversion factor(s) used, the date and time of commencement and completion of each time period of excess emissions, and the process operating time during the reporting period.

(B) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected source. The nature and cause of any malfunction (if known), the corrective action taken, or preventative measures adopted.

(C) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

(D) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the reports.

(2) Periodic Monitoring and/or Source Test

(a) Unless required to operate a CEMS, testing requirements apply to boilers rated thirty (30) MMBtu/hr or greater permitted for solid fuels and boilers rated greater than one hundred (100) MMBtu/hr permitted for any other fuels.

(b) Except as allowed by the Department, an initial source test for NO_X emissions shall be conducted within one hundred and eighty (180) days after startup.

(c) Periodic source tests for NO_X shall be conducted every twenty-four (24) months, or as determined by the Department on a case by case basis in the permit condition for the affected source. Source tests will be used to show compliance with the NO_X standard.

(d) The Department reserves the right to require periodic source testing for any affected sources. All source testing shall be conducted in accordance with Regulation 61–62.1, Section IV.

(3) Fuel Certification

The owner or operator shall record monthly records of the amounts and types of each fuel combusted and maintain these records on site.

(4) Tune-ups

If the owner or operator of a boiler is required to comply with federal tune-up requirements in 40 CFR 63, then the federal requirements shall meet the compliance requirements of this paragraph.

(a) The owners or operator shall perform tune-ups every twenty-four (24) months in accordance with manufacturer's specifications or with good engineering practices.

(b) All tune-up records are required to be maintained on site and available for inspection by the Department for a period of five (5) years from the date generated.

(c) The owner or operator shall develop and retain a tune-up plan on file.

(5) Other Requirements

The owner or operator shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected source; any malfunction of the air pollution control equipment; and any periods during which a continuous monitoring system or monitoring device is inoperative.

B. Internal Combustion Engines

With the exception of fuel certification and tune-up requirements, compliance with required NO_X monitoring in 40 CFR 60 shall constitute compliance with the monitoring requirements in this section.

Affected sources that are not subject to 40 CFR 60 shall comply with all applicable requirements in this section.

The owner or operator of an affected source shall comply with either (B)(1) or (B)(2) below.

(1) Manufacturer's Certification

(a) Operate and maintain the stationary internal combustion engine and control device according to the manufacturer's emission-related written instructions;

(b) Change only those emission-related settings that are permitted by the manufacturer.

(2) Periodic Monitoring and/or Source Test

(a) Except as allowed by the Department, an initial source test for NO_X shall be conducted within one hundred eighty (180) days after startup.

(b) Periodic source tests for NO_X shall be conducted every twenty-four (24) months, or as determined by the Department on a case by case basis in the permit condition for the affected source. Source tests will be used to show compliance with the NO_X standard.

(c) The owner or operator shall operate the affected source(s) within the parameter(s) established during the most recent compliant source tests. A copy of the most recent Department issued source test summary letter(s) that established the parameter(s) shall be maintained with the required permit.

(d) The Department reserves the right to require periodic source testing for any affected sources. All source testing shall be conducted in accordance with Regulation 61–62.1, Section IV.

(3) Tune-Ups

If the owner or operator of an internal combustion engine is required to comply with federal requirements in 40 CFR 63 for the internal combustion engine, then the federal requirements shall meet the tune-up requirements of this section.

(a) The owner or operator shall perform tune-ups every twenty-four (24) months in accordance with manufacturer's specifications or with good engineering practices.

(b) All tune-up records are required to be maintained on site and available for inspection by the Department for a period of five (5) years from the date generated.

(c) The owner or operator shall develop and retain a tune-up plan on file.

(4) Fuel Certification

The owner or operator shall record monthly the amounts and types of each fuel combusted by the affected sources and maintain these records on site.

(5) Other Requirements

The owner or operator shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected source; any malfunction of the air pollution control equipment; and any periods during which a continuous monitoring system or monitoring device is inoperative.

C. Turbines

With the exception of fuel certification and tune-up requirements, compliance with required NO_X monitoring in 40 CFR 60 shall constitute compliance with the monitoring requirements in this section.

Affected sources that are not subject to 40 CFR 60 shall comply with all applicable requirements in this section.

The owner or operator of an affected source shall comply with either (C)(1) or (C)(2) below.

(1) CEMS

(a) Except as allowed by the Department, the owner or operator shall install, calibrate, maintain, and operate CEMS on the turbine for measuring NO_X, and Oxygen (O_2) or Carbon Dioxide (CO_2) emissions discharged to the atmosphere, and shall record the output of the system.

(b) The CEMS required under this section shall be operated and data recorded during all periods of operation of the affected source except for CEMS breakdowns and repairs. Data is to be recorded during calibration checks and zero and span adjustments.

(c) The CEMS required under this section shall be installed, calibrated, maintained, and operated in accordance with approved methods in Regulation 61–62.60 or 61–62.72, or as approved by the Department.

(d) Excess Emissions

(i) Excess emissions and monitoring systems performance reports shall be submitted semiannually. All reports shall be postmarked by the thirtieth (30th) day following the end of each six (6) month period. Written reports of excess emissions shall include the following information:

(A) The magnitude of excess emissions, any conversion factor(s) used, the date and time of commencement and completion of each time period of excess emissions, and the process operating time during the reporting period.

(B) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected source. The nature and cause of any malfunction (if known), the corrective action taken, or preventative measures adopted.

(C) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

(D) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the reports.

(2) Parametric Monitoring

(a) Unless required to operate a CEMS, the owner or operator using water or steam injection to control NO_X shall install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water or steam to fuel being fired in the turbine.

(b) Unless required to operate a CEMS, the owner or operator using a diffusion flame turbine without add-on selective catalytic reduction controls (SCR) to control NO_X, shall define at least four parameters indicative of the unit's NO_X formation characteristics and shall monitor these parameters continuously.

(c) Unless required to operate a CEMS, for any lean premix stationary combustion turbine, the owner or operator shall continuously monitor the appropriate parameters to determine whether the unit is operating in low-NO_X mode.

(d) Unless required to operate a CEMS, for any turbine that uses SCR to reduce NO_X, the owner or operator shall continuously monitor appropriate parameters to verify the proper operation of the emission controls.

(3) Periodic Monitoring and/or Source Test

(a) This requirement only applies to turbines not required to operate a CEMS.

(b) The steam or water to fuel ratio or other parameters that are continuously monitored as described in this section shall be monitored during the performance test required under this section to establish acceptable values and ranges. The owner or operator may supplement the performance test data with engineering analyses, design specifications, manufacturer's recommendations, and other relevant information to define the acceptable parametric ranges more precisely. The owner or operator shall develop and keep on-site a parameter monitoring plan which explains the procedures used to document proper operation of the NO_X emission controls. The plan shall include the parameter(s) monitored and the acceptable range(s) of the parameter(s) as well as the basis for designating the parameter(s) and acceptable range(s). Any supplemental data such as engineering analyses, design specifications, manufacturer's recommendations, and other relevant information shall be included in the monitoring plan.

(c) Except as allowed by the Department, an initial source test for NO_X emissions shall be conducted within one hundred eighty (180) days after startup.

(d) Periodic source tests for NO_X shall be conducted every twenty-four (24) months or as determined by the Department on a case by case basis in the permit condition for the affected source. Source tests will be used to show compliance with the NO_X standard.

(e) The Department reserves the right to require periodic source testing for any affected sources. All source testing shall be conducted in accordance with Regulation 61–62.1, Section IV.

(4) Tune-Ups

(a) The owner or operator shall perform tune-ups every twenty-four (24) months in accordance with manufacturer's specifications or with good engineering practices.

(b) All tune-up records are required to be maintained on site and available for inspection by the Department for a period of five (5) years from the date generated.

(c) The owner or operator shall develop and retain a tune-up plan on file.

(5) Fuel Certification

The owner or operator shall record monthly the amounts and types of each fuel combusted by the affected sources and maintain these records on site.

(6) Other Requirements

The owner or operator shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected source; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

D. All Other Affected Source Types

With the exception of fuel certification and tune-up requirements, compliance with required NO_X monitoring in 40 CFR 60 shall constitute compliance with the monitoring requirements in this section.

If the owner or operator is not required to comply with federal requirements in 40 CFR 60 for monitoring NO_X, then the monitoring requirements for the affected source shall be established on a case by case basis.

(1) Tune-Ups

(a) The owner or operator of a combustion source shall perform tune-ups every twenty-four (24) months in accordance with manufacturer's specifications or with good engineering practices.

(b) All tune-up records are required to be maintained on site and available for inspection by the Department for a period of five (5) years from the date generated.

(c) The owner or operator shall develop and retain a tune-up plan on file.

(2) Periodic Monitoring and/or Source Test

(a) Except as allowed by the Department, an initial source test for NO_X shall be conducted within one hundred eighty (180) days after startup.

(b) Periodic source tests for NO_X shall be conducted every twenty-four (24) months, or as determined by the Department on a case by case basis in the permit condition for the affected source. Source tests will be used to show compliance with the NO_X standard.

(c) The Department reserves the right to require periodic source tests for any affected sources. All source testing shall be conducted in accordance with Regulation 61–62.1, Section IV.

(3) Fuel Certification

The owner or operator shall record and maintain monthly records of the amounts and types of each fuel combusted by the affected sources and maintain these records on site.

SECTION V - STANDARD REQUIREMENTS FOR EXISTING AFFECTED SOURCES

A. For those affected sources subject to the requirements of this regulation as defined in Section I(A)(2) above where an existing burner assembly is replaced after the effective date of this regulation, the burner assembly shall be replaced with a low-NO_X burner assembly or equivalent technology, and shall achieve a thirty (30) percent reduction from uncontrolled NO_X emission levels based upon manufacturer's specifications. An exemption from this requirement shall be granted when a single burner assembly is being replaced in an affected source with multiple burners due to non-routine maintenance.

B. For those sources defined in Section I(A)(2) above where an existing burner assembly is replaced after the effective date of this regulation, the owner or operator shall notify and register the replacement with the Department in accordance with Section VI below.

C. An affected source may request an alternative control methodology to the one specified in paragraph (A) above of this section provided that they can demonstrate to the Department why the NO_X control limits specified are not economically or technically feasible for this specific circumstance. The Department reserves the right to request that the owner or operator submit additional information as necessary for the alternative control methodology determination. Alternative control methodol-

ogies granted under this part are not effective until notification is submitted to and approved by the Department.

SECTION VI - NOTIFICATION REQUIREMENTS FOR EXISTING AFFECTED SOURCES

A. Burner Assembly Replacement Notifications for Existing Affected Sources

(1) Except for those affected sources that wish to request an alternative control methodology as specified in Section V(C) above, the notification requirements specified in this section shall apply only to existing affected sources as defined in Section I(A)(2) above where an existing burner assembly is replaced after the effective date of this regulation.

(2) Within seven (7) days of replacing an existing burner assembly, the owner or operator shall submit written notification to register the replacement unit with the Department.

(3) Notification shall satisfy the permitting requirements consistent with Regulation 61–62.1, Section II(a).

(4) Notification shall contain replacement unit information as requested in the format provided by the Department. Replacement unit information shall include, at a minimum, all affected units at the source and the date the replacement unit(s) commenced operation.

(5) Those affected sources that wish to receive an emission reduction credit for the control device will be required to submit a permit application prior to replacement of the burner assembly(s).

SECTION VII - TUNE-UP REQUIREMENTS FOR EXISTING SOURCES

A. The owner or operator shall perform tune-ups every twenty-four (24) months in accordance with manufacturer's specifications or with good engineering practices. The first tune-up shall be conducted no more than twenty-four (24) months from start-up of operation for affected new sources and no more than twenty-four (24) months from replacement of a burner assembly for affected existing sources. Each subsequent tune-up shall be conducted no more than twenty-four (24) months after the previous tune-up.

B. All tune-up records are required to be maintained on site and available for inspection by the Department for a period of five (5) years from the date generated.

C. The owner or operator shall develop and retain a tune-up plan on file.

HISTORY: Amended by State Register Volume 36, Issue No. 12, eff December 28, 2012 (errata); State Register Volume 40, Issue No. 6, Doc. No. 4590, eff June 24, 2016; State Register Volume 41, Issue No. 8, Doc. No. 4750, eff August 25, 2017.

Editor's Note

Scrivener's errors corrected in 2017, in Section I.A.(2) and (3).

Scrivener's error corrected in 2017, in the title for Section III, inserting "Affected" before "Sources".

STANDARD NO. 6. RESERVED

Editor's Note

In State Register Vol. 35, Issue 5, May 27, 2011, Regulation 61–62.5, Standard 6, shall be deleted in its entirety and reserved as follows: SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL, AIR POLLUTION CONTROL REGULATIONS AND STANDARDS, REGULATION 61–62.5 AIR POLLUTION CONTROL STANDARDS, STANDARD NO. 6 is Reserved.

STANDARD NO. 7

PREVENTION OF SIGNIFICANT DETERIORATION

(a)(1) [Reserved]

(2) **Applicability procedures.**

(i) The requirements of this regulation apply to the construction of any new major stationary source (as defined in paragraph (b)(32)) or any project at an existing major stationary source in an area designated as attainment or unclassifiable under 40 Code of Federal Regulations (CFR) 81.341.

(ii) The requirements of paragraphs (j) through (r) apply to the construction of any new major stationary source or the major modification of any existing major stationary source, except as this section otherwise provides.

(iii) No new major stationary source or major modification to which the requirements of paragraphs (j) through (r)(5) apply shall begin actual construction without a permit that states that the major stationary source or major modification will meet those requirements. The Department has authority to issue any such permit.

(iv) The requirements of the program will be applied in accordance with the principles set out in paragraphs (a)(2)(iv)(a) through (f).

(a) Except as otherwise provided in paragraphs (a)(2)(v) and (vi), and consistent with the definition of major modification contained in paragraph (b)(30), a project is a major modification for a regulated New Source Review (NSR) pollutant if it causes two types of emissions increases - a significant emissions increase (as defined in paragraph (b)(50)), and a significant net emissions increase (as defined in paragraphs (b)(34) and (b)(49)). The project is not a major modification if it does not cause a significant emissions increase. If the project causes a significant emissions increase, then the project is a major modification only if it also results in a significant net emissions increase.

(b) The procedure for calculating (before beginning actual construction) whether a significant emissions increase (that is, the first step of the process) will occur depends upon the type of emissions units being modified, according to paragraphs (a)(2)(iv)(c) through (f). The procedure for calculating (before beginning actual construction) whether a significant net emissions increase will occur at the major stationary source (that is, the second step of the process) is contained in the definition in paragraph (b)(34). Regardless of any such preconstruction projections, a major modification results if the project causes a significant emissions increase and a significant net emissions increase.

(c) **Actual-to-projected-actual applicability test for projects that only involve existing emissions units.** A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the projected actual emissions (as defined in paragraph (b)(41)) and the baseline actual emissions (as defined in paragraphs (b)(4)(i) and (ii)), for each existing emissions unit, equals or exceeds the significant amount for that pollutant (as defined in paragraph (b)(49)).

(d) **Actual-to-potential test for projects that only involve construction of a new emissions unit(s).** A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the potential to emit (as defined in paragraph (b)(37)) from each new emissions unit following completion of the project and the baseline actual emissions (as defined in paragraph (b) (4)(iii)) of these units before the project equals or exceeds the significant amount for that pollutant (as defined in paragraph (b)(49)).

(e) **[Reserved]**

(f) **Hybrid test for projects that involve multiple types of emissions units.** A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the emissions increases for each emissions unit, using the method specified in paragraphs (a)(2)(iv)(c) and (d) as applicable with respect to each emissions unit, for each type of emissions unit equals or exceeds, the significant amount for that pollutant (as defined in paragraph (b)(49)).

(v) For any major stationary source for a Plantwide Applicability Limitation (PAL) for a regulated NSR pollutant, the major stationary source shall comply with the requirements under paragraph (aa).

(b) Definitions.

For the purposes of this regulation:

(1)(i) **"Actual emissions"** means the actual rate of emissions of a regulated NSR pollutant from an emissions unit, as determined in accordance with paragraphs (b)(1)(ii) through (b)(1)(iv), except that this definition shall not apply for calculating whether a significant emissions increase has occurred, or for establishing a PAL under paragraph (aa). Instead, paragraphs (b)(41) and (b)(4) shall apply for those purposes.

(ii) In general, actual emissions as of a particular date shall equal the average rate, in tons per year (tpy), at which the unit actually emitted the pollutant during a consecutive 24-month period which precedes the particular date and which is representative of normal source operation. The Department shall allow the use of a different time period upon a determination that it is more

representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

(iii) The Department may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

(iv) For any emissions unit that has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

(2) **"Adverse impact on visibility"** means visibility impairment which interferes with the management, protection, preservation or enjoyment of the visitor's visual experience of the Class I area. This determination must be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency and time of visibility impairment, and how these factors correlate with (1) times of visitor use of the Class I area, and (2) the frequency and timing of natural conditions that reduce visibility.

(3) **"Allowable emissions"** means the emissions rate of a stationary source calculated using the maximum rated capacity of the source (unless the source is subject to federally enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following:

(i) The applicable standards as set forth in 40 CFR 60 and 61;

(ii) The applicable State Implementation Plan emissions limitation, including those with a future compliance date; or

(iii) The emissions rate specified as a federally enforceable permit condition, including those with a future compliance date.

(4) **"Baseline actual emissions"** means the rate of emissions, in tpy, of a regulated NSR pollutant, as determined in accordance with paragraphs (b)(4)(i) through (iv).

(i) For any existing electric utility steam generating unit, baseline actual emissions means the average rate, in tpy, at which the unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 5-year period immediately preceding when the owner or operator begins actual construction of the project. The Department shall allow the use of a different time period upon a determination that it is more representative of normal source operation.

(a) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.

(b) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period.

(c) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period can be used for each regulated NSR pollutant.

(d) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tpy, and for adjusting this amount if required by paragraph (b)(4)(i)(b).

(ii) For an existing emissions unit (other than an electric utility steam generating unit), baseline actual emissions means the average rate, in tpy, at which the emissions unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 10-year period immediately preceding either the date the owner or operator begins actual construction of the project, or the date a complete permit application is received by the Department for a permit required under this section or under a plan approved by the Administrator, whichever is earlier, except that the 10-year period shall not include any period earlier than November 15, 1990. The Department reserves the right to determine if the 24-month period selected is appropriate.

(a) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.

(b) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above an emission limitation that was legally enforceable during the consecutive 24-month period.

(c) The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had such major stationary source been required to comply with such limitations during the consecutive 24-month period. However, if an emission limitation is part of a maximum achievable control technology standard that the Administrator proposed or promulgated under 40 CFR 63, the baseline actual emissions need only be adjusted if the State has taken credit for such emissions reductions in an attainment demonstration or maintenance plan consistent with the requirements of 40 CFR 51.165(a)(3)(ii)(G).

(d) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for all the emissions units being changed. A different consecutive 24-month period can be used for each regulated NSR pollutant.

(e) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tpy, and for adjusting this amount if required by paragraphs (b)(4)(ii)(b) and (c).

(iii) For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to emit.

(iv) For a PAL for a stationary source, the baseline actual emissions shall be calculated for existing electric utility steam generating units in accordance with the procedures contained in paragraph (b)(4)(i), for other existing emissions units in accordance with the procedures contained in paragraph (b)(4)(ii), and for a new emissions unit in accordance with the procedures contained in paragraph (b)(4)(iii).

(5)(i) **"Baseline area"** means any intrastate area (and every part thereof) designated as attainment or unclassifiable under Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act in which the major source or major modification establishing the minor source baseline date would construct or would have an air quality impact for the pollutant for which the baseline date is established, as follows: Equal to or greater than one (1) microgram(s) per cubic meter ($\mu g/m^3$) (annual average) for SO_2, NO_2, or PM_{10}; or equal or greater than 0.3 $\mu g/m^3$ (annual average) for $PM_{2.5}$.

(ii) Area redesignations under Section 107(d)(1)(A)(ii) or 107(d)(1)(A)(iii) of the Clean Air Act cannot intersect or be smaller than the area of impact of any major stationary source or major modification which:

(a) Establishes a minor source baseline date; or

(b) Is subject to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166.

(iii) Any baseline area established originally for the TSP increments shall remain in effect and shall apply for purposes of determining the amount of available PM_{10} increments, except that such baseline area shall not remain in effect if the Department rescinds the corresponding minor source baseline date in accordance with paragraph (b)(31)(iv).

(6)(i) **"Baseline concentration"** means that ambient concentration level that exists in the baseline area at the time of the applicable minor source baseline date. A baseline concentration is determined for each pollutant for which a minor source baseline date is established and shall include:

(a) The actual emissions, as defined in paragraph (b)(1), representative of sources in existence on the applicable minor source baseline date, except as provided in paragraph (b)(6)(ii); and

(b) The allowable emissions of major stationary sources that commenced construction before the major source baseline date, but were not in operation by the applicable minor source baseline date.

(ii) The following will not be included in the baseline concentration and will affect the applicable maximum allowable increase(s):

(a) Actual emissions, as defined in paragraph (b)(1), from any major stationary source on which construction commenced after the major source baseline date; and

(b) Actual emissions increases and decreases, as defined in paragraph (b)(1), at any stationary source occurring after the minor source baseline date.

(7) "**Begin actual construction"** means, in general, initiation of physical on-site construction activities on an emissions unit which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying underground pipework and construction of permanent storage structures. With respect to a change in method of operations, this term refers to those on-site activities other than preparatory activities which mark the initiation of the change.

(8) **"Best available control technology (BACT)"** means an emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under the Clean Air Act which would be emitted from any proposed major stationary source or major modification which the Department, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of BACT result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR 60 and 61. If the Department determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof, may be prescribed instead to satisfy the requirement for the application of BACT. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

(9) **"Building, structure, facility, or installation"** means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "Major Group" (that is, which have the same first two digit code) as described in the Standard Industrial Classification Manual, 1972, as amended by the 1977 Supplement (U.S. Government Printing Office stock numbers 4101–0066 and 003–005–00176–0, respectively).

(10) **"Clean coal technology"** means any technology, including technologies applied at the precombustion, combustion, or post combustion stage, at a new or existing facility which will achieve significant reductions in air emissions of sulfur dioxide or oxides of nitrogen associated with the utilization of coal in the generation of electricity, or process steam which was not in widespread use as of November 15, 1990.

(11) **"Clean coal technology demonstration project"** means a project using funds appropriated under the heading "Department of Energy-Clean Coal Technology," up to a total amount of $2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the Environmental Protection Agency. The federal contribution for a qualifying project shall be at least twenty (20) percent of the total cost of the demonstration project.

(12) **[Reserved]**

(13) **"Commence"** means, as applied to construction of a major stationary source or major modification that the owner or operator has all necessary preconstruction approvals or permits and either has:

(i) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or

(ii) Entered into binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.

(14) **"Complete"** means, in reference to an application for a permit, that the application contains all of the information necessary for processing the application.

(15) **"Construction"** means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) that would result in a change in emissions.

(16) **"Continuous emissions monitoring system (CEMS)"** means all of the equipment that may be required to meet the data acquisition and availability requirements of this regulation, to sample, condition (if applicable), analyze, and provide a record of emissions on a continuous basis.

(17) **"Continuous emissions rate monitoring system (CERMS)"** means the total equipment required for the determination and recording of the pollutant mass emissions rate (in terms of mass per unit of time).

(18) **"Continuous parameter monitoring system (CPMS)"** means all of the equipment necessary to meet the data acquisition and availability requirements of this regulation, to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, O_2 or CO_2 concentrations), and to record average operational parameter value(s) on a continuous basis.

(19) **"Electric utility steam generating unit"** means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than twenty-five (25) megawatt (MW) electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

(20) **"Emissions unit"** means any part of a stationary source that emits or would have the potential to emit any regulated NSR pollutant and includes an electric utility steam generating unit as defined in paragraph (b)(19). For purposes of this regulation, there are two types of emissions units as described in paragraphs (b)(20)(i) and (ii).

(i) A new emissions unit is any emissions unit that is (or will be) newly constructed and that has existed for less than 2 years from the date such emissions unit first operated.

(ii) An existing emissions unit is any emissions unit that does not meet the requirements in paragraph (b)(20)(i). A replacement unit, as defined in paragraph (b)(45), is an existing emissions unit.

(21) **"Federal Land Manager"** means, with respect to any lands in the United States, the Secretary of the department with authority over such lands.

(22) **"Federally enforceable"** means all limitations and conditions which are enforceable by the Administrator, including those requirements developed pursuant to 40 CFR 60 and 61, requirements within any applicable State Implementation Plan, any permit requirements established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51, Subpart I, including operating permits issued under an EPA-approved program that is incorporated into the State implementation plan and expressly requires adherence to any permit issued under such program.

(23) **"Fugitive emissions"** means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

(24) **"High terrain"** means any area having an elevation 900 feet or more above the base of the stack of a source.

(25) **"Indian Governing Body"** means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self government.

(26) **"Indian Reservation"** means any federally recognized reservation established by Treaty, Agreement, Executive Order, or Act of Congress.

(27) **"Innovative control technology"** means any system of air pollution control that has not been adequately demonstrated in practice, but would have a substantial likelihood of achieving greater continuous emissions reduction than any control system in current practice or of achieving at least comparable reductions at lower cost in terms of energy, economics, or non-air quality environmental impacts.

(28) **"Low terrain"** means any area other than high terrain.

(29) **"Lowest achievable emission rate (LAER)"** is as defined in paragraph (c)(5) of Regulation 61–62.5 Standard 7.1, Nonattainment New Source Review.

(30)(i) **"Major modification"** means any physical change in or change in the method of operation of a major stationary source that would result in: a significant emissions increase (as defined in paragraph (b)(50)) of a regulated NSR pollutant (as defined in paragraph (b)(44)); and a significant net emissions increase of that pollutant from the major stationary source.

(ii) Any significant emissions increase (as defined in paragraph (b)(50)) from any emissions units or net emissions increase (as defined in paragraph (b)(34)) at a major stationary source that is significant for volatile organic compounds (VOCs) or oxides of nitrogen shall be considered significant for ozone.

(iii) A physical change or change in the method of operation shall not include:

(a) Routine maintenance, repair and replacement;

(b) Use of an alternative fuel or raw material by reason of an order under Sections 2(a) and 2(b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;

(c) Use of an alternative fuel by reason of an order or rule under Section 125 of the Clean Air Act;

(d) Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;

(e) Use of an alternative fuel or raw material by a stationary source which:

(1) The source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR subpart I or 40 CFR 51.166; or

(2) The source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166;

(f) An increase in the hours of operation or in the production rate, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR subpart I or 40 CFR 51.166.

(g) Any change in ownership at a stationary source

(h) [Reserved]

(i) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, provided that the project complies with:

(1) The State Implementation Plan for the state in which the project is located, and

(2) Other requirements necessary to attain and maintain the National Ambient Air Quality Standards during the project and after it is terminated.

(j) The installation or operation of a permanent clean coal technology demonstration project that constitutes repowering, provided that the project does not result in an increase in the potential to emit of any regulated pollutant emitted by the unit. This exemption shall apply on a pollutant-by-pollutant basis.

(k) The reactivation of a very clean coal-fired electric utility steam generating unit.

(iv) This definition shall not apply with respect to a particular regulated NSR pollutant when the major stationary source is complying with the requirements under paragraph (aa) for a PAL for that pollutant. Instead, the definition at paragraph (aa)(2)(viii) shall apply.

(v) Fugitive emissions shall not be included in determining, for any of the purposes of this section whether a physical change in or change in the method of operation of a major stationary source is a major modification, unless the source belongs to one of the source categories listed in paragraph b(32)(iii) of this section.

(31)(i) **"Major source baseline date"** means:

(a) In the case of PM_{10} and sulfur dioxide, January 6, 1975;

(b) In the case of nitrogen dioxide, February 8, 1988; and

(c) In the case of $PM_{2.5}$, October 20, 2010.

(ii) **"Minor source baseline date"** means the earliest date after the trigger date on which a major stationary source or a major modification subject to 40 CFR 52.21 or to regulations approved pursuant to 40 CFR 51.166 submits a complete application under the relevant regulations. The trigger date is:

(a) In the case of PM_{10} and sulfur dioxide, August 7, 1977;

(b) In the case of nitrogen dioxide, February 8, 1988; and

(c) In the case of $PM_{2.5}$, October 20, 2011.

(iii) The baseline date is established for each pollutant for which increments or other equivalent measures have been established if:

(a) The area in which the proposed source or modification would construct is designated as attainment or unclassifiable under Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act for the pollutant on the date of its complete application under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166; and

(b) In the case of a major stationary source, the pollutant would be emitted in significant amounts, or, in the case of a major modification, there would be a significant net emissions increase of the pollutant.

(iv) Any minor source baseline date established originally for the TSP increments shall remain in effect and shall apply for purposes of determining the amount of available PM_{10} increments, except that the Department shall rescind a minor source baseline date where it can be shown, to the satisfaction of the Department, that the emissions increase from the major stationary source, or net emissions increase from the major modification, responsible for triggering that date did not result in a significant amount of PM_{10} emissions.

(32)(i) **"Major stationary source"** means:

(a) Any of the following stationary sources of air pollutants which emits, or has the potential to emit, 100 tpy or more of any regulated NSR pollutant: Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants (which does not include ethanol production facilities that produce ethanol by natural fermentation included in North American Industrial Classification System (NAICS) codes 325193 or 312140), fossil fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants, and charcoal production plants;

(b) Notwithstanding the stationary source size specified in paragraph (b)(32)(i), any stationary source which emits, or has the potential to emit, 250 tpy or more of a regulated NSR pollutant; or

(c) Any physical change that would occur at a stationary source not otherwise qualifying under paragraph (b)(32) as a major stationary source, if the changes would constitute a major stationary source by itself.

(ii) A major stationary source that is major for VOCs or oxides of nitrogen shall be considered major for ozone.

(iii) The fugitive emissions of a stationary source shall not be included in determining for any of the purposes of this regulation whether it is a major stationary source, unless the source belongs to one of the following categories of stationary sources:

(a) Coal cleaning plants (with thermal dryers);

(b) Kraft pulp mills;

(c) Portland cement plants;

(d) Primary zinc smelters;

(e) Iron and steel mills;

(f) Primary aluminum ore reduction plants;

(g) Primary copper smelters;

(h) Municipal incinerators capable of charging more than 250 tons of refuse per day;

(i) Hydrofluoric, sulfuric, or nitric acid plants;

(j) Petroleum refineries;

(k) Lime plants;

(*l*) Phosphate rock processing plants;

(m) Coke oven batteries;

(n) Sulfur recovery plants;

(*o*) Carbon black plants (furnace process);

(p) Primary lead smelters;

(q) Fuel conversion plants;

(r) Sintering plants;

(s) Secondary metal production plants;

(t) Chemical process plants - The term chemical processing plant shall not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140;

(u) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;

(v) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;

(w) Taconite ore processing plants;

(x) Glass fiber processing plants;

(y) Charcoal production plants;

(z) Fossil fuel-fired steam electric plants of more that 250 million British thermal units per hour heat input; and

(aa) Any other stationary source category which, as of August 7, 1980, is being regulated under Section 111 or 112 of the Clean Air Act.

(33) **"Necessary preconstruction approvals or permits"** means those permits or approvals required under federal air quality control laws and regulations and those air quality control laws and regulations which are part of the applicable State Implementation Plan.

(34)(i) **"Net emissions increase"** means, with respect to any regulated NSR pollutant emitted by a major stationary source, the amount by which the sum of the following exceeds zero:

(a) The increase in emissions from a particular physical change or change in method of operation at a stationary source as calculated pursuant to paragraph (a)(2)(iv); and

(b) Any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable. Baseline actual emissions for calculating increases and decreases under this paragraph (b)(34)(i)(b) shall be determined as provided in paragraph (b)(4), except that paragraphs (b)(4)(i)(c) and (b)(4)(ii)(d) shall not apply.

(ii) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between:

(a) The date five (5) years before construction on the particular change commences; and

(b) The date that the increase from the particular change occurs.

(iii) An increase or decrease in actual emissions is creditable only if:

(a) The Department has not relied on it in issuing a permit for the source under this section, which permit is in effect when the increase in actual emissions from the particular change occurs; and

(b) [Reserved]

(c) It occurs within five years before construction on the particular change commences.

(d) As it pertains to an increase or decrease in fugitive emissions (to the extent quantifiable), it occurs at an emissions unit that is part of one of the source categories listed in paragraph (b)(32)(iii) of this section or it occurs at an emission unit that is located at a major stationary source that belongs to one of the listed source categories.

(iv) An increase or decrease in actual emissions of sulfur dioxide, particulate matter, or nitrogen oxide that occurs before the applicable minor source baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.

(v) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.

(vi) A decrease in actual emissions is creditable only to the extent that:

(a) The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;

(b) It is federally enforceable at and after the time that actual construction on the particular change begins; and

(c) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.

(vii) [Reserved]

(viii) An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.

(ix) Paragraph (b)(1)(ii) shall not apply for determining creditable increases and decreases.

(35) **[Reserved]**

(36) **[Reserved]**

(37) **"Potential to emit"** means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.

(38) **"Predictive emissions monitoring system (PEMS)"** means all of the equipment necessary to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, O_2 or CO_2 concentrations), and calculate and record the mass emissions rate (for example, pounds per hour) on a continuous basis.

(39) **"Prevention of Significant Deterioration (PSD) program"** means the EPA-implemented major source preconstruction permit programs or a major source preconstruction permit program that has been approved by the Administrator and incorporated into the State Implementation Plan pursuant to 40 CFR 51.166 to implement the requirements of that section. Any permit issued under such a program is a major NSR permit.

(40) **"Project"** means a physical change in, or change in the method of operation of, an existing major stationary source.

(41)(i) **"Projected actual emissions"** means the maximum annual rate, in tpy, at which an existing emissions unit is projected to emit a regulated NSR pollutant in any one of the five (5) years (12-month period) following the date the unit resumes regular operation after the project, or in any one of the ten (10) years following that date, if the project involves increasing the emissions unit's design capacity or

its potential to emit that regulated NSR pollutant and full utilization of the unit would result in a significant emissions increase or a significant net emissions increase at the major stationary source.

(ii) In determining the projected actual emissions under paragraph (b)(41)(i) (before beginning actual construction), the owner or operator of the major stationary source:

(a) Shall consider all relevant information, including but not limited to, historical operational data, the company's own representations, the company's expected business activity and the company's highest projections of business activity, the company's filings with the state or federal regulatory authorities, and compliance plans under the approved State Implementation Plan; and

(b) Shall include fugitive emissions to the extent quantifiable and emissions associated with startups, shutdowns, and malfunctions; and

(c) Shall exclude, in calculating any increase in emissions that results from the particular project, that portion of the unit's emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions under paragraph (b)(4) and that are also unrelated to the particular project, including any increased utilization due to product demand growth; or

(d) In lieu of using the method set out in paragraph (b)(41)(ii)(a) through (b)(41)(ii)(c), may elect to use the emissions unit's potential to emit, in tpy, as defined under paragraph (b)(37).

(42) **"Reactivation of a very clean coal-fired electric utility steam generating unit"** means any physical change or change in the method of operation associated with the commencement of commercial operations by a coal-fired utility unit after a period of discontinued operation where the unit:

(i) Has not been in operation for the two-year period prior to the enactment of the Clean Air Act Amendments of 1990, and the emissions from such unit continue to be carried in the permitting authority's emissions inventory at the time of enactment;

(ii) Was equipped prior to shut-down with a continuous system of emissions control that achieves a removal efficiency for sulfur dioxide of no less than eighty-five (85) percent and a removal efficiency for particulates of no less than ninety-eight (98) percent;

(iii) Is equipped with low-NOx burners prior to the time of commencement of operations following reactivation; and

(iv) Is otherwise in compliance with the requirements of the Clean Air Act.

(43) **"Reasonably available control technology (RACT)"** is as defined in 40 CFR 51.100(*o*).

(44) **"Regulated NSR pollutant,"** for purposes of this regulation, means the following:

(i) Any pollutant for which a national ambient air quality standard has been promulgated. This includes, but is not limited to, the following:

(a) $PM_{2.5}$ emissions and PM_{10} emissions shall include gaseous emissions from a source or activity which condense to form particulate matter at ambient temperatures. On or after January 1, 2011, such condensable particulate matter shall be accounted for in applicability determinations and in establishing emissions limitations for $PM_{2.5}$ and PM_{10} in PSD permits. Compliance with emissions limitations for $PM_{2.5}$ and PM_{10} issued prior to this date shall not be based on condensable particulate matter unless required by the terms and conditions of the permit or the applicable implementation plan. Applicability determinations made prior to this date without accounting for condensable particulate matter shall not be considered in violation of this section unless the applicable implementation plan required condensable particulate matter to be included;

(b) Any pollutant identified under paragraph (b)(44)(i)(b) as a constituent or precursor to a pollutant for which a national ambient air quality standard has been promulgated. Precursors identified by the Administrator for purposes of NSR are the following:

(1) Volatile organic compounds and nitrogen oxides are precursors to ozone in all attainment and unclassifiable areas.

(2) Sulfur dioxide is a precursor to $PM_{2.5}$ in all attainment and unclassifiable areas.

(3) Nitrogen oxides are presumed to be precursors to $PM_{2.5}$ in all attainment and unclassifiable areas, unless the State demonstrates to the Administrator's satisfaction or EPA demonstrates

that emissions of nitrogen oxides from sources in a specific area are not a significant contributor to that area's ambient $PM_{2.5}$ concentrations.

(4) Volatile organic compounds are presumed not to be precursors to $PM_{2.5}$ in any attainment or unclassifiable area, unless the State demonstrates to the Administrator's satisfaction or EPA demonstrates that emissions of volatile organic compounds from sources in a specific area are a significant contributor to that area's ambient $PM_{2.5}$ concentrations.

(ii) Any pollutant that is subject to any standard promulgated under Section 111 of the Clean Air Act.

(iii) Any Class I or II substance subject to a standard promulgated under or established by Title VI of the Clean Air Act.

(iv) Any pollutant that otherwise is subject to regulation under the Clean Air Act; except that any or all hazardous air pollutants either listed in Section 112 of the Clean Air Act or added to the list pursuant to Section 112(b)(2) of the Clean Air Act, which have not been delisted pursuant to Section 112(b)(3) of the Clean Air Act, are not regulated NSR pollutants unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a general pollutant listed under Section 108 of the Clean Air Act.

(v) **[Deleted]**

(45) **"Replacement unit"** means an emissions unit for which all the criteria listed in paragraphs (b)(45)(i) through (iv) are met. No credible emission reductions shall be generated from shutting down the existing emissions unit that is replaced.

(i) The emissions unit is a reconstructed unit within the meaning of 40 CFR 60.15(b)(1), or the emissions unit completely takes the place of an existing emissions unit.

(ii) The emissions unit is identical to or functionally equivalent to the replaced emissions unit.

(iii) The replacement does not alter the basic design parameters of the process unit.

(iv) The replaced emissions unit is permanently removed from the major stationary source, otherwise permanently disabled, or permanently barred from operation by a permit that is enforceable as a practical matter. If the replaced emissions unit is brought back into operation, it shall constitute a new emissions unit.

(46)(i) **"Repowering"** 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 Administrator, 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.

(ii) Repowering shall also include any oil and/or gas-fired unit which has been awarded clean coal technology demonstration funding as of January 1, 1991, by the Department of Energy.

(iii) The Department shall give expedited consideration to permit applications for any source that satisfies the requirements of this subsection and is granted an extension under Section 409 of the Clean Air Act.

(47) **[Reserved]**

(48) **"Secondary emissions"** means emissions which would occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. For the purposes of this section, secondary emissions must be specific, well defined, quantifiable, and impact the same general areas the stationary source modification which causes secondary emissions. Secondary emissions include emissions from any offsite support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification. Secondary emissions do not include any emissions which come directly from a mobile source, such as emissions from the tailpipe of a motor vehicle, from a train, from a vessel; or from the following:

(i) Emissions from ships or trains coming to or from the new or modified stationary source; and

(ii) Emissions from any offsite support facility which would not otherwise be constructed or increase its emissions as a result of the construction or operation of the major stationary source or major modification.

(49)(i) **"Significant"** means, in reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

Pollutant and Emissions Rate

Carbon monoxide: 100 tpy

Nitrogen oxides: 40 tpy

Sulfur dioxide: 40 tpy

Particulate matter:

25 tpy of particulate matter emissions;

15 tpy of PM_{10} emissions;

10 tpy of direct $PM_{2.5}$;

40 tpy of sulfur dioxide emissions;

40 tpy of nitrogen oxide emissions unless demonstrated not to be a $PM_{2.5}$ precursor under paragraph (b)(44) of this section

Ozone: 40 tpy of VOCs or oxides of nitrogen

Lead: 0.6 tpy

Fluorides: 3 tpy

Sulfuric acid mist: 7 tpy

Hydrogen sulfide (H_2S): 10 tpy

Total reduced sulfur (including H_2S): 10 tpy

Reduced sulfur compounds (including H_2S): 10 tpy

Municipal waste combustor organics (measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans): 3.2×10^{-6} megagrams per year (3.5×10^{-6} tpy)

Municipal waste combustor metals (measured as particulate matter): 14 megagrams per year (15 tpy)

Municipal waste combustor acid gases (measured as sulfur dioxide and hydrogen chloride): 36 megagrams per year (40 tpy)

Municipal solid waste landfills emissions (measured as nonmethane organic compounds): 45 megagrams per year (50 tpy)

(ii) **"Significant"** means, in reference to a net emissions increase or the potential of a source to emit a regulated NSR pollutant that paragraph (b)(49)(i), does not list, any emissions rate.

(iii) Notwithstanding paragraph (b)(49)(i), significant means any emissions rate or any net emissions increase associated with a major stationary source or major modification, which would construct within ten (10) kilometers of a Class I area, and have an impact on such area equal to or greater than 1 $\mu g/m^3$ (24-hour average).

(50) "**Significant emissions increase"** means, for a regulated NSR pollutant, an increase in emissions that is significant (as defined in paragraph (b)(49)) for that pollutant.

(51) **"Stationary source"** means any building, structure, facility, or installation which emits or may emit a regulated NSR pollutant.

(52) **"Temporary clean coal technology demonstration project"** means a clean coal technology demonstration project that is operated for a period of five (5) years or less, and which complies with the State Implementation Plans for the state in which the project is located and other requirements necessary to attain and maintain the National Ambient Air Quality Standards during the project and after it is terminated.

(53) **"Volatile organic compounds (VOC)"** is as defined in Regulation 61–62.1, Section I, Definitions.

(c) Ambient air increments.

In areas designated as Class I, II, or III, increases in pollutant concentration over the baseline concentration shall be limited to the following:

CLASS I		
Pollutant		Maximum Allowable Increase (micrograms per cubic meter)
$PM_{2.5}$:	annual arithmetic mean	1
	24-hr maximum	2
PM_{10}:	annual arithmetic mean	4
	24-hr maximum	8
Sulfur dioxide:	annual arithmetic mean	2
	24-hr maximum	5
	3-hr maximum	25
Nitrogen dioxide:	annual arithmetic mean	2.5

CLASS II		
Pollutant		Maximum Allowable Increase (micrograms per cubic meter)
$PM_{2.5}$:	annual arithmetic mean	4
	24-hr maximum	9
PM_{10}:	annual arithmetic mean	17
	24-hr maximum	30
Sulfur dioxide:	annual arithmetic mean	20
	24-hr maximum	91
	3-hr maximum	512
Nitrogen dioxide:	annual arithmetic mean	25

CLASS III		
Pollutant		Maximum Allowable Increase (micrograms per cubic meter)
$PM_{2.5}$:	annual arithmetic mean	8
	24-hr maximum	18
PM_{10}:	annual arithmetic mean	34
	24-hr maximum	60
Sulfur dioxide:	annual arithmetic mean	40
	24-hr maximum	182
	3-hr maximum	700
Nitrogen dioxide:	annual arithmetic mean	50

For any period other than an annual period, the applicable maximum allowable increase may be exceeded during one such period per year at any one location.

(d) Ambient air ceilings.

No concentration of a pollutant shall exceed:

(1) The concentration permitted under the national secondary ambient air quality standard; or

(2) The concentration permitted under the national primary ambient air quality standard, whichever concentration is lowest for the pollutant for a period of exposure.

(e) Restrictions on area classifications.

(1) All of the following areas which were in existence on August 7, 1977, shall be Class I areas and may not be redesignated:

(i) International parks;

(ii) National wilderness areas which exceed 5,000 acres in size;

(iii) National memorial parks which exceed 5,000 acres in size; and

(iv) National parks which exceed 6,000 acres in size.

(2) Areas which were redesignated as Class I under regulations promulgated before August 7, 1977, shall remain Class I, but may be redesignated as provided in this section.

(3) Any other area, unless otherwise specified in the legislation creating such an area, is initially designated Class II, but may be redesignated as provided in this section.

(4) The following areas may be redesignated only as Class I or II:

(i) An area which as of August 7, 1977, exceeded 10,000 acres in size and was a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore; and

(ii) A national park or national wilderness area established after August 7, 1977, which exceeds 10,000 acres in size.

(f) [Reserved]

(g) Redesignation.

(1) All areas (except as otherwise provided under paragraph (e)) are designated Class II as of December 5, 1974. Redesignation (except as otherwise precluded by paragraph (e)) may be proposed by the respective states or Indian Governing Bodies, as provided below, subject to approval by the Administrator as a revision to the applicable State Implementation Plan.

(2) The state may submit to the Administrator a proposal to redesignate areas of the state Class I or Class II provided that:

(i) At least one public hearing has been held in accordance with procedures established in 40 CFR 51.102;

(ii) Other states, Indian Governing Bodies, and Federal Land Managers whose lands may be affected by the proposed redesignation were notified at least thirty (30) days prior to the public hearing;

(iii) A discussion of the reasons for the proposed redesignation, including a satisfactory description and analysis of the health, environmental, economic, social and energy effects of the proposed redesignation, was prepared and made available for public inspection at least 30 days prior to the hearing and the notice announcing the hearing contained appropriate notification of the availability of such discussion;

(iv) Prior to the issuance of notice respecting the redesignation of an area that includes any federal lands, the state has provided written notice to the appropriate Federal Land Manager and afforded adequate opportunity (not in excess of sixty (60) days) to confer with the state respecting the redesignation and to submit written comments and recommendations. In redesignating any area with respect to which any Federal Land Manager had submitted written comments and recommendations, the state shall have published a list of any inconsistency between such redesignation and such comments and recommendations (together with the reasons for making such redesignation against the recommendation of the Federal Land Manager); and

(v) The state has proposed the redesignation after consultation with the elected leadership of local and other substate general purpose governments in the area covered by the proposed redesignation.

(3) Any area other than an area to which paragraph (e) refers may be redesignated as Class III if -

(i) The redesignation would meet the requirements of paragraph (g)(2);

(ii) The redesignation, except any established by an Indian Governing Body, has been specifically approved by the Governor of the state, after consultation with the appropriate committees of the legislature, if it is in session, or with the leadership of the legislature, if it is not in session (unless state law provides that the redesignation must be specifically approved by state legislation) and if general purpose units of local government representing a majority of the residents of the area to be redesignated enact legislation or pass resolutions concurring in the redesignation:

(iii) The redesignation would not cause, or contribute to, a concentration of any air pollutant which would exceed any maximum allowable increase permitted under the classification of any other area or any National Ambient Air Quality Standard; and

(iv) Any permit application for any major stationary source or major modification, subject to review under paragraph (*l*), which could receive a permit under this section only if the area in question were redesignated as Class III, and any material submitted as part of that application, were available insofar as was practicable for public inspection prior to any public hearing on redesignation of the area as Class III.

(4) Lands within the exterior boundaries of Indian Reservations may be redesignated only by the appropriate Indian Governing Body. The appropriate Indian Governing Body may submit to the Department a proposal to redesignate areas Class I, Class II, or Class III: Provided, That:

(i) The Indian Governing Body has followed procedures equivalent to those required of a state under paragraphs (g)(2), (g)(3)(iii), and (g)(3)(iv); and

(ii) Such redesignation is proposed after consultation with the state(s) in which the Indian Reservation is located and which border the Indian Reservation.

(5) The Administrator shall disapprove, within ninety (90) days of submission, a proposed redesignation of any area only if it is found, after notice and opportunity for public hearing, that such redesignation does not meet the procedural requirements of this paragraph or is inconsistent with paragraph (e). If any such disapproval occurs, the classification of the area shall be that which was in effect prior to the redesignation which was disapproved.

(6) If the Administrator disapproves any proposed redesignation, the state or Indian Governing Body, as appropriate, may resubmit the proposal after correcting the deficiencies noted by the Administrator.

(h) Stack heights.

(1) The degree of emission limitation required for control of any air pollutant under this section shall not be affected in any manner by:

(i) So much of the stack height of any source as exceeds good engineering practice; or

(ii) Any other dispersion technique.

(2) Paragraph (h)(1) shall not apply with respect to stack heights in existence before December 31, 1970, or to dispersion techniques implemented before then.

(i) Exemptions.

(1) The requirements of paragraphs (j) through (r) shall not apply to a particular major stationary source or major modification, if:

(i) Construction commenced on the source or modification before August 7, 1977. The regulations at 40 CFR 52.21 as in effect before August 7, 1977, shall govern the review and permitting of any such source or modification; or

(ii) The source or modification was subject to the review requirements of 40 CFR 52.21(d)(1) as in effect before March 1, 1978, and the owner or operator:

(a) Obtained under 40 CFR 52.21 a final approval effective before March 1, 1978;

(b) Commenced construction before March 19, 1979; and

(c) Did not discontinue construction for a period of 18 months or more and completed construction within a reasonable time; or

(iii) The source or modification was subject to 40 CFR 52.21 as in effect before March 1, 1978, and the review of an application for approval for the stationary source or modification under 40 CFR 52.21 would have been completed by March 1, 1978, but for an extension of the public comment period pursuant to a request for such an extension. In such case, the application shall continue to be processed, and granted or denied, under 40 CFR 52.21 as in effect prior to March 1, 1978; or

(iv) The source or modification was not subject to 40 CFR 52.21 as in effect before March 1, 1978, and the owner or operator:

(a) Obtained all final federal, state, and local preconstruction approvals or permits necessary under the applicable State Implementation Plan before March 1, 1978;

(b) Commenced construction before March 19, 1979; and

(c) Did not discontinue construction for a period of 18 months or more and completed construction within a reasonable time; or

(v) The source or modification was not subject to 40 CFR 52.21 as in effect on June 19, 1978 or under the partial stay of regulations published on February 5, 1980 (45 FR 7800), and the owner or operator:

(a) Obtained all final federal, state, and local preconstruction approvals or permits necessary under the applicable State Implementation Plan before August 7, 1980;

(b) Commenced construction within eighteen (18) months from August 7, 1980, or any earlier time required under the applicable State Implementation Plan; and

(c) Did not discontinue construction for a period of eighteen (18) months or more and completed construction within a reasonable time; or

(vi) The source or modification would be a nonprofit health or nonprofit educational institution, or a major modification would occur at such an institution, and the Governor of the state in which the source or modification would be located requests that it be exempt from those requirements; or

(vii) The source or modification would be a major stationary source or major modification only if fugitive emissions, to the extent quantifiable, are considered in calculating the potential to emit of the stationary source or modification and the source does not belong to any of the following categories:

(a) Coal cleaning plants (with thermal dryers);

(b) Kraft pulp mills;

(c) Portland cement plants;

(d) Primary zinc smelters;

(e) Iron and steel mills;

(f) Primary aluminum ore reduction plants;

(g) Primary copper smelters;

(h) Municipal incinerators capable of charging more than 250 tons of refuse per day;

(i) Hydrofluoric, sulfuric, or nitric acid plants;

(j) Petroleum refineries;

(k) Lime plants;

(*l*) Phosphate rock processing plants;

(m) Coke oven batteries;

(n) Sulfur recovery plants;

(*o*) Carbon black plants (furnace process);

(p) Primary lead smelters;

(q) Fuel conversion plants;

(r) Sintering plants;

(s) Secondary metal production plants;

(t) Chemical process plants - The term chemical process plant shall not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140;

(u) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;

(v) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;

(w) Taconite ore processing plants;

(x) Glass fiber processing plants;

(y) Charcoal production plants;

(z) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input;

(aa) Any other stationary source category which, as of August 7, 1980, is being regulated under Section 111 or 112 of the Clean Air Act; or

(viii) The source is a portable stationary source which has previously received a permit under this section, and:

(a) The owner or operator proposes to relocate the source and emissions of the source at the new location would be temporary; and

(b) The emissions from the source would not exceed its allowable emissions; and

(c) The emissions from the source would impact no Class I area and no area where an applicable increment is known to be violated; and

(d) Reasonable notice is given to the Department prior to the relocation identifying the proposed new location and the probable duration of operation at the new location. Such notice shall be given to the Department not less than ten (10) days in advance of the proposed relocation unless a different time duration is previously approved by the Department.

(ix) The source or modification was not subject to 40 CFR 52.21 with respect to particulate matter, as in effect before July 31, 1987, and the owner or operator:

(a) Obtained all final federal, state, and local preconstruction approvals or permits necessary under the applicable State Implementation Plan before July 31, 1987;

(b) Commenced construction within eighteen (18) months after July 31, 1987, or any earlier time required under the State Implementation Plan; and

(c) Did not discontinue construction for a period of 18 months or more and completed construction within a reasonable period of time.

(x) The source or modification was subject to 40 CFR 52.21, with respect to particulate matter, as in effect before July 31, 1987, and the owner or operator submitted an application for a permit under this section before that date, and the Department subsequently determines that the application as submitted was complete with respect to the particulate matter requirements then in effect in this section. Instead, the requirements of paragraphs (j) through (r) that were in effect before July 31, 1987, shall apply to such source or modification.

(2) The requirements of paragraphs (j) through (r) shall not apply to a major stationary source or major modification with respect to a particular pollutant if the owner or operator demonstrates that, as to that pollutant, the source or modification is located in an area designated as nonattainment under Section 107 of the Clean Air Act.

(3) The requirements of paragraphs (k), (m), and (*o*) shall not apply to a major stationary source or major modification with respect to a particular pollutant, if the allowable emissions of that pollutant from the source, or the net emissions increase of that pollutant from the modification:

(i) Would impact no Class I area and no area where an applicable increment is known to be violated; and

(ii) Would be temporary.

(4) The requirements of paragraphs (k), (m), and (*o*) as they relate to any maximum allowable increase for a Class II area shall not apply to a major modification at a stationary source that was in existence on March 1, 1978, if the net increase in allowable emissions of each regulated NSR pollutant from the modification after the application of BACT would be less than fifty (50) tpy.

(5) The Department may exempt a stationary source or modification from the requirements of paragraph (m), with respect to monitoring for a particular pollutant if:

(i) The emissions increase of the pollutant from the new source or the net emissions increase of the pollutant from the modification would cause, in any area, air quality impacts less than the following amounts:

Carbon monoxide—575 $\mu g/m^3$, 8-hour average;

Nitrogen dioxide—14 $\mu g/m^3$, annual average;

Particulate matter—10 $\mu g/m^3$ of PM_{10}, 24-hour average;

Sulfur dioxide—13 $\mu g/m^3$, 24-hour average;

Ozone;[1]

Lead—0.1 $\mu g/m^3$, 3-month average;

Fluorides—0.25 $\mu g/m^3$, 24-hour average;

Total reduced sulfur—10 $\mu g/m^3$, 1-hour average;

Hydrogen sulfide—0.2 $\mu g/m^3$, 1-hour average;

Reduced sulfur compounds—10 $\mu g/m^3$, 1-hour average; or

(ii) The concentrations of the pollutant in the area that the source or modification would affect are less than the concentrations listed in paragraph (i)(5)(i), or the pollutant is not listed in paragraph (i)(5)(i).

(6) The requirements for BACT in paragraph (j) and the requirements for air quality analyses in paragraph (m)(1), shall not apply to a particular stationary source or modification that was subject to 40 CFR 52.21 as in effect on June 19, 1978, if the owner or operator of the source or modification submitted an application for a permit under those regulations before August 7, 1980, and the Department subsequently determines that the application as submitted before that date was complete. Instead, the requirements at 40 CFR 52.21(j) and (n) as in effect on June 19, 1978, apply to any such source or modification.

(7)(i) The requirements for air quality monitoring in paragraphs (m)(1)(ii) through (iv) shall not apply to a particular source or modification that was subject to 40 CFR 52.21 as in effect on June 19, 1978, if the owner or operator of the source or modification submits an application for a permit under this section on or before June 8, 1981, and the Department subsequently determines that the application as submitted before that date was complete with respect to the requirements of this regulation other than those in paragraphs (m)(1)(ii) through (iv), and with respect to the requirements for such analyses at 40 CFR 52.21(m)(2) as in effect on June 19, 1978. Instead, the latter requirements shall apply to any such source or modification.

(ii) The requirements for air quality monitoring in paragraphs (m)(1)(ii) through (iv) shall not apply to a particular source or modification that was not subject to 40 CFR 52.21 as in effect on June 19, 1978, if the owner or operator of the source or modification submits an application for a permit under this section on or before June 8, 1981, and the Department subsequently determines that the application as submitted before that date was complete, except with respect to the requirements in paragraphs (m)(1)(ii) through (iv).

(8)(i) At the discretion of the Department, the requirements for air quality monitoring of PM_{10} in paragraphs (m)(1)(i) through (m)(1)(iv) may not apply to a particular source or modification when the owner or operator of the source or modification submits an application for a permit under this section on or before June 1, 1988 and the Department subsequently determines that the application as submitted before that date was complete, except with respect to the requirements for monitoring particulate matter in paragraphs (m)(1)(i) through (m)(1)(iv).

(ii) The requirements for air quality monitoring of PM_{10} in paragraphs (m)(1), (m)(1)(ii), (m)(1)(iv), and (m)(3) shall apply to a particular source or modification if the owner or operator of the source or modification submits an application for a permit under this section after June 1, 1988 and no later than December 1, 1988. The data shall have been gathered over at least the period from February 1, 1988 to the date the application becomes otherwise complete in accordance with the provisions set forth under paragraph (m)(1)(viii), except that if the Department determines that a complete and adequate analysis can be accomplished with monitoring data over a shorter period (not to be less than four (4) months), the data that paragraph (m)(1)(iii) requires shall have been gathered over a shorter period.

(9) The requirements of paragraph (k)(2) shall not apply to a stationary source or modification with respect to any maximum allowable increase for nitrogen oxides if the owner or operator of the source or modification submitted an application for a permit under this section before the provisions embodying the maximum allowable increase took effect as part of the applicable implementation plan and the Department subsequently determined that the application as submitted before that date was complete.

[1] No de minimis air quality level is provided for ozone. However, any net increase of 100 tpy or more of VOCs or nitrogen oxides subject to PSD would be required to perform an ambient impact analysis including the gathering of ambient air quality data.

(10) The requirements in paragraph (k)(2) shall not apply to a stationary source or modification with respect to any maximum allowable increase for PM_{10} if:

(i) The owner or operator of the source or modification submitted an application for a permit under this section before the provisions embodying the maximum allowable increases for PM_{10} took effect in an implementation plan to which this section applies; and

(ii) The Department subsequently determined that the application as submitted before that date was otherwise complete. Instead, the requirements in paragraph (k)(2) shall apply with respect to the maximum allowable increases for TSP as in effect on the date the application was submitted.

(j) Control technology review.

(1) A major stationary source or major modification shall meet each applicable emissions limitation under the State Implementation Plan and each applicable emissions standard and standard of performance under 40 CFR 60 and 61.

(2) A new major stationary source shall apply BACT for each regulated NSR pollutant that it would have the potential to emit in significant amounts.

(3) A major modification shall apply BACT for each regulated NSR pollutant for which it would result in a significant net emissions increase at the source. This requirement applies to each proposed emissions unit at which a net emissions increase in the pollutant would occur as a result of a physical change or change in the method of operation in the unit.

(4) For phased construction projects, the determination of BACT shall be reviewed and modified as appropriate at the latest reasonable time which occurs no later than eighteen (18) months prior to commencement of construction of each independent phase of the project. At such time, the owner or operator of the applicable stationary source may be required to demonstrate the adequacy of any previous determination of BACT for the source.

(k) Source impact analysis.

The owner or operator of the proposed source or modification shall demonstrate that allowable emission increases from the proposed source or modification, in conjunction with all other applicable emissions increases or reductions (including secondary emissions), would not cause or contribute to air pollution in violation of:

(1) Any National Ambient Air Quality Standards in any air quality control region; or

(2) Any applicable maximum allowable increase over the baseline concentration in any area.

(*l*) Air quality models.

(1) All estimates of ambient concentrations required under this paragraph shall be based on applicable air quality models, data bases, and other requirements specified in 40 CFR 51 Appendix W (Guideline on Air Quality Models).

(2) Where an air quality model specified in 40 CFR 51 Appendix W (Guideline on Air Quality Models) is inappropriate, the model may be modified or another model substituted. Such a modification or substitution of a model may be made on a case-by-case basis or, where appropriate, on a generic basis for a specific state program. Written approval of the Department must be obtained for any modification or substitution. In addition, use of a modified or substituted model must be subject to notice and opportunity for public comment under procedures developed in accordance with paragraph (q).

(m) Air quality analysis.

(1) Preapplication analysis.

(i) Any application for a permit under this section shall contain an analysis of ambient air quality in the area that the major stationary source or major modification would affect for each of the following pollutants:

(a) For the source, each pollutant that it would have the potential to emit in a significant amount;

(b) For the modification, each pollutant for which it would result in a significant net emissions increase.

(ii) With respect to any such pollutant for which no National Ambient Air Quality Standard exists, the analysis shall contain such air quality monitoring data as the Department determines is necessary

to assess ambient air quality for that pollutant in any area that the emissions of that pollutant would affect.

(iii) With respect to any such pollutant (other than nonmethane hydrocarbons) for which such a standard does exist, the analysis shall contain continuous air quality monitoring data gathered for purposes of determining whether emissions of that pollutant would cause or contribute to a violation of the standard or any maximum allowable increase.

(iv) In general, the continuous air quality monitoring data that is required shall have been gathered over a period of at least one (1) year and shall represent at least the year preceding receipt of the application, except that, if the Department determines that a complete and adequate analysis can be accomplished with monitoring data gathered over a period shorter than one (1) year (but not to be less than four (4) months), the data that is required shall have been gathered over at least that shorter period.

(v) For any application which becomes complete, except as to the requirements of paragraphs (m)(1)(iii) and (iv), between June 8, 1981, and February 9, 1982, the data that paragraph (m)(1)(iii), requires shall have been gathered over at least the period from February 9, 1981, to the date the application becomes otherwise complete, except that:

(a) If the source or modification would have been major for that pollutant under 40 CFR 52.21 as in effect on June 19, 1978, any monitoring data shall have been gathered over at least the period required by those regulations.

(b) If the Department determines that a complete and adequate analysis can be accomplished with monitoring data over a shorter period (not to be less than four (4) months), the data that paragraph (m)(1)(iii), requires shall have been gathered over at least that shorter period.

(c) If the monitoring data would relate exclusively to ozone and would not have been required under 40 CFR 52.21 as in effect on June 19, 1978, the Department may waive the otherwise applicable requirements of this paragraph (v) to the extent that the applicant shows that the monitoring data would be unrepresentative of air quality over a full year.

(vi) The owner or operator of a proposed stationary source or modification of VOCs who satisfies all conditions of 40 CFR 51 Appendix S, Section IV may provide post-approval monitoring data for ozone in lieu of providing preconstruction data as required under paragraph (m)(1).

(vii) For any application that becomes complete, except as to the requirements of paragraphs (m)(1)(iii) and (iv) pertaining to PM_{10}, after December 1, 1988, and no later than August 1, 1989, the data that paragraph (m)(1)(iii) requires shall have been gathered over at least the period from August 1, 1988, to the date the application becomes otherwise complete, except that if the Department determines that a complete and adequate analysis can be accomplished with monitoring data over a shorter period (not to be less than four (4) months), the data that paragraph (m)(1)(iii) requires shall have been gathered over that shorter period.

(viii) With respect to any requirements for air quality monitoring of PM_{10} under paragraphs (i)(11)(i) and (ii) the owner or operator of the source or modification shall use a monitoring method approved by the Department and shall estimate the ambient concentrations of PM_{10} using the data collected by such approved monitoring method in accordance with estimating procedures approved by the Department.

(2) Post-construction monitoring. The owner or operator of a major stationary source or major modification shall, after construction of the stationary source or modification, conduct such ambient monitoring as the Department determines is necessary to determine the effect emissions from the stationary source or modification may have, or are having, on air quality in any area.

(3) Operations of monitoring stations. The owner or operator of a major stationary source or major modification shall meet the requirements of Appendix B to 40 CFR 58 of during the operation of monitoring stations for purposes of satisfying paragraph (m).

(n) Source information.

The owner or operator of a proposed source or modification shall submit all information necessary to perform any analysis or make any determination required under this section.

(1) With respect to a source or modification to which paragraphs (j), (*l*), (n), and (p) apply, such information shall include:

(i) A description of the nature, location, design capacity, and typical operating schedule of the source or modification, including specifications and drawings showing its design and plant layout;

(ii) A detailed schedule for construction of the source or modification;

(iii) A detailed description as to what system of continuous emission reduction is planned for the source or modification, emission estimates, and any other information necessary to determine that BACT would be applied.

(2) Upon request of the Department, the owner or operator shall also provide information on:

(i) The air quality impact of the source or modification, including meteorological and topographical data necessary to estimate such impact; and

(ii) The air quality impacts, and the nature and extent of any or all general commercial, residential, industrial, and other growth which has occurred since August 7, 1977, in the area the source or modification would affect.

(*o*) Additional impact analyses.

(1) The owner or operator shall provide an analysis of the impairment to visibility, soils and vegetation that would occur as a result of the source or modification and general commercial, residential, industrial and other growth associated with the source or modification. The owner or operator need not provide an analysis of the impact on vegetation having no significant commercial or recreational value.

(2) The owner or operator shall provide an analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial and other growth associated with the source or modification.

(3) Visibility monitoring. The Department may require monitoring of visibility in any Class I area near the proposed new stationary source for major modification for such purposes and by such means as the Administrator deems necessary and appropriate.

(p) Sources impacting Class I areas—additional requirements.

(1) Notice to Federal Land Managers. The Department shall provide written notice of any permit application for a proposed major stationary source or major modification, the emissions from which may affect a Class I area, to the Federal Land Manager and the federal official charged with direct responsibility for management of any lands within any such area. Such notification shall include a copy of all information relevant to the permit application and shall be given within thirty (30) days of receipt and at least sixty (60) days prior to any public hearing on the application for a permit to construct. Such notification shall include an analysis of the proposed source's anticipated impacts on visibility in the Class I area. The Department shall also provide the Federal Land Manager and such federal officials with a copy of the preliminary determination required under paragraph (q), and shall make available to them any materials used in making that determination, promptly after the Department makes such determination. Finally, the Department shall also notify all affected Federal Land Managers within thirty (30) days of receipt of any advance notification of any such permit application.

(2) Federal Land Manager. The Federal Land Manager and the federal official charged with direct responsibility for management of such lands have an affirmative responsibility to protect the air quality related values (including visibility) of such lands and to consider, in consultation with the Department, whether a proposed source or modification will have an adverse impact on such values.

(3) Visibility analysis. The Department shall consider any analysis performed by the Federal Land Manager, provided within thirty (30) days of the notification required by paragraph (p)(1), that shows that a proposed new major stationary source or major modification may have an adverse impact on visibility in any Class I area. Where the Department finds that such an analysis does not demonstrate to the satisfaction of the Department that an adverse impact on visibility will result in the Class I area, the Department must, in the notice of public hearing on the permit application, either explain its decision or give notice as to where the explanation can be obtained.

(4) Denial—impact on air quality related values. The Federal Land Manager of any such lands may demonstrate to the Department that the emissions from a proposed source or modification would have an adverse impact on the air quality-related values (including visibility) of those lands, notwithstanding that the change in air quality resulting from emissions from such source or modification would not

cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the Department concurs with such demonstration, then the permit shall not be issued.

(5) Class I variances. The owner or operator of a proposed source or modification may demonstrate to the Federal Land Manager that the emissions from such source or modification would have no adverse impact on the air quality related values of any such lands (including visibility), notwithstanding that the change in air quality resulting from emissions from such source or modification would cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the Federal Land Manager concurs with such demonstration and so certifies, the state may authorize the Administrator: Provided, That the applicable requirements of this regulation are otherwise met, to issue the permit with such emission limitations as may be necessary to assure that emissions of sulfur dioxide, $PM_{2.5}$, PM_{10}, and nitrogen oxides would not exceed the following maximum allowable increases over minor source baseline concentration for such pollutants:

Pollutant		Maximum Allowable Increase (micrograms per cubic meter)
$PM_{2.5}$:	annual arithmetic mean	4
	24-hr maximum	9
PM_{10}:	annual arithmetic mean	17
	24-hr maximum	30
Sulfur dioxide:	annual arithmetic mean	20
	24-hr maximum	91
	3-hr maximum	325
Nitrogen dioxide:	annual arithmetic mean	25

(6) Sulfur dioxide variance by Governor with Federal Land Manager's concurrence. The owner or operator of a proposed source or modification which cannot be approved under paragraph (q)(4) may demonstrate to the Governor that the source cannot be constructed by reason of any maximum allowable increase for sulfur dioxide for a period of twenty-four (24) hours or less applicable to any Class I area and, in the case of Federal mandatory Class I areas, that a variance under this clause would not adversely affect the air quality related values of the area (including visibility). The Governor, after consideration of the Federal Land Manager's recommendation (if any) and concurrence, may, after notice and public hearing, grant a variance from such maximum allowable increase. If such variance is granted, the Department shall issue a permit to such source or modification pursuant to the requirements of paragraph (q)(7): Provided, that the applicable requirements of this regulation are otherwise met.

(7) Variance by the Governor with the President's concurrence. In any case where the Governor recommends a variance in which the Federal Land Manager does not concur, the recommendations of the Governor and the Federal Land Manager shall be transmitted to the President. The President may approve the Governor's recommendation if it is found that the variance is in the national interest. If the variance is approved, the Department shall issue a permit pursuant to the requirements of paragraph (q)(7): Provided, that the applicable requirements of this regulation are otherwise met.

(8) Emission limitations for Presidential or gubernatorial variance. In the case of a permit issued pursuant to paragraph (q)(5) or (q)(6) the source or modification shall comply with such emission limitations as may be necessary to assure that emissions of sulfur dioxide from the source or modification would not (during any day on which the otherwise applicable maximum allowable increases are exceeded) cause or contribute to concentrations which would exceed the following maximum allowable increases over the baseline concentration and to assure that such emissions would not cause or contribute to concentrations which exceed the otherwise applicable maximum allowable increases for periods of exposure of twenty-four (24) hours or less for more than eighteen (18) days, not necessarily consecutive, during any annual period:

MAXIMUM ALLOWABLE INCREASE (Micrograms per cubic meter)		
	Terrain Areas	
Period of exposure	Low	High
24-hr maximum	36	62
3-hr maximum	130	221

(q) Public participation.

(1) Within thirty (30) days after receipt of an application to construct, or any addition to such application, the Department shall advise the applicant of any deficiency in the application or in the information submitted and transmit a copy of such application to EPA. In the event of such a deficiency, the date of receipt of the application shall be, for the purpose of this regulation, the date on which the Department received all required information.

(2) In accordance with Regulation 61–30, Environmental Protection Fees, the Department shall make a final determination on the application. This involves performing the following actions in a timely manner:

(i) Make a preliminary determination whether construction should be approved, approved with conditions, or disapproved.

(ii) Make available in at least one location in each region in which the proposed source or modification would be constructed, a copy of all materials the applicant submitted, a copy of the preliminary determination and a copy or summary of other materials, if any, considered in making the preliminary determination. This requirement may be met by making these materials available at a physical location or on a public website identified by the Department.

(iii) Notify the public, by advertisement in a newspaper of general circulation in each region in which the proposed source or modification would be constructed, of the application, the preliminary determination, the degree of increment consumption that is expected from the source or modification, and the opportunity for comment at a public hearing as well as written public comment. Alternatively, these notifications may be made on a public website identified by the Department. However, the Department's selected notification method (i.e., either newspaper or website), known as the "consistent noticing method," shall be used for all permits subject to notice under this section and may, when appropriate, be supplemented by other noticing methods on individual permits. If the Department selects website notice as its consistent noticing method, the notice shall be available for the duration of the public comment period and shall include the notice of public comment, the draft permit, information on how to access the administrative record for the draft permit and how to request and/or attend a public hearing on the draft permit.

(iv) Send a copy of the notice of public comment to the applicant, the Administrator of EPA, and to officials and agencies having cognizance over the location where the proposed construction would occur as follows: The chief executives of the city and county where the source or modification would be located, any comprehensive regional land use planning agency and any state, Federal Land Manager, or Indian Governing Body whose lands may be affected by emissions from the source or modification.

(v) Provide opportunity for a public hearing for interested persons to appear and submit written or oral comments on the air quality impact of the source or modification, alternatives to the source or modification, the control technology required, and other appropriate considerations.

(vi) Consider all written comments submitted within a time specified in the notice of public comment and all comments received at any public hearing in making a final decision on the approvability of the application. No later than ten (10) days after the close of the public comment period, the applicant may submit a written response to any comments submitted by the public. The Department shall consider the applicant's response in making a final decision. The Department shall make all comments available for public inspection in the same location or on the same website where the Department made available preconstruction information relating to the proposed source or modification.

(vii) Make a final determination whether construction should be approved, approved with conditions, or disapproved pursuant to this section.

(viii) Notify the applicant in writing of the final determination and make such notification available for public inspection at the same location or on the same website where the Department made available preconstruction information and public comments relating to the source or modification.

(ix) Notify EPA of every action related to the consideration of the permit.

(3) The requirements of Section (q), Public Participation, of this standard shall not apply to any major plant or major modification which Section (i), Exemptions, would exempt from the requirements of Sections (k), (m), and (*o*), but only to the extent that, with respect to each of the criteria for construction approval under the South Carolina State Implementation Plan and for exemption under Section (i), requirements providing the public with at least as much participation in each material determination as those of Section (q) have been met in the granting of such construction approval.

(r) Source obligation.

In addition to all other applicable requirements specified in this regulation, the owner or operator shall comply with the requirements of paragraphs (r)(1) through (r)(8).

(1) Any owner or operator who constructs or operates a source or modification not in accordance with the application submitted pursuant to this section or with the terms of any approval to construct, or any owner or operator of a source or modification subject to this section who commences

construction after the effective date of these regulations without applying for and receiving approval hereunder, shall be subject to appropriate enforcement action.

(2) Approval to construct shall become invalid if construction is not commenced within eighteen (18) months after receipt of such approval, if construction is discontinued for a period of eighteen (18) months or more, or if construction is not completed within a reasonable time. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within eighteen (18) months of the projected and approved commencement date.

(3) Approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan and any other requirements under local, state, or federal law.

(4) At such time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements or paragraphs (j) through (r) shall apply to the source or modification as though construction had not yet commenced on the source or modification.

(5) [Reserved]

(6) **Monitoring, recordkeeping and reporting.** The provisions of this paragraph (r)(6) apply to projects at an existing emissions unit at a major stationary source (other than projects at a source with a PAL) in circumstances where there is a reasonable possibility that a project that is not a part of a major modification may result in a significant emissions increase and the owner or operator elects to use the method specified in paragraphs (b)(41)(ii)(a) through (c) for calculating projected actual emissions.

(i) If the project requires construction permitting under Regulation 61–62.1, Section II, ''Permit Requirements,'' the owner or operator shall provide a copy of the information set out in paragraph (r)(6)(ii) as part of the permit application to the Department. If construction permitting under Regulation 61–62.1, Section II, ''Permit Requirements,'' is not required, the owner or operator shall maintain the information set out in paragraph (r)(6)(ii).

(ii) Before beginning actual construction of the project, the owner or operator shall document and maintain a record of the following information:

(a) A description of the project;

(b) Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project; and

(c) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded under paragraph (b)(41)(ii)(c) and an explanation for why such amount was excluded, and any netting calculations, if applicable.

(iii) The owner or operator shall monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any emissions unit identified in paragraph (r)(6)(ii)(b); and calculate and maintain a record of the annual emissions, in tpy on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or potential to emit that regulated NSR pollutant at such emissions unit.

(iv) If the unit is an existing electric utility steam generating unit, the owner or operator shall submit a report to the Department within 60 days after the end of each year during which records must be generated under paragraph (r)(6)(iii) setting out the unit's annual emissions during the calendar year that preceded submission of the report.

(v) If the unit is an existing unit other than an electric utility steam generating unit, the owner or operator shall submit a report to the Department if the annual emissions, in tpy, from the project identified in paragraph (r)(6)(ii), exceed the baseline actual emissions (as documented and main-

tained pursuant to paragraph (r)(6)(ii)(c)), by a significant amount (as defined in paragraph (b)(49)) for that regulated NSR pollutant, and if such emissions differ from the preconstruction projection as documented and maintained pursuant to paragraph (r)(6)(ii)(c). Such report shall be submitted to the Department within 60 days after the end of such year. The report shall contain the following:

(a) The name, address and telephone number of the major stationary source;

(b) The annual emissions as calculated pursuant to paragraph (r)(6)(iii); and

(c) Any other information needed to make a compliance determination (for example, an explanation as to why the emissions differ from the preconstruction projection).

(7) If a project at a source with a PAL requires construction permitting under Regulation 61–62.1, Section II, "Permit Requirements", the owner or operator shall provide notification of source status as part of the permit application to the Department.

(8) The owner or operator of the source shall make the information required to be documented and maintained pursuant to paragraph (r)(6) available for review upon a request for inspection by the Department or the general public pursuant to the requirements contained in 40 CFR 70.4(b)(3)(viii).

(s) through (u)(3) [Reserved]

(u)(4) In the case of a source or modification which proposes to construct in a Class III area, emissions from which would cause or contribute to air quality exceeding the maximum allowable increase applicable if the area were designated a Class II area, and where no standard under Section 111 of the Clean Air Act has been promulgated for such source category, the Administrator must approve the determination of BACT as set forth in the permit.

(v) Innovative control technology.

(1) An owner or operator of a proposed major stationary source or major modification may request the Department in writing no later than the close of the comment period under 40 CFR 124.10 to approve a system of innovative control technology.

(2) The Department shall, with the consent of the governor(s) of the affected state(s), determine that the source or modification may employ a system of innovative control technology, if:

(i) The proposed control system would not cause or contribute to an unreasonable risk to public health, welfare, or safety in its operation or function;

(ii) The owner or operator agrees to achieve a level of continuous emissions reduction equivalent to that which would have been required under paragraph (j)(2), by a date specified by the Department. Such date shall not be later than four (4) years from the time of startup or seven (7) years from permit issuance;

(iii) The source or modification would meet the requirements of paragraphs (j) and (k), based on the emissions rate that the stationary source employing the system of innovative control technology would be required to meet on the date specified by the Department;

(iv) The source or modification would not before the date specified by the Department:

(a) Cause or contribute to a violation of an applicable National Ambient Air Quality Standard; or

(b) Impact any area where an applicable increment is known to be violated; and

(v) All other applicable requirements including those for public participation have been met.

(vi) The provisions of paragraph (p) (relating to Class I areas) have been satisfied with respect to all periods during the life of the source or modification.

(3) The Department shall withdraw any approval to employ a system of innovative control technology made under this section, if:

(i) The proposed system fails by the specified date to achieve the required continuous emissions reduction rate; or

(ii) The proposed system fails before the specified date so as to contribute to an unreasonable risk to public health, welfare, or safety; or

(iii) The Department decides at any time that the proposed system is unlikely to achieve the required level of control or to protect the public health, welfare, or safety.

(4) If a source or modification fails to meet the required level of continuous emission reduction within the specified time period or the approval is withdrawn in accordance with paragraph (v)(3), the Department may allow the source or modification up to an additional three (3) years to meet the requirement for the application of best available control technology through use of a demonstrated system of control.

(w) Permit rescission.

(1) Any permit issued under this section or a prior version of this regulation shall remain in effect, unless and until it expires or is rescinded under this paragraph (w).

(2) Any owner or operator of a stationary source or modification who holds a permit issued under this section for the construction of a new source or modification that meets the requirement in paragraph (w)(3) of this section may request that the Department rescind the permit or a particular portion of the permit.

(3) The Department may grant an application for rescission if the application shows that this section would not apply to the source or modification.

(4) If the Department rescinds a permit under this paragraph, the Department shall post a notice of the rescission determination on a public website identified by the Department within 60 days of the rescission.

(x) [Reserved]

(y) [Reserved]

(z) [Reserved]

(aa) Actuals PALs. The provisions in paragraphs (aa)(1) through (aa)(15) govern actuals PALs.

(1) **Applicability.**

(i) The Department may approve the use of an actuals PAL for any existing major stationary source if the PAL meets the requirements in paragraphs (aa)(1) through (aa)(15). The term "PAL" shall mean "actuals PAL" throughout paragraph (aa).

(ii) Any physical change in or change in the method of operation of a major stationary source that maintains its total source-wide emissions below the PAL level, meets the requirements in paragraphs (aa)(1) through (aa)(15), and complies with the PAL permit:

(a) Is not a major modification for the PAL pollutant;

(b) Does not have to be approved through Regulation 61–62.5, Standard 7, Prevention of Significant Deterioration. However, will be reviewed through R. 61–62.1, Section II.A. Permit Requirements; and

(c) Is not subject to the provisions in paragraph (r)(4) (restrictions on relaxing enforceable emission limitations that the major stationary source used to avoid applicability of the major NSR program).

(iii) Except as provided under paragraph (aa)(1)(ii)(c), a major stationary source shall continue to comply with all applicable federal or state requirements, emission limitations, and work practice requirements that were established prior to the effective date of the PAL.

(2) **Definitions.** The definitions in paragraphs (aa)(2)(i) through (aa)(2)(xi) shall apply to actual PALs consistent with paragraphs (aa)(1) through (aa)(15). When a term is not defined in these paragraphs, it shall have the meaning given in paragraph (b) or in the Clean Air Act.

(i) **Actuals PAL** for a major stationary source means a PAL based on the baseline actual emissions (as defined in paragraph (b)(4)) of all emissions units (as defined in paragraph (b)(20)) at the source, that emit or have the potential to emit the PAL pollutant.

(ii) **"Allowable emissions"** means "allowable emissions" as defined in paragraph (b)(3), except as this definition is modified according to paragraphs (aa)(2)(ii)(a) and (aa)(2)(ii)(b).

(a) The allowable emissions for any emissions unit shall be calculated considering any emission limitations that are enforceable as a practical matter on the emissions unit's potential to emit.

(b) An emissions unit's potential to emit shall be determined using the definition in paragraph (b)(37), except that the words "or enforceable as a practical matter" should be added after "federally enforceable."

(iii) **"Small emissions unit"** means an emissions unit that emits or has the potential to emit the PAL pollutant in an amount less than the significant level for that PAL pollutant, as defined in paragraph (b)(49) or in the Clean Air Act, whichever is lower.

(iv) **"Major emissions unit"** means:

(a) Any emissions unit that emits or has the potential to emit 100 tpy or more of the PAL pollutant in an attainment area; or

(b) Any emissions unit that emits or has the potential to emit the PAL pollutant in an amount that is equal to or greater than the major source threshold for the PAL pollutant as defined by the Clean Air Act for nonattainment areas. For example, in accordance with the definition of major stationary source in Section 182(c) of the Clean Air Act, an emissions unit would be a major emissions unit for VOC if the emissions unit is located in a serious ozone nonattainment area and it emits or has the potential to emit fifty (50) or more tons of VOC per year.

(v) **"Plantwide applicability limitation (PAL)"** means an emission limitation expressed in tpy, for a pollutant at a major stationary source, that is enforceable as a practical matter and established source-wide in accordance with paragraphs (aa)(1) through (aa)(15).

(vi) **"PAL effective date"** generally means the date of issuance of the PAL permit. However, the PAL effective date for an increased PAL is the date any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

(vii) **"PAL effective period"** means the period beginning with the PAL effective date and ending ten (10) years later.

(viii) **"PAL major modification"** means, notwithstanding paragraphs (b)(30) and (b)(34) (the definitions for major modification and net emissions increase), any physical change in or change in the method of operation of the PAL source that causes it to emit the PAL pollutant at a level equal to or greater than the PAL.

(ix) **"PAL permit"** means the major NSR permit, the minor NSR permit, or the state operating permit under Regulation 61–62.1, Section II.G, or the Title V permit issued by the Department that establishes a PAL for a major stationary source.

(x) **"PAL pollutant"** means the pollutant for which a PAL is established at a major stationary source.

(xi) **"Significant emissions unit"** means an emissions unit that emits or has the potential to emit a PAL pollutant in an amount that is equal to or greater than the significant level (as defined in paragraph (b)(49) or in the Clean Air Act, whichever is lower) for that PAL pollutant, but less than the amount that would qualify the unit as a major emissions unit as defined in paragraph (aa)(2)(iv).

(3) **Permit application requirements.** As part of a permit application requesting a PAL, the owner or operator of a major stationary source shall submit the following information to the Department for approval:

(i) A list of all emissions units at the source designated as small, significant or major based on their potential to emit. In addition, the owner or operator of the source shall indicate which, if any, federal or state applicable requirements, emission limitations, or work practices apply to each unit.

(ii) Calculations of the baseline actual emissions (with supporting documentation). Baseline actual emissions are to include emissions associated not only with operation of the unit, but also emissions associated with startup, shutdown, and malfunction.

(iii) The calculation procedures that the major stationary source owner or operator proposes to use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month as required by paragraph (aa)(13)(i).

(4) **General requirements for establishing PALs.**

(i) The Department is allowed to establish a PAL at a major stationary source, provided that at a minimum, the requirements in paragraphs (aa)(4)(i)(a) through (aa)(4)(i)(g) are met.

(a) The PAL shall impose an annual emission limitation in tpy, that is enforceable as a practical matter, for the entire major stationary source. For each month during the PAL effective period after the first twelve (12) months of establishing a PAL, the major stationary source owner or operator shall show that the sum of the monthly emissions from each emissions unit under the

PAL for the previous twelve (12) consecutive months is less than the PAL (a 12–month average, rolled monthly). For each month during the first eleven (11) months from the PAL effective date, the major stationary source owner or operator shall show that the sum of the preceding monthly emissions from the PAL effective date for each emissions unit under the PAL is less than the PAL.

(b) The PAL shall be established in a PAL permit that meets the public participation requirements in paragraph (aa)(5).

(c) The PAL permit shall contain all the requirements of paragraph (aa)(7).

(d) The PAL shall include fugitive emissions, to the extent quantifiable, from all emissions units that emit or have the potential to emit the PAL pollutant at the major stationary source.

(e) Each PAL shall regulate emissions of only one pollutant.

(f) Each PAL shall have a PAL effective period of ten (10) years.

(g) The owner or operator of the major stationary source with a PAL shall comply with the monitoring, recordkeeping, and reporting requirements provided in paragraphs (aa)(12) through (aa)(14) for each emissions unit under the PAL through the PAL effective period.

(ii) At no time (during or after the PAL effective period) are emissions reductions of a PAL pollutant that occur during the PAL effective period creditable as decreases for purposes of offsets under 40 CFR 51.165(a)(3)(ii) unless the level of the PAL is reduced by the amount of such emissions reductions and such reductions would be creditable in the absence of the PAL.

(5) **Public participation requirements for PALs.** PALs for existing major stationary sources shall be established, renewed, or increased through a procedure that is consistent with section (q) "Public Participation" of this regulation. The Department must address all material comments before taking final action on the permit.

(6) **Setting the 10-year actuals PAL level.**

(i) Except as provided in paragraph (aa)(6)(ii), the actuals PAL level for a major stationary source shall be established as the sum of the baseline actual emissions (as defined in paragraph (b)(4)) of the PAL pollutant for each emissions unit at the source; plus an amount equal to the applicable significant level for the PAL pollutant under paragraph (b)(49) or under the Clean Air Act, whichever is lower. When establishing the actuals PAL level, for a PAL pollutant, only one consecutive 24-month period must be used to determine the baseline actual emissions for all existing emissions units. However, a different consecutive 24-month period may be used for each different PAL pollutant. Emissions associated with units that were permanently shut down after this 24-month period must be subtracted from the PAL level. The Department shall specify a reduced PAL level(s) (in tpy) in the PAL permit to become effective on the future compliance date(s) of any applicable federal or state regulatory requirement(s) that the Department is aware of prior to the issuance of the PAL permit. For instance, if the source owner or operator will be required to reduce emissions from industrial boilers in half from baseline emissions of sixty (60) parts per million (ppm) NO_X to a new rule limit of thirty (30) ppm, then the permit shall contain a future effective PAL level that is equal to the current PAL level reduced by half of the original baseline emissions of such unit(s).

(ii) For newly constructed units (which do not include modification to existing units) on which actual construction began after the 24-month period, the emissions must be added to the PAL level in an amount equal to the potential to emit of the units.

(7) **Contents of the PAL permit.** The PAL permit must contain, at a minimum, the information in paragraphs (aa)(7)(i) through (aa)(7)(x).

(i) The PAL pollutant and the applicable source-wide emission limitation in tpy.

(ii) The PAL permit effective date and the expiration date of the PAL (PAL effective period).

(iii) Specification in the PAL permit that if a major stationary source owner or operator applies to renew a PAL in accordance with paragraph (aa)(10) before the end of the PAL effective period, then the PAL shall not expire at the end of the PAL effective period. It shall remain in effect until a revised PAL permit is issued by the Department.

(iv) A requirement that emission calculations for compliance purposes must include emissions from startups, shutdowns, and malfunctions.

(v) A requirement that, once the PAL expires, the major stationary source is subject to the requirements of paragraph (aa)(9).

(vi) The calculation procedures that the major stationary source owner or operator shall use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total as required by paragraph (aa)(13)(i).

(vii) A requirement that the major stationary source owner or operator monitor all emissions units in accordance with the provisions under paragraph (aa)(12).

(viii) A requirement to retain the records required under paragraph (aa)(13) on site. Such records may be retained in an electronic format.

(ix) A requirement to submit the reports required under paragraph (aa)(14) by the required deadlines.

(x) Any other requirements that the Department deems necessary to implement and enforce the PAL.

(8) **PAL effective period and reopening of the PAL permit.** The requirements in paragraphs (aa)(8)(i) and (aa)(8)(ii) apply to actuals PALs.

(i) **PAL effective period.** The Department shall specify a PAL effective period of ten (10) years.

(ii) **Reopening of the PAL permit.**

(a) During the PAL effective period, the Department must reopen the PAL permit to:

(1) Correct typographical/calculation errors made in setting the PAL or reflect a more accurate determination of emissions used to establish the PAL;

(2) Reduce the PAL if the owner or operator of the major stationary source creates creditable emissions reductions for use as offsets under 40 CFR 51.165(a)(3)(ii); and

(3) Revise the PAL to reflect an increase in the PAL as provided under paragraph (aa)(11).

(b) The Department shall have discretion to reopen the PAL permit for the following:

(1) Reduce the PAL to reflect newly applicable federal requirements (for example, NSPS) with compliance dates after the PAL effective date;

(2) Reduce the PAL consistent with any other requirement, that is enforceable as a practical matter, and that the state may impose on the major stationary source under the State Implementation Plan; and

(3) Reduce the PAL if the Department determines that a reduction is necessary to avoid causing or contributing to a National Ambient Air Quality Standard or PSD increment violation, or to an adverse impact on an air quality related value that has been identified for a Class I area by a Federal Land Manager and for which information is available to the general public.

(c) Except for the permit reopening in paragraph (aa)(8)(ii)(a)(1) for the correction of typographical/calculation errors that do not increase the PAL level, all other reopenings shall be carried out in accordance with the public participation requirements of paragraph (aa)(5).

(9) **Expiration of a PAL.** Any PAL that is not renewed in accordance with the procedures in paragraph (aa)(10) shall expire at the end of the PAL effective period, and the requirements in paragraphs (aa)(9)(i) through (aa)(9)(v) shall apply.

(i) Each emissions unit (or each group of emissions units) that existed under the PAL shall comply with an allowable emission limitation under a revised permit established according to the procedures in paragraphs (aa)(9)(i)(a) and (aa)(9)(i)(b).

(a) Within the time frame specified for PAL renewals in paragraph (aa)(10)(ii), the major stationary source shall submit a proposed allowable emission limitation for each emissions unit (or each group of emissions units, if such a distribution is more appropriate as decided by the Department) by distributing the PAL allowable emissions for the major stationary source among each of the emissions units that existed under the PAL. If the PAL had not yet been adjusted for an applicable requirement that became effective during the PAL effective period, as required under paragraph (aa)(10)(v), such distribution shall be made as if the PAL had been adjusted.

(b) The Department shall decide whether and how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as the Department determines is appropriate.

(ii) Each emissions unit(s) shall comply with the allowable emission limitation on a 12-month rolling basis. The Department may approve the use of monitoring systems (source testing, emission factors, etc.) other than CEMS, CERMS, PEMS, or CPMS to demonstrate compliance with the allowable emission limitation.

(iii) Until the Department issues the revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as required under paragraph (aa)(9)(i)(b), the source shall continue to comply with a source-wide, multi-unit emissions cap equivalent to the level of the PAL emission limitation.

(iv) Any physical change or change in the method of operation at the major stationary source will be subject to major NSR requirements if such change meets the definition of major modification in paragraph (b)(30).

(v) The major stationary source owner or operator shall continue to comply with any state or federal applicable requirements (BACT, RACT, NSPS, etc.) that may have applied either during the PAL effective period or prior to the PAL effective period except for those emission limitations that had been established pursuant to paragraph (r)(4), but were eliminated by the PAL in accordance with the provisions in paragraph (aa)(1)(ii)(c).

(10) **Renewal of a PAL.**

(i) The Department shall follow the procedures specified in paragraph (aa)(5) in approving any request to renew a PAL for a major stationary source, and shall provide both the proposed PAL level and a written rationale for the proposed PAL level to the public for review and comment. During such public review, any person may propose a PAL level for the source for consideration by the Department.

(ii) **Application deadline.** A major stationary source owner or operator shall submit a timely application to the Department to request renewal of a PAL. A timely application is one that is submitted at least six (6) months prior to, but not earlier than eighteen (18) months from, the date of permit expiration. This deadline for application submittal is to ensure that the permit will not expire before the permit is renewed. If the owner or operator of a major stationary source submits a complete application to renew the PAL within this time period, then the PAL shall continue to be effective until the revised permit with the renewed PAL is issued.

(iii) **Application requirements.** The application to renew a PAL permit shall contain the information required in paragraphs (aa)(10)(iii)(a) through (aa)(10)(iii)(d).

(a) The information required in paragraphs (aa)(3)(i) through (aa)(3)(iii).

(b) A proposed PAL level.

(c) The sum of the potential to emit of all emissions units under the PAL (with supporting documentation).

(d) Any other information the owner or operator wishes the Department to consider in determining the appropriate level for renewing the PAL.

(iv) **PAL adjustment.** In determining whether and how to adjust the PAL, the Department shall consider the options outlined in paragraphs (aa)(10)(iv)(a) and (aa)(10)(iv)(b). However, in no case may any such adjustment fail to comply with paragraph (aa)(10)(iv)(c).

(a) If the emissions level calculated in accordance with paragraph (aa)(6) is equal to or greater than eighty (80) percent of the PAL level, the Department may renew the PAL at the same level without considering the factors set forth in paragraph (aa)(10)(iv)(b); or

(b) The Department may set the PAL at a level that it determines to be more representative of the source's baseline actual emissions, or that it determines to be more appropriate considering air quality needs, advances in control technology, anticipated economic growth in the area, desire to reward or encourage the source's voluntary emissions reductions, or other factors as specifically identified by the Department in its written rationale.

(c) Notwithstanding paragraphs (aa)(10)(iv)(a) and (aa)(10)(iv)(b):

(1) If the potential to emit of the major stationary source is less than the PAL, the Department shall adjust the PAL to a level no greater than the potential to emit of the source; and

(2) The Department shall not approve a renewed PAL level higher than the current PAL, unless the major stationary source has complied with the provisions of paragraph (aa)(11) (increasing a PAL).

(v) If the compliance date for a state or federal requirement that applies to the PAL source occurs during the PAL effective period, and if the Department has not already adjusted for such requirement, the PAL shall be adjusted at the time of PAL permit renewal or Title V permit renewal, whichever occurs first.

(11) **Increasing a PAL during the PAL effective period.**

(i) The Department may increase a PAL emission limitation only if the major stationary source complies with the provisions in paragraphs (aa)(11)(i)(a) through (aa)(11)(i)(d).

(a) The owner or operator of the major stationary source shall submit a complete application to request an increase in the PAL limit for a PAL major modification. Such application shall identify the emissions unit(s) contributing to the increase in emissions so as to cause the major stationary source's emissions to equal or exceed its PAL.

(b) As part of this application, the major stationary source owner or operator shall demonstrate that the sum of the baseline actual emissions of the small emissions units, plus the sum of the baseline actual emissions of the significant and major emissions units assuming application of BACT equivalent controls, plus the sum of the allowable emissions of the new or modified emissions unit(s) exceeds the PAL. The level of control that would result from BACT equivalent controls on each significant or major emissions unit shall be determined by conducting a new BACT analysis at the time the application is submitted, unless the emissions unit is currently required to comply with a BACT or LAER requirement that was established within the preceding 10 years. In such a case, the assumed control level for that emissions unit shall be equal to the level of BACT or LAER with which that emissions unit must currently comply.

(c) The owner or operator obtains a major NSR permit for all emissions unit(s) identified in paragraph (aa)(11)(i)(a), regardless of the magnitude of the emissions increase resulting from them (that is, no significant levels apply). These emissions unit(s) shall comply with any emissions requirements resulting from the major NSR process (for example, BACT), even though they have also become subject to the PAL or continue to be subject to the PAL.

(d) The PAL permit shall require that the increased PAL level shall be effective on the day any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

(ii) The Department shall calculate the new PAL as the sum of the allowable emissions for each modified or new emissions unit, plus the sum of the baseline actual emissions of the significant and major emissions units (assuming application of BACT equivalent controls as determined in accordance with paragraph (aa)(11)(i)(b)), plus the sum of the baseline actual emissions of the small emissions units.

(iii) The PAL permit shall be revised to reflect the increased PAL level pursuant to the public notice requirements of paragraph (aa)(5).

(12) **Monitoring requirements for PALs.** (i) General requirements. (a) Each PAL permit must contain enforceable requirements for the monitoring system that accurately determines plantwide emissions of the PAL pollutant in terms of mass per unit of time. Any monitoring system authorized for use in the PAL permit must be based on sound science and meet generally acceptable scientific procedures for data quality and manipulation. Additionally, the information generated by such system must meet minimum legal requirements for admissibility in a judicial proceeding to enforce the PAL permit.

(b) The PAL monitoring system must employ one or more of the four general monitoring approaches meeting the minimum requirements set forth in paragraphs (aa)(12)(ii)(a) through (aa)(12)(ii)(d) and must be approved by the Department.

(c) Notwithstanding paragraph (aa)(12)(i)(b), the owner or operator may also employ an alternative monitoring approach that meets paragraph (aa)(12)(i)(a) if approved by the Department.

(d) Failure to use a monitoring system that meets the requirements of this regulation renders the PAL invalid.

(ii) Minimum performance requirements for approved monitoring approaches. The following are acceptable general monitoring approaches when conducted in accordance with the minimum requirements in paragraphs (aa)(12)(iii) through (aa)(12)(ix):

(a) Mass balance calculations for activities using coatings or solvents;

(b) CEMS;

(c) CPMS or PEMS; and

(d) Emission factors.

(iii) Mass balance calculations. An owner or operator using mass balance calculations to monitor PAL pollutant emissions from activities using coating or solvents shall meet the following requirements:

(a) Provide a demonstrated means of validating the published content of the PAL pollutant that is contained in or created by all materials used in or at the emissions unit;

(b) Assume that the emissions unit emits all of the PAL pollutant that is contained in or created by any raw material or fuel used in or at the emissions unit, if it cannot otherwise be accounted for in the process; and

(c) Where the vendor of a material or fuel, which is used in or at the emissions unit, publishes a range of pollutant content from such material, the owner or operator must use the highest value of the range to calculate the PAL pollutant emissions unless the Department determines there is site-specific data or a site-specific monitoring program to support another content within the range.

(iv) CEMS. An owner or operator using CEMS to monitor PAL pollutant emissions shall meet the following requirements:

(a) CEMS must comply with applicable Performance Specifications found in 40 CFR 60, Appendix B; and

(b) CEMS must sample, analyze and record data at least every fifteen (15) minutes while the emissions unit is operating.

(v) CPMS or PEMS. An owner or operator using CPMS or PEMS to monitor PAL pollutant emissions shall meet the following requirements:

(a) The CPMS or the PEMS must be based on current site-specific data demonstrating a correlation between the monitored parameter(s) and the PAL pollutant emissions across the range of operation of the emissions unit; and

(b) Each CPMS or PEMS must sample, analyze, and record data at least every fifteen (15) minutes, or at another less frequent interval approved by the Department, while the emissions unit is operating.

(vi) Emission factors. An owner or operator using emission factors to monitor PAL pollutant emissions shall meet the following requirements:

(a) All emission factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors' development;

(b) The emissions unit shall operate within the designated range of use for the emission factor, if applicable; and

(c) If technically practicable, the owner or operator of a significant emissions unit that relies on an emission factor to calculate PAL pollutant emissions shall conduct validation testing to determine a site-specific emission factor within six (6) months of PAL permit issuance, unless the Department determines that testing is not required.

(vii) A source owner or operator must record and report maximum potential emissions without considering enforceable emission limitations or operational restrictions for an emissions unit during

any period of time that there is no monitoring data, unless another method for determining emissions during such periods is specified in the PAL permit.

(viii) Notwithstanding the requirements in paragraphs (aa)(12)(iii) through (aa)(12)(vii), where an owner or operator of an emissions unit cannot demonstrate a correlation between the monitored parameter(s) and the PAL pollutant emissions rate at all operating points of the emissions unit, the Department shall, at the time of permit issuance:

(a) Establish default value(s) for determining compliance with the PAL based on the highest potential emissions reasonably estimated at such operating point(s); or

(b) Determine that operation of the emissions unit during operating conditions when there is no correlation between monitored parameter(s) and the PAL pollutant emissions is a violation of the PAL.

(ix) Re-validation. All data used to establish the PAL pollutant must be re-validated through performance testing or other scientifically valid means approved by the Department. Such testing must occur at least once every 5 years after issuance of the PAL.

(13) **Recordkeeping requirements.** (i) The PAL permit shall require an owner or operator to retain a copy of all records necessary to determine compliance with any requirement of paragraph (aa) and of the PAL, including a determination of each emissions unit's 12-month rolling total emissions, for five (5) years from the date of such record.

(ii) The PAL permit shall require an owner or operator to retain a copy of the following records for the duration of the PAL effective period plus five (5) years:

(a) A copy of the PAL permit application and any applications for revisions to the PAL; and

(b) Each annual certification of compliance pursuant to Title V and the data relied on in certifying the compliance.

(14) **Reporting and notification requirements.** The owner or operator shall submit semi-annual monitoring reports and prompt deviation reports to the Department in accordance with the applicable Title V operating permit program. The reports shall meet the requirements in paragraphs (aa)(14)(i) through (aa)(14)(iii).

(i) **Semi-annual report.** The semi-annual report shall be submitted to the Department within 30 days of the end of each reporting period. This report shall contain the information required in paragraphs (aa)(14)(i)(a) through (aa)(14)(i)(g).

(a) The identification of owner and operator and the permit number.

(b) Total annual emissions (tons/year) based on a 12-month rolling total for each month in the reporting period recorded pursuant to paragraph (aa)(13)(i).

(c) All data relied upon, including, but not limited to, any Quality Assurance or Quality Control data, in calculating the monthly and annual PAL pollutant emissions.

(d) A list of any emissions units modified or added to the major stationary source during the preceding 6-month period.

(e) The number, duration, and cause of any deviations or monitoring malfunctions (other than the time associated with zero and span calibration checks), and any corrective action taken.

(f) A notification of a shutdown of any monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the pollutant or the number determined by method included in the permit, as provided by (aa)(12)(vii).

(g) A signed statement by the responsible official (as defined by the applicable Title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.

(ii) **Deviation report.** The major stationary source owner or operator shall promptly submit reports of any deviations or exceedance of the PAL requirements, including periods where no monitoring is available. A report submitted pursuant to 40 CFR 70.6(a)(3)(iii)(B) shall satisfy this reporting requirement. The deviation reports shall be submitted within the time limits prescribed

by the applicable program implementing 40 CFR 70.6(a)(3)(iii)(B). The reports shall contain the following information:

(a) The identification of owner and operator and the permit number;

(b) The PAL requirement that experienced the deviation or that was exceeded;

(c) Emissions resulting from the deviation or the exceedance; and

(d) A signed statement by the responsible official (as defined by the applicable Title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.

(iii) **Re-validation results.** The owner or operator shall submit to the Department the results of any re-validation test or method within three (3) months after completion of such test or method.

(15) **Transition requirements.**

(i) The Department may not issue a PAL that does not comply with the requirements in paragraphs (aa)(1) through (aa)(15) after the date these provisions become effective.

(ii) The Department may supersede any PAL that was established prior to the date these provisions become effective with a PAL that complies with the requirements of paragraphs (aa)(1) through (aa)(15).

(bb) If any provision of this regulation, or the application of such provision to any person or circumstance, is held invalid, the remainder of this regulation, or the application of such provision to persons or circumstances other than those to which it is held invalid, shall not be affected thereby.

HISTORY: Amended by State Register Volume 36, Issue No. 4, eff April 27, 2012; State Register Volume 37, Issue No. 3, eff March 22, 2013 (errata); State Register Volume 37, Issue No. 12, eff December 27, 2013; State Register Volume 39, Issue No. 6, Doc. No. 4481, eff June 26, 2015; State Register Volume 41, Issue No. 8, Doc. No. 4750, eff August 25, 2017.

Editor's Note

Scrivener's error corrected in 2017, in (v), moving paragraphs (i) to (iii) from paragraph (4) to paragraph (3).

Scrivener's error corrected in 2017, in (aa)(1)(i), removing underscoring from "(aa)(15)".

Scrivener's error corrected in 2017, in (aa)(12)(v)(b), removing underscoring from "fifteen", "(", and ")".

STANDARD NO. 7.1

NONATTAINMENT NEW SOURCE REVIEW (NSR)

(a) **Applicability**

(1) This rule applies to all major stationary sources constructed or modified in any nonattainment area as designated in 40 Code of Federal Regulations (CFR) 81.341 ("nonattainment area") if the emissions from such facility will cause or contribute to concentrations of a regulated NSR pollutant (as defined in paragraph (c)(13)) for which the nonattainment area was designated as nonattainment. Applicability to this regulation shall be based on the pollutant emission rate set out in paragraph (c)(14) for only those pollutants for which the area's designation is based.

(A) The requirements of paragraph (d) apply to the construction of any new major stationary source or the major modification of any existing major stationary source, except as provided in paragraph (b).

(B) No new major stationary source or major modification to which the requirements of paragraph (d) apply shall begin actual construction without a permit that states that the major stationary source or major modification will meet those requirements. The Department has authority to issue any such permit.

(2) **Redesignation to attainment**. If any nonattainment area to which this regulation applies is later designated in 40 CFR 81.341 as attainment, all sources in that nonattainment area subject to this regulation before the redesignation date shall continue to comply with this regulation.

(3) For any area designated as nonattainment a major stationary source or major modification that is major for volatile organic compounds or oxides of nitrogen is also major for ozone.

(b) **Applicability procedures.**

(1) Except as otherwise provided in paragraphs (b)(7) and (8), and consistent with the definition of major modification contained in paragraph (c)(6)(A), a project is a major modification for a regulated NSR pollutant if it causes two types of emissions increases - a significant emissions increase (as defined in paragraph (c)(15), and a significant net emissions increase (as defined in paragraphs (c)(8) and (15). The project is not a major modification if it does not cause a significant emissions increase. If the project causes a significant emissions increase, then the project is a major modification only if it also results in a significant net emissions increase.

(2) The procedure for calculating (before beginning actual construction) whether a significant emissions increase (that is, the first step of the process) will occur depends upon the type of emissions units being modified, according to paragraphs (b)(1) through (6). The procedure for calculating (before beginning actual construction) whether a significant net emissions increase will occur at the major stationary source (that is, the second step of the process) is contained in the definition in paragraph (c)(8). Regardless of any such preconstruction projections, a major modification results if the project causes a significant emissions increase and a significant net emissions increase.

(3) **Actual-to-projected-actual applicability test for projects that only involve existing emissions units**. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the projected actual emissions (as defined in paragraph (c)(11)) and the baseline actual emissions (as defined in paragraphs (c)(2)(A) and (B), as applicable), for each existing emissions unit, equals or exceeds the significant amount for that pollutant (as defined in paragraph (c)(14)).

(4) **Actual-to-potential test for projects that only involve construction of a new emissions unit(s)**. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the potential to emit (as defined in paragraph (b)(37) of Regulation 61–62.5 Standard 7, "Prevention of Significant Deterioration" ("Standard 7")) from each new emissions unit following completion of the project and the baseline actual emissions (as defined in paragraph (c)(2)(C)) of these units before the project equals or exceeds the significant amount for that pollutant (as defined in paragraph (c)(14)).

(5) **[Reserved]**

(6) **Hybrid test for projects that involve multiple types of emissions units**. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the emissions increases for each emissions unit, using the method specified in paragraphs (b)(3) and (4) as applicable with respect to each emissions unit, for each type of emissions unit equals or exceeds the significant amount for that pollutant (as defined in paragraph (c)(14)).

(7) For any major stationary source for a Plantwide Applicability Limitation (PAL) for a regulated NSR pollutant, the major stationary source shall comply with requirements under paragraph (i).

(c) **Definitions.** The following definitions apply to this Standard only. Any other term contained within this Standard is as defined where indicated in Regulation 61–62.5, Standard 7, Prevention of Significant Deterioration.

(1)(A) **"Actual emissions"** means the actual rate of emissions of a regulated NSR pollutant from an emissions unit, as determined in accordance with paragraphs (c)(1)(B) through (D), except that this definition shall not apply for calculating whether a significant emissions increase has occurred, or for establishing a PAL under paragraph (i). Instead, paragraphs (c)(2) and (c)(11) shall apply for those purposes.

(B) In general, actual emissions as of a particular date shall equal the average rate, in tons per year (tpy), at which the unit actually emitted the pollutant during a consecutive 24-month period which precedes the particular date and which is representative of normal source operation. The Department shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

(C) The Department may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

(D) For any emissions unit that has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

(2) **"Baseline actual emissions"** means the rate of emissions, in tpy, of a regulated NSR pollutant, as determined in accordance with paragraphs (c)(2)(A) through (D).

(A) For any existing electric utility steam generating unit, baseline actual emissions means the average rate, in tpy, at which the unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 5-year period immediately preceding when the owner or operator begins actual construction of the project. The Department shall allow the use of a different time period upon a determination that it is more representative of normal source operation.

(i) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.

(ii) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period.

(iii) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period can be used for each regulated NSR pollutant.

(iv) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tpy, and for adjusting this amount if required by paragraph (c)(2)(A)(ii).

(B) For an existing emissions unit (other than an electric utility steam generating unit), baseline actual emissions means the average rate, in tpy, at which the emissions unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 10-year period immediately preceding either the date the owner or operator begins actual construction of the project, or the date a complete permit application is received by the Department for a permit required either under this section or under a plan approved by the Administrator whichever is earlier, except that the 10-year period shall not include any period earlier than November 15, 1990. The Department reserves the right to determine if the 24-month period selected is appropriate.

(i) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.

(ii) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above an emission limitation that was legally enforceable during the consecutive 24-month period.

(iii) The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had such major stationary source been required to comply with such limitations during the consecutive 24-month period. However, if an emission limitation is part of a maximum achievable control technology standard that the Administrator proposed or promulgated under 40 CFR 63, the baseline actual emissions need only be adjusted if the state has taken credit for such emissions reductions in an attainment demonstration or maintenance plan consistent with the requirements of paragraph (d)(1)(c)(viii).

(iv) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period can be used for each regulated NSR pollutant.

(v) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tpy, and for adjusting this amount if required by paragraphs (c)(2)(B)(ii) and (iii).

(C) For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to emit.

(D) For a PAL for a major stationary source, the baseline actual emissions shall be calculated for existing electric utility steam generating units in accordance with the procedures contained in paragraph (c)(2)(A), for other existing emissions units in accordance with the procedures contained in paragraph (c)(2)(B), and for a new emissions unit in accordance with the procedures contained in paragraph (c)(2)(C).

(3) **"Best available control technology (BACT)"** means an emissions limitation (including a visible emissions standard) based on the maximum degree of reduction for each regulated NSR pollutant which would be emitted from any proposed major stationary source or major modification which the Department, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR 60 or 61. If the Department determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof, may be prescribed instead to satisfy the requirement for the application of BACT. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

(4) **[Reserved]**

(5) **"Lowest achievable emission rate (LAER)"** means, for any source, the more stringent rate of emissions based on the following:

(A) The most stringent emissions limitation which is contained in the implementation plan of any state for such class or category of stationary source, unless the owner or operator of the proposed stationary source demonstrates that such limitations are not achievable; or

(B) The most stringent emissions limitation which is achieved in practice by such class or category of stationary sources. This limitation, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions units within a stationary source. In no event shall the application of the term permit a proposed new or modified stationary source to emit any pollutant in excess of the amount allowable under an applicable new source standard of performance.

(6)(A) **"Major modification"** means any physical change in or change in the method of operation of a major stationary source that would result in:

(i) A significant emissions increase of a regulated NSR pollutant (as defined in paragraph (c)(13)); and

(ii) A significant net emissions increase of that pollutant from the major stationary source.

(B) Any significant emissions increase (as defined in paragraph (c)(15)) from any emissions units or net emissions increase (as defined in paragraph (c)(8)) at a major stationary source that is significant for volatile organic compounds or oxides of nitrogen shall be considered significant for ozone.

(C) A physical change or change in the method of operation shall not include:

(i) Routine maintenance, repair and replacement;

(ii) Use of an alternative fuel or raw material by reason of an order under sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;

(iii) Use of an alternative fuel by reason of an order or rule section 125 of the Clean Air Act;

(iv) Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;

(v) Use of an alternative fuel or raw material by a stationary source which;

(a) The source was capable of accommodating before December 21, 1976, unless such change would be prohibited under any federally enforceable permit condition which was established after December 21, 1976, or

(b) The source is approved to use under any permit issued under regulations approved pursuant to this section;

(vi) An increase in the hours of operation or in the production rate, unless such change is prohibited under any federally enforceable permit condition which was established after December 21, 1976.

(vii) Any change in ownership at a stationary source.

(viii) [Reserved]

(ix) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, provided that the project complies with:

(a) The South Carolina State Implementation Plan, and

(b) Other requirements necessary to attain and maintain the National Ambient Air Quality Standard (NAAQS) during the project and after it is terminated.

(D) This definition shall not apply with respect to a particular regulated NSR pollutant when the major stationary source is complying with the requirements under paragraph (i) for a PAL for that pollutant. Instead, the definition at paragraph (i)(2)(viii) shall apply.

(7)(A) **"Major stationary source"** means:

(i) Any stationary source of air pollutants which emits, or has the potential to emit 100 tpy or more of any regulated NSR pollutant, except that lower emissions thresholds shall apply in areas subject to Subpart 2, Subpart 3, or Subpart 4 of Part D, Title I of the Act, according to paragraphs (c)(7)(A)(i)(a) through (e) of this section.

(a) 50 tpy of volatile organic compounds or oxides of nitrogen in any serious ozone nonattainment area.

(b) 50 tpy of volatile organic compounds or oxides of nitrogen in an area within an ozone transport region, except for any severe or extreme ozone nonattainment area.

(c) 25 tpy of volatile organic compounds or oxides of nitrogen in any severe ozone nonattainment area.

(d) 10 tpy of volatile organic compounds or oxides of nitrogen in any extreme ozone nonattainment area, or

(ii) Any physical change that would occur at a stationary source not qualifying under paragraph (c)(7)(A)(i) as a major stationary source, if the change would constitute a major stationary source by itself.

(B) A major stationary source that is major for volatile organic compounds or oxides of nitrogen shall be considered major for ozone.

(C) The fugitive emissions of a stationary source shall not be included in determining for any of the purposes of this paragraph whether it is a major stationary source, unless the source belongs to one of the following categories of stationary sources:

(i) Coal cleaning plants (with thermal dryers);

(ii) Kraft pulp mills;

(iii) Portland cement plants;

(iv) Primary zinc smelters;

(v) Iron and steel mills;

(vi) Primary aluminum ore reduction plants;

(vii) Primary copper smelters;

(viii) Municipal incinerators capable of charging more than 250 tons of refuse per day;

(ix) Hydrofluoric, sulfuric, or nitric acid plants;

(x) Petroleum refineries;

(xi) Lime plants;

(xii) Phosphate rock processing plants;

(xiii) Coke oven batteries;

(xiv) Sulfur recovery plants;

(xv) Carbon black plants (furnace process);

(xvi) Primary lead smelters;

(xvii) Fuel conversion plants;

(xviii) Sintering plants;

(xix) Secondary metal production plants;

(xx) Chemical process plants - The term chemical process plant shall not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140;

(xxi) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;

(xxii) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;

(xxiii) Taconite ore processing plants;

(xxiv) Glass fiber processing plants;

(xxv) Charcoal production plants;

(xxvi) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input; and

(xxvii) Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the Clean Air Act.

(8)(A) **"Net emissions increase"** means, with respect to any regulated NSR pollutant emitted by a major stationary source, the amount by which the sum of the following exceeds zero:

(i) The increase in emissions from a particular physical change or change in the method of operation at a stationary source as calculated pursuant to paragraph (b); and

(ii) Any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable. Baseline actual emissions for calculating increases and decreases under this paragraph (c)(8)(A)(ii) shall be determined as provided in paragraph (c)(2), except that paragraphs (c)(2)(A)(iii) and (c)(2)(B)(iv) shall not apply.

(B) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs before the date that the increase from the particular change occurs;

(C) An increase or decrease in actual emissions is creditable only if:

(i) It occurs within five years before construction on the particular change commences; and

(ii) The Department has not relied on it in issuing a permit for the source, which permit is in effect when the increase in actual emissions from the particular change occurs; and

(D) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.

(E) A decrease in actual emissions is creditable only to the extent that:

(i) The old level of actual emission or the old level of allowable emissions whichever is lower, exceeds the new level of actual emissions;

(ii) It is enforceable as a practical matter at and after the time that actual construction on the particular change begins; and

(iii) The Department has not relied on it in issuing any permit or the Department has not relied on it in demonstrating attainment or reasonable further progress;

(iv) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change; and

(F) An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.

(G) Paragraph (c)(1)(B) shall not apply for determining creditable increases and decreases or after a change.

(9) **"Nonattainment major new source review (NSR) program"** means a major source preconstruction permit program that has been approved by the Administrator and incorporated into the plan to implement the requirements of this regulation, or a program that implements 40 CFR 51, appendix S, Sections I through VI. Any permit issued under such a program is a major NSR permit.

(10) **[Reserved]**

(11)(A) **"Projected actual emissions"** means, the maximum annual rate, in tpy, at which an existing emissions unit is projected to emit a regulated NSR pollutant in any one of the 5 years (12-month period) following the date the unit resumes regular operation after the project, or in any one of the 10 years following that date, if the project involves increasing the emissions unit's design capacity or its potential to emit of that regulated NSR pollutant and full utilization of the unit would result in a significant emissions increase or a significant net emissions increase at the major stationary source.

(B) In determining the projected actual emissions under paragraph (c)(11)(A) before beginning actual construction, the owner or operator of the major stationary source:

(i) Shall consider all relevant information, including but not limited to, historical operational data, the company's own representations, the company's expected business activity and the company's highest projections of business activity, the company's filings with the state or federal regulatory authorities, and compliance plans under the approved plan; and

(ii) Shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions; and

(iii) Shall exclude, in calculating any increase in emissions that results from the particular project, that portion of the unit's emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions under paragraph (c)(2) and that are also unrelated to the particular project, including any increased utilization due to product demand growth; or,

(iv) In lieu of using the method set out in paragraphs (c)(11)(B)(i) through (iii) may elect to use the emissions unit's potential to emit, in tpy, as defined under paragraph (b)(37) of Standard 7.

(12) **"Prevention of Significant Deterioration (PSD) permit"** means any permit that is issued under a major source preconstruction permit program that has been approved by the Administrator and incorporated into the plan to implement the requirements of 40 CFR 51.166, or under the program in 40 CFR 52.21.

(13) **"Regulated NSR pollutant,"** for purposes of this regulation, means the following:

(A) Oxides of nitrogen or any volatile organic compounds;

(B) Any pollutant for which a national ambient air quality standard has been promulgated;

(C) Any pollutant that is a constituent or precursor of a general pollutant listed under paragraphs (c)(13)(A) or (B), provided that a constituent or precursor pollutant may only be regulated under NSR as part of regulation of the general pollutant. Precursors identified by the Administrator for purposes of NSR are the following:

(a) Volatile organic compounds and nitrogen oxides are precursors to ozone in all ozone nonattainment areas;

(b) Sulfur dioxide is a precursor to $PM_{2.5}$ in all $PM_{2.5}$ nonattainment areas;

(c) Nitrogen oxides are presumed to be precursors to $PM_{2.5}$ in all $PM_{2.5}$ nonattainment areas, unless the state demonstrates to the Administrator's satisfaction or the Environmental Protection Agency (EPA) demonstrates that emissions of nitrogen oxides from sources in a specific area are not a significant contributor to that area's ambient $PM_{2.5}$ concentrations;

(d) Volatile organic compounds and ammonia are presumed not to be precursors to $PM_{2.5}$ in any $PM_{2.5}$ nonattainment area, unless the state demonstrates to the Administrator's satisfaction or EPA demonstrates that emissions of volatile organic compounds or ammonia from sources in a specific area are a significant contributor to that area's ambient $PM_{2.5}$ concentrations; or

(D) $PM_{2.5}$ emissions and PM_{10} emissions shall include gaseous emissions from a source or activity which condense to form particulate matter at ambient temperatures. On or after January 1, 2011 (or any earlier date established in the upcoming rulemaking codifying test methods), such condensable particulate matter shall be accounted for in applicability determinations and in establishing emissions limitations for $PM_{2.5}$ and PM_{10} in permits issued under this ruling. Compliance with emissions limitations for $PM_{2.5}$ and PM_{10} issued prior to this date shall not be based on condensable particulate matter unless required by the terms and conditions of the permit or the applicable implementation plan. Applicability determinations made prior to this date without accounting for condensable particulate matter shall not be considered in violation of this section unless the applicable implementation plan required condensable particulate matter to be included.

(14) **"Significant"** means, in reference to a net emissions increase or the potential of a source to emit any of the following pollutants, as rate of emissions that would equal or exceed any of the following rates:

Pollution Emission Rate

Carbon monoxide: 100 tpy

Nitrogen oxides: 40 tpy

Particulate matter:

15 tpy of PM_{10} emissions;

10 tpy of direct $PM_{2.5}$;

40 tpy of sulfur dioxide emissions;

40 tpy of nitrogen oxide emissions unless demonstrated not to be a $PM_{2.5}$ precursor under paragraph 13 of this section

Sulfur dioxide: 40 tpy

Ozone: 40 tpy of volatile organic compounds or oxides of nitrogen

Lead: 0.6 tpy

(15) **"Significant emissions increase"** means, for a regulated NSR pollutant, an increase in emissions that is significant (as defined in paragraph (c)(14)) for that pollutant.

(16) **"Volatile organic compounds (VOC)"** is as defined in Regulation 61–62.1, Section I, Definitions.

(d) **Permitting requirements**

(1) **Conditions for approval**. If the Department finds that the major stationary source or major modification would be constructed in an area designated in 40 CFR 81.341 as nonattainment for a pollutant for which the stationary source or modification is major, approval may be granted only if the following conditions are met:

(A) The major stationary source or major modification is required to meet an emission limitation which specifies the LAER for such source.

(B) The applicant must certify that all existing major sources owned or operated by the applicant (or any entity controlling, controlled by, or under common control with the applicant) in the same state as the proposed source are in compliance with all applicable emission limitations and standards under the Clean Air Act (or are in compliance with an expeditious schedule which is federally enforceable or contained in a court decree).

(C) The owner or operator of the proposed new major stationary source or major modification will obtain sufficient emission reductions of the nonattainment pollutant from other sources. Emission reductions shall be in effect and enforceable prior to the date the new source or modification commences operation. The emission reductions shall be obtained in accordance with the following provisions:

(i) Where the permitted emissions limit allows greater emissions than the potential to emit of the source, emissions offset credit will be allowed only for control below this potential;

(ii) For an existing fuel combustion source, credit shall be based on the allowable emissions for the type of fuel being burned at the time the application to construct is filed. If the existing source commits to switch to a cleaner fuel at some future date, emissions offset credit based on the allowable (or actual) emissions for the fuels involved is not acceptable, unless the permit is conditioned to require the use of a specified alternative control measure which would achieve the same degree of emissions reduction should the source switch back to a dirtier fuel at some later date.

(iii)(a) Emissions reductions achieved by shutting down an existing source or curtailing production or operating hours below baseline levels may be generally credited if such reductions are permanent, quantifiable, federally enforceable, occurred on or after the date of the most recent emissions inventory, and if the area has an EPA-approved attainment plan.

(b) Such reductions may be credited if the shutdown or curtailment occurred on or after the date the new source permit application is filed, or, if the applicant can establish that the proposed new source is a replacement for the shutdown or curtailed source, and the cutoff date provision of paragraph (d)(C)(iii)(a) are observed.

(iv) No emissions credit may be allowed for replacing one hydrocarbon compound with another of lesser reactivity, except for those compounds listed in Table 1 of EPA's "Recommended Policy on Control of Volatile Organic Compounds" (42 FR 35314, July 8, 1977);

(v) All emission reductions claimed as offset credit shall be federally enforceable and surplus;

(a) **Eligibility as Emission Offsets**. Any facility that has the potential to emit any NAAQS pollutant in an amount greater than 5 tpy and that is located in a federally-designated nonattainment area shall be eligible to create emission offsets.

(1) To be eligible to be an emission offset:

(A) A reduction in emissions shall be permanent, quantifiable, enforceable, and surplus and must have occurred after December 31 of the base year inventory for those pollutants that are designated nonattainment by the EPA. The base year inventory date is two years preceding the date of nonattainment designation. However, the Department may choose to consider a prior shutdown or curtailment to have occurred after the last day of the base year if the projected emissions inventory used to develop the attainment demonstration explicitly includes the emissions from such previously shutdown or curtailed emission units.

(B) Emission reductions shall have been created by an existing facility that has obtained an enforceable air quality permit or letter of permit cancellation resulting from the surrender of the source's permit(s).

(2) Emission reductions may be created by any or a combination of the following methods:

(A) Installation of control equipment beyond what is necessary to comply with existing requirements;

(B) A change in process inputs, formulations, products or product mix, fuels, or raw materials;

(C) A reduction in actual emission rates;

(D) A reduction in hours of operation;

(E) Production curtailment or reduction in throughput;

(F) Shutdown of emitting sources; or

(G) Any other enforceable method that the Department determines to result in real, permanent, quantifiable, enforceable, and surplus reduction of emissions.

(3) A completed emissions offset submittal must be received by the Department within one year of the date of the creation of the reductions. Emission offsets not requested within one year of the date of the creation of the reductions will be permanently retired. Prior to commencing operation of a permitted emissions unit, Department approval for the required emission offsets must be granted.

(4) The following are ineligible for emission offsets:

(A) Emission reductions that are not considered surplus, such as:

(i) Emission reductions that have previously been used to avoid Regulation 61–62.5 Standard No. 7, Prevention of Significant Deterioration, or Regulation 61–62.5 Standard No. 7.1, Nonattainment New Source Review (NSR), through a netting demonstration;

(ii) Emission reductions of hazardous air pollutants, listed in Section 112(b) of the Clean Air Act, to the extent needed to comply with Regulation 61–62.61, National Emission Standards for Hazardous Air Pollutants (NESHAP), and Regulation 61–62.63, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories, (however, emission reductions of hazardous volatile organic compound (VOC) and/or hazardous particulate matter (PM) air pollutants beyond the amount of reductions necessary to comply with Regulation 61–62.61, NESHAP, and Regulation 61–62.63, NESHAP for Source Categories, are considered surplus);

(iii) Emission reductions of nitrogen oxides (NO_x), sulfur dioxide (SO_2), particulate matter (PM) and VOCs to the extent needed to comply with Section 111 of the CAA and Regulation 61–62.60, South Carolina Designated Facility Plan and New Source Performance Standards (NSPS), (however, emission reductions of VOCs, NO_x, SO_2, PM and VOCs beyond the amount of reductions necessary to comply with Regulation 61–62.60, South Carolina Designated Facility Plan and NSPS, are considered surplus);

(iv) Emission units covered under an agreement, order or variance for exceeding an emission standard until compliance is demonstrated with the emission standard that is the subject of the agreement, order or variance;

(v) Sources that have operated less than 12 months;

(vi) Emission reductions required in order to comply with any state or federal regulation not listed above, unless these reductions are in excess of the amount required by the state or federal regulation; or

(vii) Facilities that have received a Department transmittal letter notifying of permit cancellation due to the facility's decision to close out its operating permit without a request to qualify facility emission reductions as offsets.

(b) **Calculation of Emission Offsets**

(1) The following procedure shall be used to calculate emission offsets:

(A) The source shall calculate average annual actual emissions, in tpy, before the emission reduction using data from the 24-month period immediately preceding the reduction in emissions. With the Department's approval, the use of a different time period, not to exceed 10 years immediately preceding the reduction in emissions, may be allowed if the owner or operator of the source documents that such period is more representative of normal source operation, but not prior to the base year inventory date, which is the last day of the two years preceding the date of nonattainment designation; and

(B) The emission offsets created shall be calculated by subtracting the allowable emissions following the reduction from the average annual actual emissions prior to the reduction.

(2) For any emissions unit that has been operating for a consecutive period of at least 12 months but less than 24 months on the base year inventory date, based on the unit's potential to emit, emissions shall be calculated to equal the amount needed to complete a 24 month period on the base year inventory date.

(vi) **Location of offsetting emissions.** Emission offsets shall be obtained from sources currently operating within the same designated nonattainment area as the new or modified stationary source. Emission offsets may be obtained from another nonattainment area with the Department's approval only if (a) the other area has an equal or higher nonattainment classification then the area in which the proposed source is located and (b) emissions from the other area contribute to a violation of the NAAQS in the nonattainment area in which the source is located.

(vii) **Emission offsetting ratios**. Emission offsets shall be required in nonattainment areas in accordance with the following provisions:

(a) Emissions for carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), lead (Pb), particulate matter (PM_{10} and $PM_{2.5}$) nonattainment areas shall be offset at a ratio greater than one to one.

(b) Emissions for ozone nonattainment areas shall be offset for volatile organic compounds (VOCs) and NO_X in accordance with the following table:

Designation	Offset ratios
Subpart I	>1 to 1
Marginal	1.1 to 1
Moderate	1.15 to 1
Serious	1.2 to 1
Severe	1.3 to 1
Extreme	1.5 to 1

(viii) Credit for an emissions reduction can be claimed to the extent that the Department has not relied on it in issuing any permit under regulations approved pursuant to 40 CFR Part 51 Subpart I or the Department has not relied on it in demonstrating attainment or reasonable further progress.

(ix) [Reserved]

(x) [Reserved]

(xi) The total tonnage of increased emissions, in tpy, resulting from a major modification that must be offset in accordance with Section 173 of the Clean Air Act shall be determined by summing the difference between the allowable emissions after the modification (as defined by paragraph (b)(3) of Standard 7) and the actual emissions before the modification (as defined in paragraph (c)(1)) for each emissions unit.

(D) The emission offsets must provide a positive net air quality benefit in the affected area as determined by 40 CFR 51, Appendix S, Emission Offset Interpretative Ruling.

(E) Alternative Sites Analysis. An analysis of alternative sites, sizes, production processes, and environmental control techniques for such proposed source demonstrates that benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification shall be required.

(2) (A) Any owner or operator who constructs or operates a source or modification not in accordance with the application submitted pursuant to this section or with the terms of any approval to construct, or any owner or operator of a source or modification subject to this section who commences construction after the effective date of these regulations without applying for and receiving approval hereunder, shall be subject to appropriate enforcement action.

(B) Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date.

(C) Approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the plan and any other requirements under local, state, or federal law.

(D) At such time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforcement limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of regulations approved pursuant to this section shall apply to the source or modification as though construction had not yet commenced on the source or modification;

(3) The following provisions apply to projects at existing emissions units at a major stationary source (other than projects at a source with a PAL) in circumstances where there is a reasonable possibility that a project that is not a part of a major modification may result in a significant emissions increase and the owner or operator elects to use the method specified in paragraphs (c)(11)(B)(i) through (iii) for calculating projected actual emissions.

(A) If the project requires construction permitting under Regulation 61–62.1, Section II "Permit Requirements," the owner or operator shall provide a copy of the information set out in paragraph (d)(3)(B) as part of the permit application to the Department. If construction permitting under Regulation 61–62.1, Section II "Permit Requirements," is not required, the owner or operator shall maintain the information set out in paragraph (d)(3).

(B) Before beginning actual construction of the project, the owner or operator shall document and maintain a record of the following information:

(i) A description of the project;

(ii) Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project; and

(iii) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded under paragraph (c)(11)(B)(iii) and an explanation for why such amount was excluded, and any netting calculations, if applicable.

(C) The owner or operator shall monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any emissions units identified in paragraph (d)(3)(B)(ii); and calculate and maintain a record of the annual emissions, in tpy on a calendar year basis, for a period of 5 years following resumption of regular operations after the change, or for a period of 10 years following resumption of regular operations after the change if the project increases the design capacity or potential to emit of that regulated NSR pollutant at such emissions unit.

(D) If the unit is an existing electric utility steam generating unit, the owner or operator shall submit a report to the Department within 60 days after the end of each year during which records must be generated under paragraph (d)(3)(B) setting out the unit's annual emissions during the year that preceded submission of the report.

(E) If the unit is an existing unit other than an electric utility steam generating unit, the owner or operator shall submit a report to the Department if the annual emissions, in tpy, from the project identified in paragraph (d)(3)(B), exceed the baseline actual emissions (as documented and maintained pursuant to paragraph (d)(3)(B)(iii)), by a significant amount (as defined in paragraph (c)(14)) for that regulated NSR pollutant, and if such emissions differ from the preconstruction projection as documented and maintained pursuant to paragraph (d)(3)(B)(iii). Such report shall be submitted to the Department within 60 days after the end of such year. The report shall contain the following:

(i) The name, address and telephone number of the major stationary source;

(ii) The annual emissions as calculated pursuant to paragraph (d)(3)(C); and

(iii) Any other information needed for to make a compliance determination (for example, an explanation as to why the emissions differ from the preconstruction projection).

(4) If a project at a source with a PAL requires construction permitting under Regulation 61–62.1, Section II, "Permit Requirements," the owner or operator shall provide notification of source status as part of the permit application to the Department.

(5) The owner or operator of the source shall make the information required to be documented and maintained pursuant to paragraph (d)(3) for review upon a request for inspection by the Department or the general public pursuant to the requirements contained in 40 CFR 70.4(b)(3)(viii).

(6) Public Participation. Within 30 days after receipt of an application to construct, or any addition to such application, the Department shall advise the applicant of any deficiency in the application or in the information submitted and transmit a copy of such application to EPA. In the event of such a deficiency, the date of receipt of the application shall be, for the purpose of this regulation, the date on which the Department received all required information.

(7) In accordance with Regulation 61–30, Environmental Protection Fees, the Department shall make a final determination on the application. This involves performing the following actions in a timely manner:

(i) For the purposes of this paragraph (d)(7), the time frame for making a final determination shall be consistent with R. 61–30, Environmental Protection Fees, paragraph (H)(2)(c)(iii).

(ii) Make a preliminary determination whether construction should be approved, approved with conditions, or disapproved.

(iii) Make available in at least one location in each region in which the proposed plant or modification would be constructed a copy of all materials the applicant submitted, a copy of the preliminary determination and a copy or summary of other materials, if any, considered in making the preliminary determination.

(iv) Notify the public, by advertisement in a newspaper of general circulation in each region in which the proposed plant or modification would be constructed, of the application, the preliminary determination, the degree of increment consumption that is expected from the plant or modification, and the opportunity for comment at a public hearing as well as written public comment.

(v) Send a copy of the notice of public comment to the applicant, the Administrator of EPA, and to officials and agencies having cognizance over the location where the proposed construction would occur as follows: The chief executives of the city and county where the plant or modification would be located, any comprehensive regional land use planning agency and any State, Federal Land Manager, or Indian Governing Body whose lands may be affected by emissions from the plant or modification.

(vi) Provide opportunity for a public hearing for interested persons to appear and submit written or oral comments on the air quality impact of the plant or modification, alternatives to the plant or modification, the control technology required, and other appropriate considerations.

(vii) Consider all written comments submitted within a time specified in the notice of public comment and all comments received at any public hearing(s) in making a final decision on the approvability of the application. No later than 10 days after the close of the public comment period, the applicant may submit a written response to any comments submitted by the public. The Department shall consider the applicant's response in making a final decision. The Department shall make all comments available for public inspection in the same locations where the Department made available preconstruction information relating to the proposed plant or modification.

(viii) Make a final determination whether construction should be approved, approved with conditions, or disapproved pursuant to this section.

(ix) Notify the applicant in writing of the final determination and make such notification available for public inspection at the same location where the Department made available preconstruction information and public comments relating to the plant or modification.

(x) Notify EPA of every action related to the consideration of the permit.

(e) **Exemptions**. The provisions of paragraph (d) shall not apply to a particular major stationary source or major modification if the source or modification would be a major stationary source or major modification only if fugitive emissions, to the extent quantifiable, are considered in calculating the potential to emit of the stationary source or modification and the source does not belong to any of the following categories:

(A) Coal cleaning plants (with thermal dryers);

(B) Kraft pulp mills;

(C) Portland cement plants;

(D) Primary zinc smelters;

(E) Iron and steel mills;

(F) Primary aluminum ore reduction plants;

(G) Primary copper smelters;

(H) Municipal incinerators capable of charging more than 250 tons of refuse per day;

(I) Hydrofluoric, sulfuric, or nitric acid plants;

(J) Petroleum refineries;

(K) Lime plants;

(L) Phosphate rock processing plants;

(M) Coke oven batteries;

(N) Sulfur recovery plants;

(O) Carbon black plants (furnace process);

(P) Primary lead smelters;

(Q) Fuel conversion plants;

(R) Sintering plants;

(S) Secondary metal production plants;

(T) Chemical process plants - The term chemical process plant shall not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140;

(U) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;

(V) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;

(W) Taconite ore processing plants;

(X) Glass fiber processing plants;

(Y) Charcoal production plants;

(Z) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input; and

(AA) Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the Clean Air Act.

(f) **[Reserved]**

(g) **[Reserved]**

(h) **[Reserved]**

(i) **Actuals PALs**. The provisions in paragraphs (i)(1) through (15) govern actuals PALs.

(1) **Applicability**.

(i) The Department may approve the use of an actuals PAL for any existing major stationary source (except as provided in paragraph (i)(1)(ii)) if the PAL meets the requirements in paragraphs (i)(1) through (15). The term "PAL" shall mean "actuals PAL" throughout paragraph (i).

(ii) The Department shall not allow an actuals PAL for VOC or NO_x for any major stationary source located in an extreme ozone nonattainment area.

(iii) Any physical change in or change in the method of operation of a major stationary source that maintains its total source-wide emissions below the PAL level, meets the requirements in paragraphs (i)(1) through (15), and complies with the PAL permit:

(A) Is not a major modification for the PAL pollutant;

(B) Does not have to be approved through Regulation 61–62.5, Standard 7.1, "Nonattainment New Source Review"; however, will be reviewed through Regulation 61–62.1, Section II A. "Permit Requirements," and

(C) Is not subject to the provisions in paragraph (d)(2)(D) (restrictions on relaxing enforceable emission limitations that the major stationary source used to avoid applicability of the nonattainment major NSR program).

(iv) Except as provided under paragraph (i)(1)(iii)(C), a major stationary source shall continue to comply with all applicable federal or state requirements, emission limitations, and work practice requirements that were established prior to the effective date of the PAL.

(2) **Definitions.** The definitions in paragraphs (i)(2)(i) through (xi) shall apply to actuals PALs consistent with paragraphs (i)(1) through (15). When a term is not defined in these paragraphs, it

shall have the meaning given in paragraph (c) of this regulation; paragraph (b) of Regulation 61–62.5, Standard 7, "Prevention of Significant Deterioration"("Standard 7"); or in the Clean Air Act.

(i) **Actuals PAL** for a major stationary source means a PAL based on the baseline actual emissions (as defined in paragraph (c)(1)) of all emissions units (as defined in paragraph (b)(20) of Standard 7) at the source, that emit or have the potential to emit the PAL pollutant.

(ii) **Allowable emissions** means "allowable emissions" as defined in paragraph (b)(3) of Standard 7, except as this definition is modified according to paragraphs (i)(2)(ii)(A) through (B).

(A) The allowable emissions for any emissions unit shall be calculated considering any emission limitations that are enforceable as a practical matter on the emissions unit's potential to emit.

(B) An emissions unit's potential to emit shall be determined using the definition in paragraph (b)(37) of Standard 7, except that the words "or enforceable as a practical matter" should be added after "federally enforceable."

(iii) **Small emissions unit** means an emissions unit that emits or has the potential to emit the PAL pollutant in an amount less than the significant level for that PAL pollutant, as defined in paragraph (c)(14) or in the Clean Air Act, whichever is lower.

(iv) **Major emissions unit** means:

(A) Any emissions unit that emits or has the potential to emit 100 tpy or more of the PAL pollutant in an attainment area; or

(B) Any emissions unit that emits or has the potential to emit the PAL pollutant in an amount that is equal to or greater than the major source threshold for the PAL pollutant as defined by the Clean Air Act for nonattainment areas. For example, in accordance with the definition of major stationary source in section 182(c) of the Clean Air Act, an emissions unit would be a major emissions unit for VOC if the emissions unit is located in a serious ozone nonattainment area and it emits or has the potential to emit 50 or more tons of VOC per year.

(v) **Plantwide applicability limitation (PAL)** means an emission limitation expressed in tpy, for a pollutant at a major stationary source, that is enforceable as a practical matter and established source-wide in accordance with paragraphs (i)(1) through (i)(15).

(vi) **PAL effective date** generally means the date of issuance of the PAL permit. However, the PAL effective date for an increased PAL is the date any emissions unit which is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

(vii) **PAL effective period** means the period beginning with the PAL effective date and ending 10 years later.

(viii) **PAL major modification** means, notwithstanding paragraphs (c)(6) and (8) (the definitions for major modification and net emissions increase), any physical change in or change in the method of operation of the PAL source that causes it to emit the PAL pollutant at a level equal to or greater than the PAL.

(ix) **PAL permit** means the major NSR permit, the minor NSR permit, or the State operating permit under Regulation 61–62.1 Section II G, or the Title V permit issued by the Department that establishes a PAL for a major stationary source.

(x) **PAL pollutant** means the pollutant for which a PAL is established at a major stationary source.

(xi) **Significant emissions unit** means an emissions unit that emits or has the potential to emit a PAL pollutant in an amount that is equal to or greater than the significant level (as defined in paragraph (c)(13) or in the Clean Air Act, whichever is lower) for that PAL pollutant, but less than the amount that would qualify the unit as a major emissions unit as defined in paragraph (i)(2)(iv).

(3) **Permit application requirements**. As part of a permit application requesting a PAL, the owner or operator of a major stationary source shall submit the following information to the Department for approval:

(i) A list of all emissions units at the source designated as small, significant or major based on their potential to emit. In addition, the owner or operator of the source shall indicate which, if any, Federal or State applicable requirements, emission limitations or work practices apply to each unit.

(ii) Calculations of the baseline actual emissions (with supporting documentation). Baseline actual emissions are to include emissions associated not only with operation of the unit, but also emissions associated with startup, shutdown and malfunction.

(iii) The calculation procedures that the major stationary source owner or operator proposes to use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month as required by paragraph (i)(13)(i).

(4) **General requirements for establishing PALs**.

(i) The Department is allowed to establish a PAL at a major stationary source, provided that at a minimum, the requirements in paragraphs (i)(4)(i)(A) through (G) are met.

(A) The PAL shall impose an annual emission limitation in tpy that is enforceable as a practical matter, for the entire major stationary source. For each month during the PAL effective period after the first 12 months of establishing a PAL, the major stationary source owner or operator shall show that the sum of the monthly emissions from each emissions unit under the PAL for the previous 12 consecutive months is less than the PAL (a 12-month average, rolled monthly). For each month during the first 11 months from the PAL effective date, the major stationary source owner or operator shall show that the sum of the preceding monthly emissions from the PAL effective date for each emissions unit under the PAL is less than the PAL.

(B) The PAL shall be established in a PAL permit that meets the public participation requirements in paragraph (i)(5).

(C) The PAL permit shall contain all the requirements of paragraph (i)(7).

(D) The PAL shall include fugitive emissions, to the extent quantifiable, from all emissions units that emit or have the potential to emit the PAL pollutant at the major stationary source.

(E) Each PAL shall regulate emissions of only one pollutant.

(F) Each PAL shall have a PAL effective period of 10 years.

(G) The owner or operator of the major stationary source with a PAL shall comply with the monitoring, recordkeeping, and reporting requirements provided in paragraphs (i)(12) through (14) for each emissions unit under the PAL through the PAL effective period.

(ii) At no time (during or after the PAL effective period) are emissions reductions of a PAL pollutant, which occur during the PAL effective period, creditable as decreases for purposes of offsets under paragraph (d)(1)(c) unless the level of the PAL is reduced by the amount of such emissions reductions and such reductions would be creditable in the absence of the PAL.

(5) **Public participation requirement for PALs**. PALs for existing major stationary sources shall be established, renewed, or increased through a procedure that is consistent paragraph (d)(6) and (d)(7). The Department must address all material comments before taking final action on the permit.

(6) **Setting the 10-year actuals PAL level**. (i) Except as provided in paragraph (i)(6)(ii), the actuals PAL level for a major stationary source shall be established as the sum of the baseline actual emissions (as defined in paragraph (c)(2)) of the PAL pollutant for each emissions unit at the source; plus an amount equal to the applicable significant level for the PAL pollutant under paragraph (c)(14) or under the Clean Air Act, whichever is lower. When establishing the actuals PAL level, for a PAL pollutant, only one consecutive 24-month period must be used to determine the baseline actual emissions for all existing emissions units. However, a different consecutive 24-month period may be used for each different PAL pollutant. Emissions associated with units that were permanently shut down after this 24-month period must be subtracted from the PAL level. The Department shall specify a reduced PAL level(s) (in tons/yr) in the PAL permit to become effective on the future compliance date(s) of any applicable federal or state regulatory requirement(s) that the Department is aware of prior to issuance of the PAL permit. For instance, if the source owner or operator will be required to reduce emissions from industrial boilers in half from baseline emissions of 60 ppm NO_X to a new rule limit of 30 ppm, then the permit shall contain a future effective PAL level that is equal to the current PAL level reduced by half of the original baseline emissions of such unit(s).

(ii) For newly constructed units (which do not include modifications to existing units) on which actual construction began after the 24-month period, the emissions must be added to the PAL level in an amount equal to the potential to emit of the units.

(7) **Contents of the PAL permit**. The PAL permit must contain, at a minimum, the information in paragraphs (i)(7)(i) through (x).

(i) The PAL pollutant and the applicable source-wide emission limitation in tpy.

(ii) The PAL permit effective date and the expiration date of the PAL (PAL effective period).

(iii) Specification in the PAL permit that if a major stationary source owner or operator applies to renew a PAL in accordance with paragraph (i)(10) before the end of the PAL effective period, then the PAL shall not expire at the end of the PAL effective period. It shall remain in effect until a revised PAL permit is issued by the Department.

(iv) A requirement that emission calculations for compliance purposes include emissions from startups, shutdowns and malfunctions.

(v) A requirement that, once the PAL expires, the major stationary source is subject to the requirements of paragraph (i)(9).

(vi) The calculation procedures that the major stationary source owner or operator shall use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month as required by paragraph (i)(13)(i).

(vii) A requirement that the major stationary source owner or operator monitor all emissions units in accordance with the provisions under paragraph (i)(12).

(viii) A requirement to retain the records required under paragraph (i)(13) on site. Such records may be retained in an electronic format.

(ix) A requirement to submit the reports required under paragraph (i)(14) by the required deadlines.

(x) Any other requirements that the Department deems necessary to implement and enforce the PAL.

(8) **PAL effective period and reopening of the PAL permit**. The requirements in paragraphs (i)(8)(i) and (ii) apply to actuals PALs.

(i) **PAL effective period**. The Department shall specify a PAL effective period of 10 years.

(ii) **Reopening of the PAL permit**.

(A) During the PAL effective period, the Department must reopen the PAL permit to:

(1) Correct typographical/calculation errors made in setting the PAL or reflect a more accurate determination of emissions used to establish the PAL.

(2) Reduce the PAL if the owner or operator of the major stationary source creates creditable emissions reductions for use as offsets under paragraph (d)(2).

(3) Revise the PAL to reflect an increase in the PAL as provided under paragraph (i)(11).

(B) The Department shall have discretion to reopen the PAL permit for the following:

(1) Reduce the PAL to reflect newly applicable federal requirements (for example, NSPS) with compliance dates after the PAL effective date.

(2) Reduce the PAL consistent with any other requirement, that is enforceable as a practical matter, and that the Department may impose on the major stationary source under the State Implementation Plan.

(3) Reduce the PAL if the Department determines that a reduction is necessary to avoid causing or contributing to a NAAQS or PSD increment violation, or to an adverse impact on an air quality related value that has been identified for a Federal Class I area by a Federal Land Manager and for which information is available to the general public.

(C) Except for the permit reopening in paragraph (i)(8)(ii)(A)(1) for the correction of typographical/calculation errors that do not increase the PAL level, all other reopenings shall be carried out in accordance with the public participation requirements of paragraph (i)(5).

(9) **Expiration of a PAL**. Any PAL which is not renewed in accordance with the procedures in paragraph (i)(10) shall expire at the end of the PAL effective period, and the requirements in paragraphs (i)(9)(i) through (v) shall apply.

(i) Each emissions unit (or each group of emissions units) that existed under the PAL shall comply with an allowable emission limitation under a revised permit established according to the procedures in paragraphs (i)(9)(i)(A) through (B).

(A) Within the time frame specified for PAL renewals in paragraph (i)(10)(ii), the major stationary source shall submit a proposed allowable emission limitation for each emissions unit (or each group of emissions units, if such a distribution is more appropriate as decided by the Department) by distributing the PAL allowable emissions for the major stationary source among each of the emissions units that existed under the PAL. If the PAL had not yet been adjusted for an applicable requirement that became effective during the PAL effective period, as required under paragraph (i)(10)(v), such distribution shall be made as if the PAL had been adjusted.

(B) The Department shall decide whether and how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as the Department determines is appropriate.

(ii) Each emissions unit(s) shall comply with the allowable emission limitation on a 12-month rolling basis. The Department may approve the use of monitoring systems (source testing, emission factors, etc.) other than Continuous Emissions Monitoring System (CEMS), Continuous Emissions Rate Monitoring System (CERMS), Predictive Emissions Monitoring System (PEMS), or Continuous Parameter Monitoring System (CPMS) to demonstrate compliance with the allowable emission limitation.

(iii) Until the Department issues the revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as required under paragraph (i)(9)(i)(A), the source shall continue to comply with a source-wide, multi-unit emissions cap equivalent to the level of the PAL emission limitation.

(iv) Any physical change or change in the method of operation at the major stationary source will be subject to the nonattainment major NSR requirements if such change meets the definition of major modification in paragraph (c)(6).

(v) The major stationary source owner or operator shall continue to comply with any State or Federal applicable requirements (BACT, RACT, NSPS, etc.) that may have applied either during the PAL effective period or prior to the PAL effective period except for those emission limitations that had been established pursuant to paragraph (d)(2)(D), but were eliminated by the PAL in accordance with the provisions in paragraph (i)(1)(iii)(C).

(10) **Renewal of a PAL**.

(i) The Department shall follow the procedures specified in paragraph (i)(5) in approving any request to renew a PAL for a major stationary source, and shall provide both the proposed PAL level and a written rationale for the proposed PAL level to the public for review and comment. During such public review, any person may propose a PAL level for the source for consideration by the Department.

(ii) **Application deadline**. A major stationary source owner or operator shall submit a timely application to the Department to request renewal of a PAL. A timely application is one that is submitted at least 6 months prior to, but not earlier than 18 months from, the date of permit expiration. This deadline for application submittal is to ensure that the permit will not expire before the permit is renewed. If the owner or operator of a major stationary source submits a complete application to renew the PAL within this time period, then the PAL shall continue to be effective until the revised permit with the renewed PAL is issued.

(iii) **Application requirements**. The application to renew a PAL permit shall contain the information required in paragraphs (i)(10)(iii)(A) through (D).

(A) The information required in paragraphs (i)(3)(i) through (iii).

(B) A proposed PAL level.

(C) The sum of the potential to emit of all emissions units under the PAL (with supporting documentation).

(D) Any other information the owner or operator wishes the Department to consider in determining the appropriate level for renewing the PAL.

(iv) **PAL adjustment**. In determining whether and how to adjust the PAL, the Department shall consider the options outlined in paragraphs (i)(10)(iv)(A) and (B). However, in no case may any such adjustment fail to comply with paragraph (i)(10)(iv)(C).

(A) If the emissions level calculated in accordance with paragraph (i)(6) is equal to or greater than 80 percent of the PAL level, the Department may renew the PAL at the same level without considering the factors set forth in paragraph (i)(10)(iv)(B); or

(B) The Department may set the PAL at a level that it determines to be more representative of the source's baseline actual emissions, or that it determines to be appropriate considering air quality needs, advances in control technology, anticipated economic growth in the area, desire to reward or encourage the source's voluntary emissions reductions, or other factors as specifically identified by the Department in its written rationale.

(C) Notwithstanding paragraphs (i)(10)(iv)(A) and (B),

(1) If the potential to emit of the major stationary source is less than the PAL, the Department shall adjust the PAL to a level no greater than the potential to emit of the source; and

(2) The Department shall not approve a renewed PAL level higher than the current PAL, unless the major stationary source has complied with the provisions of paragraph (i)(11) (increasing a PAL).

(v) If the compliance date for a state or federal requirement that applies to the PAL source occurs during the PAL effective period, and if the Department has not already adjusted for such requirement, the PAL shall be adjusted at the time of PAL permit renewal or Title V permit renewal, whichever occurs first.

(11) **Increasing a PAL during the PAL effective period.**

(i) The Department may increase a PAL emission limitation only if the major stationary source complies with the provisions in paragraphs (i)(11)(i)(A) through (D).

(A) The owner or operator of the major stationary source shall submit a complete application to request an increase in the PAL limit for a PAL major modification. Such application shall identify the emissions unit(s) contributing to the increase in emissions so as to cause the major stationary source's emissions to equal or exceed its PAL.

(B) As part of this application, the major stationary source owner or operator shall demonstrate that the sum of the baseline actual emissions of the small emissions units, plus the sum of the baseline actual emissions of the significant and major emissions units assuming application of BACT equivalent controls, plus the sum of the allowable emissions of the new or modified emissions unit(s) exceeds the PAL. The level of control that would result from BACT equivalent controls on each significant or major emissions unit shall be determined by conducting a new BACT analysis at the time the application is submitted, unless the emissions unit is currently required to comply with a BACT or LAER requirement that was established within the preceding 10 years. In such a case, the assumed control level for that emissions unit shall be equal to the level of BACT or LAER with which that emissions unit must currently comply.

(C) The owner or operator obtains a major NSR permit for all emissions unit(s) identified in paragraph (i)(11)(i)(A), regardless of the magnitude of the emissions increase resulting from them (that is, no significant levels apply). These emissions unit(s) shall comply with any emissions requirements resulting from the nonattainment major NSR program process (for example, LAER), even though they have also become subject to the PAL or continue to be subject to the PAL.

(D) The PAL permit shall require that the increased PAL level shall be effective on the day any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

(ii) The Department shall calculate the new PAL as the sum of the allowable emissions for each modified or new emissions unit, plus the sum of the baseline actual emissions of the significant and major emissions units (assuming application of BACT equivalent controls as determined in accordance with paragraph (i)(11)(i)(B)), plus the sum of the baseline actual emissions of the small emissions units.

(iii) The PAL permit shall be revised to reflect the increased PAL level pursuant to the public notice requirements of paragraph (i)(5).

(12) **Monitoring requirements for PALs**.

(i) General Requirements.

(A) Each PAL permit must contain enforceable requirements for the monitoring system that accurately determines plantwide emissions of the PAL pollutant in terms of mass per unit of time. Any monitoring system authorized for use in the PAL permit must be based on sound science and meet generally acceptable scientific procedures for data quality and manipulation. Additionally, the information generated by such system must meet minimum legal requirements for admissibility in a judicial proceeding to enforce the PAL permit.

(B) The PAL monitoring system must employ one or more of the four general monitoring approaches meeting the minimum requirements set forth in paragraphs (i)(12)(ii)(A) through (D) and must be approved by the Department.

(C) Notwithstanding paragraph (i)(12)(i)(B), you may also employ an alternative monitoring approach that meets paragraph (i)(12)(i)(A) if approved by the Department.

(D) Failure to use a monitoring system that meets the requirements of this regulation renders the PAL invalid.

(ii) Minimum Performance Requirements for Approved Monitoring Approaches. The following are acceptable general monitoring approaches when conducted in accordance with the minimum requirements in paragraphs (i)(12)(iii) through (ix):

(A) Mass balance calculations for activities using coatings or solvents;

(B) Continuous emissions monitoring system (CEMS);

(C) Continuous parameter monitoring system (CPMS) or Predictive emissions monitoring system (PEMS); and

(D) Emission Factors.

(iii) Mass Balance Calculations. An owner or operator using mass balance calculations to monitor PAL pollutant emissions from activities using coating or solvents shall meet the following requirements:

(A) Provide a demonstrated means of validating the published content of the PAL pollutant that is contained in or created by all materials used in or at the emissions unit;

(B) Assume that the emissions unit emits all of the PAL pollutant that is contained in or created by any raw material or fuel used in or at the emissions unit, if it cannot otherwise be accounted for in the process; and

(C) Where the vendor of a material or fuel, which is used in or at the emissions unit, publishes a range of pollutant content from such material, the owner or operator must use the highest value of the range to calculate the PAL pollutant emissions unless the Department determines there is site-specific data or a site-specific monitoring program to support another content within the range.

(iv) CEMS. An owner or operator using CEMS to monitor PAL pollutant emissions shall meet the following requirements:

(A) CEMS must comply with applicable Performance Specifications found in 40 CFR Part 60, Appendix B; and

(B) CEMS must sample, analyze and record data at least every 15 minutes while the emissions unit is operating.

(v) CPMS or PEMS. An owner or operator using CPMS or PEMS to monitor PAL pollutant emissions shall meet the following requirements:

(A) The CPMS or the PEMS must be based on current site-specific data demonstrating a correlation between the monitored parameter(s) and the PAL pollutant emissions across the range of operation of the emissions unit; and

(B) Each CPMS or PEMS must sample, analyze, and record data at least every 15 minutes, or at another less frequent interval approved by the Department, while the emissions unit is operating.

(vi) Emission factors. An owner or operator using emission factors to monitor PAL pollutant emissions shall meet the following requirements:

(A) All emission factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors' development;

(B) The emissions unit shall operate within the designated range of use for the emission factor, if applicable; and

(C) If technically practicable, the owner or operator of a significant emissions unit that relies on an emission factor to calculate PAL pollutant emissions shall conduct validation testing to determine a site-specific emission factor within 6 months of PAL permit issuance, unless the Department determines that testing is not required.

(vii) A source owner or operator must record and report maximum potential emissions without considering enforceable emission limitations or operational restrictions for an emissions unit during any period of time that there is no monitoring data, unless another method for determining emissions during such periods is specified in the PAL permit.

(viii) Notwithstanding the requirements in paragraphs (i)(12)(iii) through (vii), where an owner or operator of an emissions unit cannot demonstrate a correlation between the monitored parameter(s) and the PAL pollutant emissions rate at all operating points of the emissions unit, the Department shall, at the time of permit issuance:

(A) Establish default value(s) for determining compliance with the PAL based on the highest potential emissions reasonably estimated at such operating point(s); or

(B) Determine that operation of the emissions unit during operating conditions when there is no correlation between monitored parameter(s) and the PAL pollutant emissions is a violation of the PAL.

(ix) Re-validation. All data used to establish the PAL pollutant must be re-validated through performance testing or other scientifically valid means approved by the Department. Such testing must occur at least once every 5 years after issuance of the PAL.

(13) **Recordkeeping requirements**.

(i) The PAL permit shall require an owner or operator to retain a copy of all records necessary to determine compliance with any requirement of paragraph (i) and of the PAL, including a determination of each emissions unit's 12-month rolling total emissions, for 5 years from the date of such record.

(ii) The PAL permit shall require an owner or operator to retain a copy of the following records for the duration of the PAL effective period plus 5 years:

(A) A copy of the PAL permit application and any applications for revisions to the PAL; and

(B) Each annual certification of compliance pursuant to Title V and the data relied on in certifying the compliance.

(14) **Reporting and notification requirements**. The owner or operator shall submit semi-annual monitoring reports and prompt deviation reports to the Department in accordance with the applicable Title V operating permit program. The reports shall meet the requirements in paragraphs (i)(14)(i) through (iii).

(i) Semi-Annual Report. The semi-annual report shall be submitted to the Department within 30 days of the end of each reporting period. This report shall contain the information required in paragraphs (i)(14)(i)(A) through (G).

(A) The identification of owner and operator and the permit number.

(B) Total annual emissions (tons/year) based on a 12-month rolling total for each month in the reporting period recorded pursuant to paragraph (i)(13)(i).

(C) All data relied upon, including, but not limited to, any Quality Assurance or Quality Control data, in calculating the monthly and annual PAL pollutant emissions.

(D) A list of any emissions units modified or added to the major stationary source during the preceding 6-month period.

(E) The number, duration, and cause of any deviations or monitoring malfunctions (other than the time associated with zero and span calibration checks), and any corrective action taken.

(F) A notification of a shutdown of any monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the pollutant or the number determined by method included in the permit, as provided by paragraph (i)(12)(vii).

(G) A signed statement by the responsible official (as defined by Regulation 61–62.70, Title V Operating Permit Program) certifying the truth, accuracy, and completeness of the information provided in the report.

(ii) Deviation report. The major stationary source owner or operator shall promptly submit reports of any deviations or exceedance of the PAL requirements, including periods where no monitoring is available. A report submitted pursuant to 40 CFR 70.6(a)(3)(iii)(B) shall satisfy this reporting requirement. The deviation reports shall be submitted within the time limits prescribed by the applicable program implementing 40 CFR 70.6(a)(3)(iii)(B). The reports shall contain the following information:

(A) The identification of owner and operator and the permit number;

(B) The PAL requirement that experienced the deviation or that was exceeded;

(C) Emissions resulting from the deviation or the exceedance; and

(D) A signed statement by the responsible official (as defined by the applicable Title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.

(iii) Re-validation results. The owner or operator shall submit to the Department the results of any re-validation test or method within 3 months after completion of such test or method.

(15) **Transition requirements**.

(i) The Department may not issue a PAL that does not comply with the requirements in paragraphs (aa)(1) through (15) after the date these provisions become effective.

(ii) The Department may supersede any PAL which was established prior to the date of approval of the plan by the Administrator with a PAL that complies with the requirements of paragraphs (i)(1) through (15).

(j) If any provision of this regulation, or the application of such provision to any person or circumstance, is held invalid, the remainder of this regulation, or the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby.

HISTORY: Amended by State Register Volume 36, Issue No. 5, eff May 25, 2012 (errata); State Register Volume 36, Issue No. 9, eff September 28, 2012 (errata); State Register Volume 27, Issue No. 4, eff April 26, 2013; State Register Volume 39, Issue No. 6, Doc. No. 4481, eff June 26, 2015; State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

STANDARD NO. 8

TOXIC AIR POLLUTANTS

I. GENERAL APPLICABILITY.

This Standard is applicable to sources of toxic air pollutants as provided below. This Standard does not apply to fuel burning sources which burn only virgin fuel or specification used oil. The terms in this Standard are used as defined in South Carolina Air Pollution Control Regulations and Standards Regulation 62.1, Section I, "Definitions". The effective date of this Standard is June 28, 1991.

A. EXISTING SOURCES:

(1) Any person with an existing source of any toxic air pollutant shall be required to show compliance with this standard not later than two years after the effective date of this standard. These sources must provide the Department with the name and Chemical Abstract Service(CAS) number of the chemical, stack parameters, and emission rate data. If potential emissions of any single toxic air pollutant are 1000 lbs/month or greater an operating permit will be required. An operating permit may or may not be required for sources with emissions less than 1000 lbs/month.

This determination will take into consideration, but not be limited to, the nature and amount of the pollutants, location, proximity to commercial establishments and residences.

(2) Any person holding an operating permit prior to the effective date of this standard shall be required to demonstrate compliance with this standard for all toxic air pollutant emissions prior to renewal of the operating permit. The compliance demonstration must include all sources of toxic air pollutants at the facility, including sources not previously subject to permit requirements. Methods for compliance demonstration may be found in the *Air Quality Modeling Guidelines* as prepared pursuant to paragraph II(A) of this regulation.

B. NEW SOURCES: Any person who constructs, alters, or adds to a source of toxic air pollutants after the effective date of this standard, shall comply with this standard. These sources must provide the Department with the name and Chemical Abstract Service (CAS) number of the chemical, stack parameters, and emission rate data. If potential emissions of any single toxic air pollutant are 1000 lbs/month or greater a construction permit will be required. A permit may or may not be required for sources with emissions less than 1000 lbs/month; however, all sources are required to demonstrate compliance with this standard for all toxic emissions. This determination will take into consideration, but will not be limited to, the nature and amount of the pollutants, location, proximity to residences and commercial establishments. Methods for compliance demonstration may be found in the Air Quality Modeling Guidelines as prepared pursuant to paragraph II(A) of this regulation.

C. This standard will not supersede any requirements imposed by Federal National Emission Standards for Hazardous Air Pollutants nor any special permit conditions, unless this standard would impose a more restrictive emission limit.

D. Facilities are exempt from the requirements of this standard as follows:

(1) Affected sources that emit Hazardous Air Pollutants (HAPs) (42 U.S.C. 112(b)) and are subject to one or more Federal Maximum Achievable Control Technology (MACT) standards (42 U.S.C. 112(d), (g), (h), or (j)) are exempt. This exemption shall only apply to toxic air pollutants regulated by this standard that are also federally regulated HAPs, except as provided below. This exemption shall apply once the emission sources are in compliance with a proposed or final MACT standard. Affected source, for the purposes of this part, means the stationary source, the group of stationary sources, or the portion of a stationary source that is regulated by a relevant standard or other requirement established pursuant to Section 112 of the Act (42 U.S.C 7401 et seq.). Each relevant standard will define the "affected source" for the purposes of that standard.

(2) Emission points that emit HAPs which are not exempt from this standard according to (1) above are granted an exemption once a federally required Residual Risk analysis (42 U.S.C. section 112(f)) that accounts for all facility-wide HAPs has been completed. Such emission points may be exempted prior to a Residual Risk analysis on a case-by-case basis after review by the Department. Exemptions may be granted in cases where off-site impacts from HAP emissions are significantly below levels established by this standard (less than 50% of the standard).[1]

(3) Sources that emit toxic air pollutants regulated by this standard which are not federally regulated HAPs can request an exemption from this standard on a case-by-case basis after review by the Department. Exemptions may be granted in cases where non-HAP emissions are controlled (reduced) by MACT controls applied to reduce HAP emissions and in cases where off-site impacts from non-HAP emissions are significantly below levels established by this standard (less than 50% of the standard).[1]

E. Additions and deletions to the list of Toxic Air Pollutants may be made following normal administrative procedures.

II. TOXIC AIR EMISSIONS.

A. The Department will prepare Air Quality Modeling Guidelines to provide assistance to facilities concerning compliance demonstrations and modeling issues. These guidelines may be updated periodically as new models and/or modeling procedures are developed by the Environmental Protection Agency. Detailed procedures for showing compliance with this standard may be found in the Air Quality Modeling Guidelines. Required modeling must use the latest versions of

[1] If future construction/modifications cause off-site impacts to exceed 50% of the appropriate standard, the exemption is no longer valid.

United States Environmental Protection Agency air dispersion models to determine the concentration of the toxic air pollutant in the ambient air at or beyond the plant property line, using 24–hour averaging.

B. The Bureau may provide modeling assistance to facilities that are designated as "small business stationary source" as defined in the Federal Clean Air Act (42 U.S.C. Sect. 507 (c)). However, the facility is still responsible for submitting the emission and facility data needed for the modeling analyses. Nothing in this section precludes a facility from conducting its own modeling if desired by the facility.

C. Changes in the following parameters will require a review by the facility to determine if they have an adverse impact on the compliance demonstration:

(1) Decrease in stack height

(2) Decrease in stack exit temperature

(3) Increase in stack diameter

(4) Decrease in stack exit velocity

(5) Increase in building height or building additions at the facility

(6) Increase in emission rates

(7) Decrease in distance between stack and property line

(8) Changes in stack orientation from vertical

(9) Installation of a rain cap that impedes vertical flow

Exemptions to this requirement may be granted on a case-by-case basis. A revised compliance demonstration will not be required when air dispersion modeling software programs are updated.

D. The air toxics, emission rates, and other information used in the compliance determination will be listed in Attachment A — Modeling Parameters Used in Compliance Determination of the construction and/or operating permit for the facility. Changes that increase maximum modeled concentrations may be administratively incorporated in these permits provided a compliance demonstration using these changes is submitted to the Department. Variations from the input parameters shall not constitute a violation unless the maximum allowable ambient concentrations identified in this standard are exceeded.

E. The allowable ambient air concentrations of a toxic air pollutant beyond the plant property line as determined by modeling under Part A shall be limited to the value listed in the following table. The pollutants are divided into three categories based on chronic exposure as follows: Category 1: Low Toxicity – Those pollutants which cause readily reversible changes which disappear after exposure ends. Category 2: Moderate Toxicity – Those pollutants which may cause chronic reversible or irreversible changes that are not severe enough to result in death or permanent injury. Category 3: High Toxicity – Those pollutants which may cause chronic effects that result in death or permanent injury after very short exposure to small quantities.

Chemical Name	CAS Number	Category	Maximum Allowable 24-Hour Average Concentration ($\mu g/m^3$)*
Acetaldehyde	75–07–0	2	1800.00
Acetamide	60–35–5	3	+
Acetic Anhydride	108–24–7	1	500.00
Acetonitrile	75–05–8	1	1750.00
Acetophenone	98–86–2	3	+
2-Acetylaminofluorene	53–96–3	3	+
Acrolein	107–02–8	3	1.25
Acrylamide	79–06–1	2	0.30
Acrylic Acid	79–10–7	3	147.50
Acrylonitrile	107–13–1	3	22.50
Aldicarb	116–06–3	2	6.00

Chemical Name	CAS Number	Category	Maximum Allowable 24-Hour Average Concentration ($\mu g/m^3$)*
Allyl Chloride	107–05–1	2	30.00
p-Aminodiphenyl (4-Aminobiphenyl)	92–67–1	3	0.00
Ammonium Chloride	12125–02–9	1	250.00
Aniline	62–53–3	3	50.00
o-Anisidine	90–04–0	3	2.50
p-Anisidine	104–94–9	3	2.50
Antimony Compounds	>	1	2.50
Arsenic Pentoxide	1303–28–2	3	1.00
Arsenic	7440–38–2	3	1.00
Benzene	71–43–2	3	150.00
Benzidine	92–87–5	3	0.00
Benzotrichloride	98–07–7	3	300.00
Benzyl Chloride	100–44–7	3	25.00
Beryllium Oxide	1304–56–9	3	0.01
Beryllium Sulfate	13510–49–1	3	0.01
Beryllium	7440–41–7	3	0.01
Biphenyl	92–52–4	3	6.00
Bis(Chloromethyl) Ether	542–88–1	3	0.03
Bis(2-ethylhexyl)phthalate (DEHP)	117–81–7	3	25.00
Bromoform	75–25–2	3	25.85
1,3-Butadiene	106–99–0	3	110.50
1-Butanethiol (n-Butyl Mercaptan)	109–79–5	2	15.00
n-Butylamine	109–73–9	3	75.00
Cadmium Oxide	1306–19–0	3	0.25
Cadmium Sulfate	10124–36–4	3	0.20
Cadmium	7440–43–9	3	0.25
Calcium Cyanamide	156–62–7	3	2.50
Caprolactam, vapor	105–60–2	1	500.00
Caprolactam, dust	105–60–2	1	25.00
Captan	133–06–2	3	25.00
Carbaryl	63–25–2	3	25.00
Carbon Disulfide	75–15–0	3	150.00
Carbon Tetrachloride	56–23–5	3	150.00
Carbonyl Sulfide	463–58–1	3	12250.00
Catechol	120–80–9	3	297.00
Chloramben	133–90–4	3	+
Chlordane	57–74–9	3	2.50
Chlorine	7782–50–5	1	75.00
Chloroacetic Acid	79–11–8	3	900.00
2-Chloroacetophenone	532–27–4	1	7.50
Chlorobenzene	108–90–7	3	1725.00
Chlorobenzilate	510–15–6	3	+
Chloroform	67–66–3	3	250.00
Chloromethyl Methyl Ether	107–30–2	3	+
p-Chloronitrobenzene	100–00–5	3	5.00
Chloroprene	126–99–8	3	175.00
Chromium (+6) Compounds	>	3	2.50
Cobalt Compounds	>	3	0.25
Coke Oven Emissions	>	3	+
Cresols/cresylic acid and mixture	1319–77–3	3	220.00
m-Cresol	108–39–4	3	110.50

Chemical Name	CAS Number	Category	Maximum Allowable 24-Hour Average Concentration (μg/m³)*
o-Cresol	95–48–7	3	110.50
p-Cresol	106–44–5	3	110.50
Cumene	98–82–8	2	9.00 #
Cyanamide	420–04–2	1	50.00
Cyanic Acid	420–05–3	1	500.00
Cyanide	57–12–5	1	125.00
Cyanide compounds[1]	>	1	+
Cyanoacetamide	107–91–5	1	125.00
Cyanogen	460–19–5	1	500.00
2,4-D,salts and esters	94–75–7	3	50.00
DDE	3547–04–4	3	+
Diazomethane	334–88–3	3	2.00
Dibenzofuran	132–64–9	3	+
1,2-Dibromo-3-chloropropane	96–12–8	3	0.05
Dibutylphthalate	84–74–2	3	25.00
p-Dichlorobenzene	106–46–7	2	4500.00
3,3 -Dichlorobenzidine	91–94–1	3	0.15
1,3-Dichloropropene	542–75–6	3	20.00 #
Dichlorvos	62–73–7	3	4.52
Diethanolamine	111–42–2	2	129.00
n,n-Diethylaniline (n,n-Dimethylaniline)	121–69–7	2	250.00
Diethyl Phthalate	84–66–2	3	25.00
Diethyl Sulfate	64–67–5	3	+
Diisodecyl Phthalate	2671–40–0	2	50.00
3,3-Dimethoxybenzidine	119–90–4	3	0.30
3,3′-Dimethyl Benzidine	119–93–7	3	+
Dimethyl Carbamoyl Chloride	79–44–7	3	+
Dimethyl Formamide	68–12–2	2	300.00
1,1-Dimethyl Hydrazine	57–14–7	3	5.00
1,2-Dimethyl Hydrazine	540–73–8	3	5.00
Dimethyl Phthalate	131–11–3	3	25.00
Dimethyl Sulfate	77–78–1	3	2.50
4-Dimethylaminoazobenzene	60–11–7	3	125.00
m-Dinitrobenzene	99–65–0	2	10.00
4,6-Dinitro-o-cresol and salts	534–52–1	2	2.00
2,4-Dinitrophenol	51–28–5	3	+
2,4-Dinitrotoluene	121–14–2	3	1.50
Dioctyl Phthalate	117–84–0	2	50.00
1,4-Dioxane	123–91–1	3	450.00
1,2-Diphenylhydrazine	122–66–7	3	+
Epichlorohydrin	106–89–8	3	50.00
1,2-Epoxybutane	106–88–7	3	+
Ethanethiol	75–08–1	2	10.00
Ethanolamine	141–43–5	1	200.00
Ethyl Acrylate	140–88–5	3	102.50
Ethyl Benzene	100–41–4	2	4350.00
Ethyl Chloride	75–00–3	2	26400.00
Ethylene Dibromide	106–93–4	2	770.00
Ethylene Dichloride	107–06–2	3	200.00
Ethylene Glycol	107–21–1	3	650.00

Chemical Name	CAS Number	Category	Maximum Allowable 24-Hour Average Concentration ($\mu g/m^3$)*
Ethylene Oxide	75–21–8	3	10.00
Ethylene Thiourea	96–45–7	3	+
Ethylene Imine	151–56–4	3	5.00
Ethylidene Dichloride	75–34–3	3	2025.00
Formaldehyde	50–00–0	2	15.00
Formamide	75–12–7	1	750.00
Formic Acid	64–18–6	1	225.00
Furfural	98–01–1	1	200.00
Furfuryl Alcohol	98–00–0	2	400.00
Glycidaldehyde	765–34–4	3	75.00
Glycol Ethers[2] (mono- and di- ethers of diethylene glycol or triethylene glycol)	>	1	+
Glycol Ethers[2] (mono- and di- ethers of ethylene glycol)	>	3	+
Heptachlor	76–44–8	3	2.50
Hexachlorobenzene	118–74–1	3	+
Hexachlorobutadiene	87–68–3	3	l.20
Hexachlorocyclohexane (multiple isomers)	608–73–1	2	5.00
Hexachlorocylopentadiene	77–47–4	3	0.50
Hexachloroethane	67–72–1	3	48.50
Hexachloronaphthalene	1335–87–1	3	1.00
Hexamethylene-1,6-diisocyanate	822–06–0	2	0.34
Hexamethylphosphoramide	680–31–9	3	l4.50
Hexane	110–54–3	3	900.00
Hydrazine	302–01–2	3	0.50
Hydrochloric Acid	7647–01–0	1	175.00
Hydrogen Cyanide	74–90–8	1	250.00
Hydrogen Fluoride (HF)	7664–39–3	3	2.05
Hydrogen Sulfide	7783–06–4	2	140.00
Hydroquinone	123–31–9	2	20.00
Isophorone	78–59–1	2	250.00
Isopropylamine	75–31–0	1	300.00
Kepone (Chlordecone)	143–50–0	3	0.00
Ketene	463–51–4	3	4.50
Lead Arsenate	7645–25–2	3	0.75
Lead (+2) Arsenate	7784–40–9	3	0.75
Lindane	58–89–9	3	2.50
Malathion	121–75–5	2	100.00
Maleic Anhydride	108–31–6	2	10.00
Manganese Compounds	>	3	25.00
Mercury	7439–97–6	3	0.25
Methanol	67–56–1	3	1310.00
Methoxychlor	72–43–5	3	50.00
Methyl Bromide	74–83–9	3	100.00
Methyl Chloride	74–87–3	3	515.00
Methyl Chloroform (1,1,1-Trichloroethane)	71–55–6	3	9550.00
Methylene Biphenyl Isocyanate	101–68–8	2	2.00
4,4-Methylene Bis(2-chloroaniline)	101–14–4	3	1.10
4,4-Methylenedianiline	101–77–9	3	4.00

Chemical Name	CAS Number	Category	Maximum Allowable 24-Hour Average Concentration (μg/m³)*
Methyl Ethyl Ketone (2-Butanone)	78–93–3	1	14750.00
Methyl Hydrazine	60–34–4	3	1.75
Methyl Iodide	74–88–4	3	58.00
Methyl Isobutyl Ketone	108–10–1	2	2050.00
Methyl Isocyanate	624–83–9	3	0.23
Methyl Mercaptan	74–93–1	2	10.00
Methyl Methacrylate	80–62–6	1	10250.00
Methylamine	74–89–5	1	300.00
Methylene Chloride	75–09–2	1	8750.00
Methyl-t-Butyl Ether	1634–04–4	1	+
Mineral Fibers, Fine[3]	>	3	+
Mineral Oil Mist (Paraffin Oil)	8012–95–1	3	25.00
Mirex	2385–85–5	3	4500.00
Naphthalene	91–20–3	1	1250.00
a-Naphthylamine	134–32–7	3	0.00
b-Naphthylamine	91–59–8	3	0.00
Nickel Carbonyl	13463–39–3	3	1.75
Nickel Oxide	1313–99–1	3	5.00
Nickel Sulfate	7786–81–4	3	5.00
Nickel	7440–02–0	3	0.50
Nitric Acid	7697–37–2	1	125.00
p-Nitroaniline	100–01–6	3	15.00
Nitrobenzene	98–95–3	3	25.00
4-Nitrobiphenyl	92–93–3	3	0.00
Nitrogen Mustard	51–75–2	3	0.00
Nitroglycerin	55–63–0	2	5.00
p-Nitrophenol	100–02–7	3	0.00
1-Nitropropane	108–03–2	1	2250.00
2-Nitropropane	79–46–9	3	182.00
p-Nitrosophenol	104–91–6	3	0.00
n-Nitroso-n-methylurea	684–93–5	3	+
n-Nitrosodimethylamine	62–75–9	3	0.00
n-Nitrosomorpholine	59–89–2	3	5000.00
p-Nitrotoluene	99–99–0	3	5.50
Octachloronaphthalene	2234–13–1	3	0.50
Oxalic Acid	144–62–7	2	10.00
Paraquat	1910–42–5	3	0.50
Parathion	56–38–2	3	0.50
Pentachloronitrobenzene (Quintobenzene)	82–68–8	3	+
Pentachlorophenol	87–86–5	2	5.00
Phenol	108–95–2	2	190.00
p-Phenylenediamine	106–50–3	2	1.00
Phenylhydrazine	100–63–0	2	200.00
Phosgene (Carbonyl Chloride)	75–44–5	2	4.00
Phosphine	7803–51–2	3	2.09
Phosphoric Acid	7664–38–2	1	25.00
Phosphorus	7723–14–0	2	0.50
Phthalic Anhydride	85–44–9	3	30.30
Picric Acid	88–89–1	2	1.00
Polychlorinated Biphenyls (PCB)	>	3	2.50

Chemical Name	CAS Number	Category	Maximum Allowable 24-Hour Average Concentration (μg/m³)*
(multiple compounds)			
Polycyclic Organic Matter[4]	>	3	160.00
1,3-Propane Sultone	1120–71–4	3	+
b-Propiolactone	57–57–8	3	7.50
Propionaldehyde	123–38–6	1	+
Propoxur	114–26–1	3	2.50
Propylene Dichloride	78–87–5	3	1750.00
Propylene Oxide	75–56–9	3	250.00
1,2-Propylenimine	75–55–8	3	23.35
Pyrethrin I	121–21–1	3	25.00
Pyrethrin II	121–29–9	3	25.00
Pyrethrum	8003–34–7	2	50.00
Quinoline	91–22–5	3	+
Quinone	106–51–4	3	2.00
Rotenone	83–79–462	2	50.00
Selenium Compounds	>	3	1.00
Sodium Hydroxide[5]	1310–73–2	1	50.00
Styrene	100–42–5	1	5325.00
Styrene Oxide	96–09–3	3	+
Sulfuric Acid	7664–93–9	2	10.00
Tetrachlorinated Dibenzo-p-dioxins	1746–01–6	3	0.00
1,1,2,2-Tetrachloroethane (Acetylene Tetrachloride)	79–34–5	3	35.00
Tetrachloroethylene (Perchloroethylene)	127–18–4	2	3350.00
Titanium Tetrachloride	7550–45–0	1	2500.00
Toluene	108–88–3	3	2000.00
2,4-Toluenediamine	95–80–7	3	+
Toluene Diisocyanate	26471–62–5	2	0.40
Toluene-2,4- diisocyanate	584–84–9	2	0.40
o-Toluidine	95–53–4	3	43.85
Toxaphene	8001–35–2	3	2.50
1,2,4-Trichlorobenzene	120–82–1	2	400.00
1,1,2-Trichloroethane	79–00–5	3	273.00
Trichloroethylene	79–01–6	1	6750.00
2,4,5-Trichlorophenol	95–95–4	3	+
2,4,6-Trichlorophenol	88–06–2	3	+
Triethylamine	121–44–8	3	207.00
Trifluralin	1582–09–8	3	+
2,2,4-Trimethylpentane	540–84–1	1	8750.00
Urethane (Carbamic Acid Ethyl Ester)	51–79–6	2	5000.00
Vinyl Acetate	108–05–4	3	176.00
Vinyl Bromide	593–60–2	3	100.00
Vinyl Chloride	75–01–4	3	50.00
Vinyl Fluoride	75–02–5	2	19.00
Vinylidene chloride	75–35–4	3	99.00
Xylene	1330–20–7	2	4350.00
m-Xylene	108–38–3	2	4350.00
o-Xylene	95–47–6	2	4350.00
p-Xylene	106–42–3	2	4350.00
Xylidine	1300–73–8	3	50.00

* For the purpose of this standard, these values shall be rounded to the nearest hundredth of a $\mu g/m^3$. For example, a test or modeled value of 0.005 through 0.01 would be rounded to 0.01 but values less than 0.005 would be rounded to 0.00.

+ to be determined

> No CAS number.

Verified reference concentration(RfC) established by the United States Environmental Protection Agency.

1 XCN where X = H + or any other group where a formal dissociation may occur. For example KCN or $Ca(CN)_2$.

2 Includes mono- and di-ethers of ethylene glycol, diethylene glycol and triethylene glycol $R–(OCH_2CH_2)_n–OR'$, where:

n = 1, 2, or 3

R = alkyl or aryl groups

R'= R, H, or groups which, when removed, yield glycol ethers with the structure: $R–(OCH_2CH)_n–OH$

Polymers are excluded from the glycol category.

Mono– and di-ethers of ethylene glycol are category 3 air toxics; mono– and di-ethers of diethylene glycol and triethylene glycol are category 1 air toxics.

3 Includes mineral fiber emissions from facilities manufacturing or processing glass, rock, and slag fibers (or other mineral derived fibers) of average diameter 1 micrometer or less.

4 Includes organic compounds with more than one benzene ring and which have a boiling point greater than or equal to 100 ° C.

5 The use of sodium hydroxide in a scrubber for air pollution control purposes is exempt from this standard.

Note: For all listings above that contain the word "compounds" and for glycol ethers the following applies: Unless otherwise specified, these listings are defined as including any unique chemical substance that contains the named element (i.e. antimony, arsenic, etc.) as part of that chemical infrastructure

III. CONTROLS.

If modeling by the source indicates that the maximum allowable concentration is exceeded, the Department may allow approved, site specific modeling/ambient monitoring on a case-by-case basis. If this approach does not demonstrate that the public health will be adequately protected, the source will be required to reduce emissions by implementing controls, altering the process, or limiting production.

IV. SOURCE TEST REQUIREMENTS.

The owner or operator of all sources of toxic air pollutants shall conduct such tests as required by the Department to verify toxic air pollutant emission rates. An owner or operator shall ensure that source tests are conducted in compliance with the requirements of R.61–62.1, Section IV, Source Tests.

V. RECORDKEEPING.

A. Copies of all records and reports required under this Standard shall be available for inspection by the Department during normal business hours and copies shall be provided to the Department within ten working days of receipt of a written request by the Department.

B. Copies of all records and reports required under this Standard shall be maintained by the owner/operator for three years after the date on which the record was made or the report submitted.

HISTORY: Amended by State Register Volume 39, Issue No. 6, Doc. No. 4481, eff June 26, 2015.

Editor's Note

Scrivener errors corrected in 2012.

61–62.6. Control of Fugitive Particulate Matter.

SECTION I—CONTROL OF FUGITIVE PARTICULATE MATTER IN NONATTAINMENT AREAS

(A) No person shall cause or permit any fugitive particulate matter to go beyond property boundaries below a height of 150 feet. Necessary precautions shall be taken to prevent such occurrences and be in accordance with good dust control practices as determined by the Department taking into consideration economic reasonableness, the seriousness of the dust conditions, and anticipated benefits; and may include but not be limited to the following:

1. Use, where possible, of water or chemicals for control of dust in demolition or construction operations, the grading of roads, or the clearing of land;

2. Application of asphalt (cut back asphalt is prohibited), water, or suitable chemicals on dirt roads, material stockpiles, and other surfaces which can give rise to airborne dust;

3. Installation and use of hoods, scrubbers, fabric filters or other dust cleaning devices where feasible and effective to capture and contain fugitive particulate matter while handling dusty materials. Adequate containment methods shall be employed during sandblasting or other similar operations;

4. The paving of roadways and the prompt removal of earth or other materials from paved streets that have been deposited by vehicular traffic, earth moving equipment, water erosion, or other means;

5. Stabilization of long term storage piles by vegetation or appropriate chemicals and reclamation of mined areas;

6. Modifying the process or materials handling system;

7. Use of a slurry to move material if feasible;

8. Use of traveling booms, telescopic chutes, rotary stackers, adequate shrouding of openings in containers to be filled;

9. Avoid use of front end loader in handling dry dusty materials unless there is no other reasonable option;

10. Impose strict slow speed limits for vehicular traffic on plant property or construction/destruction sites;

11. Ensure proper loading of trucks, trailers, front end loaders, etc., to prevent spillage on paved roadways.

(B) No visible dust in excess of ten (10) percent opacity will be allowed to come from transfer points of any conveyor system for raw material or finished product unless the source owner can demonstrate to the satisfaction of the Department that such control is not feasible.

(C) No new source will be granted a permit to construct in a nonattainment area for primary standards if any part of materials handling of dry and dusty material is to be done with a front end loader, dump truck, or similar type handling which permits excessive dust to escape to the ambient air.

SECTION II—CONTROL OF FUGITIVE PARTICULATE MATTER IN PROBLEM AREAS

(A) For the purpose of this section, problem areas are defined as areas in which ambient levels of particulate matter are at or near primary standards; areas where an undesirable level of air pollution exists; areas in which excessive levels of fugitive particulate matter result in complaints from the general public; areas in which fugitive particulate matter is determined to be impacting upon a nonattainment area.

(B) No person shall cause or permit any fugitive particulate matter that can reasonably be controlled to escape into the ambient air. Such reasonable control shall be in accordance with recognized and generally accepted methods as determined by the Department and may include, but not be limited to, the following:

1. Restrictions as applicable and contained in Section I;

2. Enclosure of any dust generating process to prevent fugitive emissions/dust; and

3. Modification or reduction of materials handling to minimize the generation of dust.

SECTION III—CONTROL OF FUGITIVE PARTICULATE MATTER STATEWIDE

(A) Emissions of fugitive particulate matter shall be controlled in such a manner and to the degree that it does not create an undesirable level of air pollution.

(B) Restrictions and requirements may be contained in operating permits on a case-by-case basis that are deemed appropriate and necessary to control fugitive particulate matter in accordance with reasonably available control technology.

(C) No source shall use any method of materials handling which will generate fugitive particulate matter that is not fully described in the permit application.

(D) Volatile organic compounds shall not be used for dust control purposes. Oil treatment is also prohibited.

SECTION IV.—EFFECTIVE DATE

The effective date of this regulation is July 1, 1979.

HISTORY: Amended by State Register Volume 36, Issue No. 12, eff December 28, 2012 (errata); State Register Volume 37, Issue No. 12, eff December 27, 2013; State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

61–62.7. Good Engineering Practice Stack Height.

SECTION I. GENERAL

The purpose of this regulation is to prevent the use of tall stacks or other dispersion techniques from affecting the emissions limitations required to meet National Ambient Air Quality Standards (NAAQS) or Prevention of Significant Deterioration (PSD) increments. This regulation does not, in any manner, restrict the actual physical stack height nor the actual use of dispersion techniques at any source. Rather, it sets limits on the maximum credit for stack height and other dispersion techniques which can be used in ambient air quality modeling for the purpose of setting an emission limitation and calculating the air quality impact of a source. Sources requiring modeling must use Good Engineering Practice (GEP) stack height. Credit for dispersion techniques is prohibited.

SECTION II. APPLICABILITY

This regulation applies to all stacks excluding flares which were not "in existence" before December 31, 1970. The regulation also applies to stack heights or dispersion techniques at sources which were reconstructed or under major modification after December 31, 1970.

SECTION III. DEFINITIONS AND CONDITIONS

For the purpose of determining GEP stack heights and other parameters applicable to modeling, the following definitions and conditions apply.

A. Stack "In Existence"—A stack on which the owner or operator had (1) begun, or caused to begin, a continuous program of physical on-site construction or (2) entered into binding agreements or contractual obligations which could not be canceled or modified without substantial loss to the owner or operator to undertake a program of construction to be completed in a reasonable time.

B. "Dispersion Technique"

1. Any technique which attempts to affect the concentration of a pollutant in the ambient air by:

a. Using that portion of a stack which exceeds GEP stack height;

b. Varying the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant; or

c. Increasing final exhaust gas plume rise by manipulating source process parameters, exhaust gas parameters, stack parameters, or combining exhaust gases from several existing stacks into one stack; or other selective handling of exhaust gas streams so as to increase the exhaust gas plume rise.

2. Paragraphs B.1.a, B.1.b, and B.1.c above do not include:

a. The reheating of a gas stream, following use of a pollution control system for the purpose of returning the gas to the temperature at which it was originally discharged from the source generating the gas stream;

b. The merging of exhaust gas streams where:

(i) The source owner or operator demonstrates that the process was originally designed and constructed with such merged gas streams;

(ii) After July 8, 1985, such merging is part of a change in operation at the plant that includes the installation of pollution controls and is accompanied by a net reduction in the allowable emissions of a pollutant. This exclusion from the definition of "dispersion technique" applies only to the emission limitation for the pollutant affected by such change in operation; or

(iii) Before July 8, 1985, such merging was part of a change in operation at the plant that included the installation of emissions control equipment or was carried out for sound economic or engineering reasons. Where there was an increase in the emission limitation or, in the event that no emission limitation was in existence prior to the merging, an increase in the quantity of

pollutants actually emitted prior to the merging, the Department shall presume that merging was significantly motivated by an intent to gain emissions credit for greater dispersion. Without a demonstration by the source owner or operator that merging was not significantly motivated by such intent, the Department shall deny credit for the effects of such merging in calculating the allowable emissions for the source;

c. Smoke management in agricultural or silvicultural prescribed burning programs;

d. Episodic restrictions on residential woodburning and open burning; or

e. Techniques which increase final exhaust gas plume rise where the resulting allowable emissions of sulfur dioxide from the plant do not exceed 5,000 tons per year.

C. "Good Engineering Practice" (GEP) Stack Height—The greater of:

1. 65 meters, measured from the ground-level elevation at the base of the stack;

2. $H_g = H + 1.5L$,

where:

H_g = GEP stack height, measured from the ground-level elevation at the base of the stack

H = height of nearby structure(s) measured from the ground-level elevation at the base of the stack

L = lesser dimension, height, or projected width of nearby structure(s)

The Department or EPA may require the use of a field study or fluid model to verify GEP stack height for the source; or

3. The height demonstrated by a fluid model or a field study approved by the Department and EPA which ensures that the emissions from a stack do not result in excessive concentrations of any air pollutant as a result of atmospheric downwash, wakes, or eddy effects created by the source itself, nearby structures or nearby terrain features.

D. "Nearby"—

1. For the purpose of applying the formula provided in paragraph C.2 above, nearby means that distance up to 5 times the lesser of the height or the width of a structure, but not greater than 0.8 kilometers (km) (1/2 mile); and

2. For conducting demonstrations under paragraph C.3 above, nearby means not greater than 0.8 km (1/2 mile), except that a portion of a terrain feature may be considered "nearby" when:

a. At a distance of 0.8 km (1/2 mile) from the stack the height of the feature is at least 40 percent of the GEP (as determined by the formula in paragraph C.2 above) or 26 meters, whichever is greater; and

b. The portion of the terrain feature must be within 10 times the maximum height of the feature, but not more than 2 miles, from the stack.

All heights are measured from the ground-level elevation at the base of the stack.

E. "Excessive Concentration"

For the purpose of determining GEP stack height under paragraph C.3 above.

1. For sources seeking credit for stack height exceeding that established under paragraph C.2 above, excessive concentration means a maximum ground-level concentration resulting from stack emissions which are due in whole or part to downwash, wakes, and eddy effects produced by nearby structures or nearby terrain features which are at least 40 percent in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects and which contribute to a total concentration due to emissions from all sources that are greater than an ambient air quality standard;

2. For sources seeking credit for stack height exceeding that established under paragraph C.2 above, and where such sources are subject to the PSD program, excessive concentration means a maximum ground-level concentration resulting from stack emissions which are due in whole or part to downwash, wakes, or eddy effects produced by nearby structures or nearby terrain features

which are at least 40 percent in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects and greater than a PSD increment;

3. The allowable emission rate to be used in making demonstrations under paragraphs E.1 or E.2 above shall be prescribed by the New Source Performance Standard (NSPS) that is applicable to the source category unless the owner or operator demonstrates that this emission rate is infeasible. Where such demonstrations are approved by the Department, an alternative emission rate shall be established in consultation with the source owner or operator;

4. For sources seeking credit after October 11, 1983, for increases in existing stack heights up to the heights established under paragraph C.2 above, excessive concentration means either:

a. A maximum ground-level concentration due in whole or part to downwash, wakes, or eddy effects as provided in paragraphs E.1 or E.2 above, except that the emission rate specified by any applicable regulation (or, in the absence of such a limit, the actual emission rate) shall be used; or

b. The actual presence of a local nuisance caused by the existing stack as determined by the Department; and

5. For sources seeking credit after January 12, 1979, for a stack height determined under paragraph C.2 above where the Department requires the use of a field study or fluid model to verify GEP stack height, for sources seeking stack height credit after November 9, 1984, based on the aerodynamic influence of cooling towers, and for sources seeking stack height credit after December 31, 1970, based on the aerodynamic influence of structures not adequately represented by the equation in paragraph C.2 above, excessive concentration means a maximum ground-level concentration due in whole or part to downwash, wakes, or eddy effects that is at least 40 percent in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects.

SECTION IV. PUBLIC PARTICIPATION

For any source whose emission limitation is based on a GEP stack height which exceeds that allowed by Section III.C.1 or C.2 above, the public will be notified of the availability of the demonstration study and the opportunity for a public hearing will be provided.

HISTORY: Amended by State Register Volume 36, Issue 12, eff December 28, 2012 (errata).

61–62.60

South Carolina Designated Facility Plan and New Source Performance Standards

Editor's Note

The following constitutes the history for 61–62.60 unless noted otherwise:

HISTORY: Added by State Register Volume 23, Issue No. 2, eff February 26, 1999. Amended by State Register Volume 24, Issue No. 10, eff October 27, 2000; State Register Volume 25, Issue No. 10, eff October 26, 2001; State Register Volume 26, Issue No. 3, eff March 22, 2002; State Register Volume 26, Issue No. 8, eff August 23, 2002; State Register Volume 27, Issue No. 6, Part 1, eff June 27, 2003; State Register Volume 28, Issue No. 9, eff September 24, 2004; State Register Volume 29, Issue No. 8, eff August 26, 2005; State Register Volume 30, Issue No. 9, eff September 22, 2006; State Register Volume 31, Issue No. 6, eff June 22, 2007; State Register Volume 31, Issue No. 12, eff December 28, 2007; State Register Volume 32, Issue No. 10, eff October 24, 2008; State Register Volume 33, Issue No. 10, eff October 23, 2009; State Register Volume 34, Issue No. 5, eff May 28, 2010; State Register Volume 34, Issue No. 11, eff November 26, 2010; State Register Volume 36, Issue No. 4, eff April 27, 2012; State Register Volume 37, Issue No. 4, eff April 26, 2013; State Register Volume 37, Issue No. 5, eff May 24, 2013 (errata); State Register Volume 37, Issue No. 12, eff December 27, 2013; State Register Volume 38, Issue No. 9, Doc. No. 4465, eff September 26, 2014.

Scrivener errors corrected in 2012.

Note: Facilities subject to the regulations listed below may be subject to additional requirements specified elsewhere in Regulation 61–62, Air Pollution Control Regulations and Standards.

Subpart A—"General Provisions"

The provisions of 40 Code of Federal Regulations (CFR) Part 60 Subpart A, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart A			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 36	December 23, 1971	[36 FR 24877]
Revision	Vol. 38	October 15, 1973	[38 FR 28565]
Revision	Vol. 39	March 8, 1974	[39 FR 9314]
Revision	Vol. 39	November 12, 1974	[39 FR 39873]
Revision	Vol. 40	April 25, 1975	[40 FR 18169]
Revision	Vol. 40	October 6, 1975	[40 FR 46254]
Revision	Vol. 40	November 17, 1975	[40 FR 53346]
Revision	Vol. 40	December 16, 1975	[40 FR 58418]
Revision	Vol. 40	December 22, 1975	[40 FR 59205]
Revision	Vol. 41	August 20, 1976	[41 FR 35185]
Revision	Vol. 42	July 19, 1977	[42 FR 37000]
Revision	Vol. 42	July 27, 1977	[42 FR 38178]
Revision	Vol. 42	November 1, 1977	[42 FR 57126]
Revision	Vol. 43	March 3, 1978	[43 FR 8800]
Revision	Vol. 43	August 3, 1978	[43 FR 34347]
Revision	Vol. 44	June 11, 1979	[44 FR 33612]
Revision	Vol. 44	September 25, 1979	[44 FR 55173]
Revision	Vol. 45	January 23, 1980	[45 FR 5617]
Revision	Vol. 45	April 4, 1980	[45 FR 23379]
Revision	Vol. 45	December 24, 1980	[45 FR 85415]
Revision	Vol. 47	January 8, 1982	[47 FR 951]
Revision	Vol. 47	July 23, 1982	[47 FR 31876]
Revision	Vol. 48	March 30, 1983	[48 FR 13326]
Revision	Vol. 48	May 25, 1983	[48 FR 23610]
Revision	Vol. 48	July 20, 1983	[48 FR 32986]
Revision	Vol. 48	October 18, 1983	[48 FR 48335]
Revision	Vol. 50	December 27, 1985	[50 FR 53113]
Revision	Vol. 51	January 15, 1986	[51 FR 1790]
Revision	Vol. 51	January 21, 1986	[51 FR 2701]
Revision	Vol. 51	November 25, 1986	[51 FR 42796]
Revision	Vol. 52	March 26, 1987	[52 FR 9781, 9782]
Revision	Vol. 52	April 8, 1987	[52 FR 11428]
Revision	Vol. 52	May 11, 1987	[52 FR 17555]
Revision	Vol. 52	June 4, 1987	[52 FR 21007]
Revision	Vol. 54	February 14, 1989	[54 FR 6662]
Revision	Vol. 54	May 17, 1989	[54 FR 21344]
Revision	Vol. 55	December 13, 1990	[55 FR 51382]
Revision	Vol. 57	July 21, 1992	[57 FR 32338, 32339]
Revision	Vol. 59	March 16, 1994	[59 FR 12427, 12428]
Revision	Vol. 59	September 15, 1994	[59 FR 47265]
Revision	Vol. 61	March 12, 1996	[61 FR 9919]
Revision	Vol. 62	February 24, 1997	[62 FR 8328]
Revision	Vol. 62	September 15, 1997	[62 FR 48348]
Revision	Vol. 63	May 4, 1998	[63 FR 24444]
Revision	Vol. 64	February 12, 1999	[64 FR 7463]
Revision	Vol. 65	August 10, 2000	[65 FR 48914]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 65	December 6, 2000	[65 FR 76350, 76378]

40 CFR Part 60 Subpart A			
Federal Register Citation	**Volume**	**Date**	**Notice**
Revision	Vol. 65	December 14, 2000	[65 FR 78268]
Revision	Vol. 66	February 6, 2001	[66 FR 9034]
Revision	Vol. 67	June 28, 2002	[67 FR 43550]
Revision	Vol. 68	April 14, 2003	[68 FR 17990]
Revision	Vol. 68	May 28, 2003	[68 FR 31611]
Revision	Vol. 69	July 8, 2004	[69 FR 41346]
Revision	Vol. 70	December 16, 2005	[70 FR 74870]
Revision	Vol. 71	June 1, 2006	[71 FR 31100]
Revision	Vol. 71	July 6, 2006	[71 FR 38482]
Revision	Vol. 72	May 16, 2007	[72 FR 27437]
Revision	Vol. 72	June 13, 2007	[72 FR 32710]
Revision	Vol. 73	January 18, 2008	[73 FR 3568]
Revision	Vol. 73	April 3, 2008	[73 FR 18162]
Revision	Vol. 73	May 6, 2008	[73 FR 24870]
Revision	Vol. 73	May 27, 2008	[73 FR 30308]
Revision	Vol. 73	June 24, 2008	[73 FR 35838]
Revision	Vol. 73	December 22, 2008	[73 FR 78199]
Revision	Vol. 74	January 28, 2009	[74 FR 5072]
Revision	Vol. 74	October 6, 2009	[74 FR 51368]
Revision	Vol. 74	October 8, 2009	[74 FR 51950]
Revision	Vol. 74	December 17, 2009	[74 FR 66921]
Revision	Vol. 75	September 9, 2010	[75 FR 54970]
Revision	Vol. 75	September 13, 2010	[75 FR 55636]
Revision	Vol. 76	January 18, 2011	[76 FR 2832]
Revision	Vol. 76	March 21, 2011	[76 FR 15372]
Revision	Vol. 76	March 21, 2011	[76 FR 15704]
Revision	Vol. 77	February 16, 2012	[77 FR 9304]
Revision	Vol. 77	August 14, 2012	[77 FR 48433]
Revision	Vol. 77	September 12, 2012	[77 FR 56422]
Revision	Vol. 78	January 30, 2013	[78 FR 6674]
Revision	Vol. 79	February 27, 2014	[79 FR 11228]
Revision	Vol. 79	April 4, 2014	[79 FR 18952]
Revision	Vol. 80	March 16, 2015	[80 FR 13671]
Revision	Vol. 81	June 3, 2016	[81 FR 35824]
Revision	Vol. 81	June 30, 2016	[81 FR 42542]
Revision	Vol. 81	August 29, 2016	[81 FR 59276, 59332]
Revision	Vol. 81	August 30, 2016	[81 FR 59800]
Revision	Vol. 82	June 23, 2017	[82 FR 28561]
Revision	Vol. 82	July 17, 2017	[82 FR 32644]
Revision	Vol. 83	November 14, 2018	[83 FR 56713]
Revision	Vol. 83	November 26, 2018	[83 FR 60696]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015; State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016; State Register Volume 41, Issue No. 8, Doc. No. 4750, eff August 25, 2017; SCSR43–1 Doc. No. 4870, eff January 25, 2019; SCSR43–8 Doc. No. 4881, eff August 23, 2019.

Subpart B—"Adoption and Submittal of State Plans for Designated Facilities"

The provisions of 40 CFR Part 60 Subpart B, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart B			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 40	November 17, 1975	[40 FR 53346]
Revision	Vol. 44	November 9, 1979	[44 FR 65071]
Revision	Vol. 54	December 20, 1989	[54 FR 52189]
Revision	Vol. 60	December 19, 1995	[60 FR 65387]
Revision	Vol. 65	December 6, 2000	[65 FR 76378]
Revision	Vol. 70	October 13, 2005	[70 FR 59848]
Revision	Vol. 77	February 16, 2012	[77 FR 9304]

Subpart C—"Emission Guidelines and Compliance Times"

The provisions of 40 CFR Part 60 Subpart C, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart C			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 42	October 18, 1977	[42 FR 55797]
Revision	Vol. 60	December 19, 1995	[60 FR 65387]
Revision	Vol. 61	March 12, 1996	[61 FR 9905]
Revision	Vol. 62	September 15, 1997	[62 FR 48348]

Subpart Ca—[Reserved]

Subpart Cb—"Emission Guidelines and Compliance Times for Large Municipal Waste Combustors That Are Constructed on or Before September 20, 1994"

The provisions of 40 CFR Part 60 Subpart Cb, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart Cb			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 60	December 19, 1995	[60 FR 65415]
Revision	Vol. 62	August 25, 1997	[62 FR 45119, 45120]
Revision	Vol. 62	August 25, 1997	[62 FR 45125]
Revision	Vol. 69	July 14, 2004	[69 FR 42117]
Revision	Vol. 71	May 10, 2006	[71 FR 27324]

Subpart Cc—"Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills"

The provisions of 40 CFR Part 60 Subpart Cc, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart Cc			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 61	March 12, 1996	[61 FR 9905]
Revision	Vol. 63	June 16, 1998	[63 FR 32743]
Revision	Vol. 64	February 24, 1999	[64 FR 9258]

Subpart Cd—"Emission Guidelines and Compliance Times for Sulfuric Acid Production Units"

The provisions of 40 CFR Part 60 Subpart Cd, as originally published in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart Cd			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 60	December 19, 1995	[60 FR 65414]

Subpart Ce—"Emission Guidelines and Compliance Times for Hospital/Medical/Infectious Waste Incinerators"

The provisions of 40 CFR Part 60 Subpart Ce, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart Ce			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 62	September 15, 1997	[62 FR 48379]
Revision	Vol. 74	October 6, 2009	[74 FR 51368]
Revision	Vol. 76	April 4, 2011	[76 FR 18407]

Subpart Cf—"Performance Standards and Compliance Times for Existing Municipal Solid Waste Landfills"

(A) All designated facilities as defined at 40 CFR 60.31f must comply with the requirements of this subpart.

(B) The compliance times, emission guideline conditions and requirements, operational standards for collection and control systems, test methods and procedures, compliance provisions, monitoring requirements, reporting requirements, recordkeeping requirements, and specifications for active collection systems set forth in 40 CFR 60.32f through 60.40f, as originally published in the Federal Register as listed below, are incorporated by reference as if fully repeated herein and applicable to each designated facility.

40 CFR Part 60 Subpart Cf			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 81	August 29, 2016	[81 FR 59276]

(C) 40 CFR 60.41f, Definitions, is adopted and incorporated by reference as if fully repeated herein, except as follows: the word "Administrator" as used in this subpart shall mean the Department of Health and Environmental Control, with the exception of the sections within this subpart that may not be delegated by the EPA.

(D) The following authorities will not be delegated to state, local, or tribal agencies:

(1) Approval of alternative methods to determine the NMOC concentration or a site specific methane generation rate constant (k).

(2) [Reserved]

HISTORY: Added by State Register Volume 41, Issue No. 8, Doc. No. 4750, eff August 25, 2017; SCSR43–8 Doc. No. 4881, eff August 23, 2019.

Subpart D—"Standards of Performance for Fossil-Fuel-Fired Steam Generators"

The provisions of 40 CFR Part 60 Subpart D, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart D			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 39	June 14, 1974	[39 FR 20791]
Revision	Vol. 40	January 16, 1975	[40 FR 2803]
Revision	Vol. 40	October 6, 1975	[40 FR 46256]
Revision	Vol. 41	November 22, 1976	[41 FR 51398]

40 CFR Part 60 Subpart D			
Federal Register Citation	**Volume**	**Date**	**Notice**
Revision	Vol. 42	July 25, 1977	[42 FR 37936]
Revision	Vol. 42	December 5, 1977	[42 FR 61537]
Revision	Vol. 43	March 7, 1978	[43 FR 9278]
Revision	Vol. 44	June 17, 1979	[44 FR 33612]
Revision	Vol. 44	December 28, 1979	[44 FR 76787]
Revision	Vol. 45	May 29, 1980	[45 FR 36077]
Revision	Vol. 45	July 14, 1980	[45 FR 47146]
Revision	Vol. 46	November 24, 1981	[46 FR 57498]
Revision	Vol. 48	January 27, 1983	[48 FR 3736]
Revision	Vol. 51	November 25, 1986	[51 FR 42797]
Revision	Vol. 52	August 4, 1987	[52 FR 28954]
Revision	Vol. 54	February 14, 1989	[54 FR 6662]
Revision	Vol. 54	May 17, 1989	[54 FR 21344]
Revision	Vol. 55	February 14, 1990	[55 FR 5212]
Revision	Vol. 61	September 24, 1996	[61 FR 49976]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 72	June 13, 2007	[72 FR 32710]
Revision	Vol. 74	January 28, 2009	[74 FR 5072]
Revision	Vol. 76	January 20, 2011	[76 FR 3517]
Revision	Vol. 77	February 16, 2012	[77 FR 9304]

Subpart Da—"Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is Commenced After September 18, 1978"

The provisions of 40 CFR Part 60 Subpart Da, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart Da			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 44	June 11, 1979	[44 FR 33613]
Revision	Vol. 48	January 27, 1983	[48 FR 3737]
Revision	Vol. 54	February 14, 1989	[54 FR 6663]
Revision	Vol. 54	May 17, 1989	[54 FR 21344]
Revision	Vol. 55	February 14, 1990	[55 FR 5212]
Revision	Vol. 55	May 7, 1990	[55 FR 18876]
Revision	Vol. 63	September 16, 1998	[63 FR 49453, 49454]
Revision	Vol. 64	February 12, 1999	[64 FR 7464]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 66	April 10, 2001	[66 FR 18546]
Revision	Vol. 66	June 11, 2001	[66 FR 31177]
Revision	Vol. 66	August 14, 2001	[66 FR 42608]
Revision	Vol. 71	February 27, 2006	[71 FR 9866]
Revision	Vol. 72	June 13, 2007	[72 FR 32710]
Revision	Vol. 74	January 28, 2009	[74 FR 5072]
Revision	Vol. 76	January 20, 2011	[76 FR 3517]
Revision	Vol. 77	February 16, 2012	[77 FR 9304]
Revision	Vol. 77	April 19, 2012	[77 FR 23399]
Revision	Vol.78	April 24, 2013	[78 FR 24073]
Revision	Vol.79	November 19, 2014	[79 FR 68777]

40 CFR Part 60 Subpart Da			
Federal Register Citation	**Volume**	**Date**	**Notice**
Revision	Vol. 81	April 6, 2016	[81 FR 20172]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015; State Register Volume 41, Issue No. 8, Doc. No. 4750, eff August 25, 2017.

Subpart Db—"Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units"

The provisions of 40 CFR Part 60 Subpart Db, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart Db			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 52	December 16, 1987	[52 FR 47842]
Revision	Vol. 54	December 18, 1989	[54 FR 51819, 51820]
Revision	Vol. 54	December 18, 1989	[54 FR 51825]
Revision	Vol. 55	May 7, 1990	[55 FR 18876]
Revision	Vol. 60	May 30, 1995	[60 FR 28062]
Revision	Vol. 61	March 29, 1996	[61 FR 14031]
Revision	Vol. 62	October 8, 1997	[62 FR 52641]
Revision	Vol. 63	September 16, 1998	[63 FR 49455]
Revision	Vol. 64	February 12, 1999	[64 FR 7464]
Revision	Vol. 65	March 13, 2000	[65 FR 13242]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 66	April 10, 2001	[66 FR 18546]
Revision	Vol. 66	June 11, 2001	[66 FR 31177]
Revision	Vol. 66	August 14, 2001	[66 FR 42608]
Revision	Vol. 66	October 1, 2001	[66 FR 49830]
Revision	Vol. 71	February 27, 2006	[71 FR 9866]
Revision	Vol. 71	November 16, 2006	[71 FR 66681]
Revision	Vol. 72	June 13, 2007	[72 FR 32710]
Revision	Vol. 74	January 28, 2009	[74 FR 5072]
Revision	Vol. 76	January 20, 2011	[76 FR 3517]
Revision	Vol. 77	February 16, 2012	[77 FR 9304]
Revision	Vol. 79	February 27, 2014	[79 FR 11228]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Subpart Dc—"Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units"

The provisions of 40 CFR Part 60 Subpart Dc, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart Dc			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 55	September 12, 1990	[55 FR 37683]
Revision	Vol. 61	May 8, 1996	[61 FR 20736]
Revision	Vol. 64	February 12, 1999	[64 FR 7465]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 71	February 27, 2006	[71 FR 9866]
Revision	Vol. 72	June 13, 2007	[72 FR 32710]

40 CFR Part 60 Subpart Dc			
Federal Register Citation	**Volume**	**Date**	**Notice**
Revision	Vol. 74	January 28, 2009	[74 FR 5072]
Revision	Vol. 76	January 20, 2011	[76 FR 3517]
Revision	Vol. 77	February 16, 2012	[77 FR 9304]

Subpart E—"Standards of Performance for Incinerators"

The provisions of 40 CFR Part 60 Subpart E, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart E			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 36	December 23, 1971	[36 FR 24877]
Revision	Vol. 39	June 14, 1974	[39 FR 20792]
Revision	Vol. 42	July 25, 1977	[42 FR 37936]
Revision	Vol. 54	February 14, 1989	[54 FR 6665]
Revision	Vol. 55	February 14, 1990	[55 FR 5212]
Revision	Vol. 56	February 11, 1991	[56 FR 5507]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 71	May 10, 2006	[71 FR 27324]

Subpart Ea—"Standards of Performance for Municipal Waste Combustors for Which Construction Is Commenced After December 20, 1989, and on or Before September 20, 1994"

The provisions of 40 CFR Part 60 Subpart Ea, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart Ea			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 56	February 11, 1991	[56 FR 5507]
Revision	Vol. 60	December 19, 1995	[60 FR 65384]
Revision	Vol. 64	February 12, 1999	[64 FR 7465]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

Subpart Eb—"Standards of Performance for Large Municipal Waste Combustors for Which Construction Is Commenced After September 20, 1994, or for Which Modification or Reconstruction Is Commenced After June 19, 1996"

The provisions of 40 CFR Part 60 Subpart Eb, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart Eb			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 60	December 19, 1995	[60 FR 65419]
Revision	Vol. 62	August 25, 1997	[62 FR 45120, 45121]
Revision	Vol. 62	August 25, 1997	[62 FR 45125, 45126]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 66	July 12, 2001	[66 FR 36473]
Revision	Vol. 66	November 16, 2001	[66 FR 57824]
Revision	Vol. 71	May 10, 2006	[71 FR 27324]

Subpart Ec—"Standards of Performance for Hospital/Medical/Infectious Waste Incinerators for Which Construction Is Commenced After June 20, 1996"

The provisions of 40 CFR Part 60 Subpart Ec, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart Ec			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 62	September 15, 1997	[62 FR 48382]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 68	October 30, 2003	[68 FR 61759]
Revision	Vol. 74	October 6, 2009	[74 FR 51368]
Revision	Vol. 76	April 4, 2011	[76 FR 18407]
Revision	Vol. 78	May 13, 2013	[78 FR 28052]
Revision	Vol. 79	February 27, 2014	[79 FR 11228]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Subpart F—"Standards of Performance for Portland Cement Plants"

The provisions of 40 CFR Part 60 Subpart F, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart F			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 36	December 23, 1971	[36 FR 24877]
Revision	Vol. 39	June 14, 1974	[39 FR 20793]
Revision	Vol. 39	November 12, 1974	[39 FR 39874]
Revision	Vol. 40	October 6, 1975	[40 FR 46258]
Revision	Vol. 42	July 25, 1977	[42 FR 37936]
Revision	Vol. 53	December 14, 1988	[53 FR 50363]
Revision	Vol. 54	February 14, 1989	[54 FR 6666]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 75	September 9, 2010	[75 FR 54970]
Revision	Vol. 78	February 12, 2013	[78 FR 10006]
Revision	Vol. 80	July 27, 2015	[80 FR 44771]

HISTORY: Amended by State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016.

Subpart G—"Standards of Performance for Nitric Acid Plants"

The provisions of 40 CFR Part 60 Subpart G, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart G			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 39	June 14, 1974	[39 FR 20794]
Revision	Vol. 40	October 6, 1975	[40 FR 46258]
Revision	Vol. 42	July 25, 1977	[42 FR 37936]
Revision	Vol. 50	April 22, 1985	[50 FR 15894]
Revision	Vol. 54	February 14, 1989	[54 FR 6666]
Revision	Vol. 77	August 14, 2012	[77 FR 48433]

Subpart Ga—"Standards of Performance for Nitric Acid Plants for Which Construction, Reconstruction, or Modification Commenced After October 14, 2011"

The provisions of 40 CFR Part 60 Subpart Ga, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart Ga			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 77	August 14, 2012	[77 FR 48433]
Revision	Vol. 79	May 6, 2014	[79 FR 25681]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Subpart H—"Standards of Performance for Sulfuric Acid Plants"

The provisions of 40 CFR Part 60 Subpart H, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart H			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 36	December 23, 1971	[36 FR 24877]
Revision	Vol. 39	June 14, 1974	[39 FR 20794]
Revision	Vol. 40	October 6, 1975	[40 FR 46258]
Revision	Vol. 42	July 25, 1977	[42 FR 37936]
Revision	Vol. 48	May 25, 1983	[48 FR 23611]
Revision	Vol. 48	September 29, 1983	[48 FR 44700]
Revision	Vol. 48	October 20, 1983	[48 FR 48669]
Revision	Vol. 54	February 14, 1989	[54 FR 6666]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 79	February 27, 2014	[79 FR 11228]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Subpart I—"Standards of Performance for Hot Mix Asphalt Facilities"

The provisions of 40 CFR Part 60 Subpart I, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart I			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 39	March 8, 1974	[39 FR 9314]
Revision	Vol. 40	October 6, 1975	[40 FR 46259]
Revision	Vol. 42	July 25, 1977	[42 FR 37936]
Revision	Vol. 51	April 10, 1986	[51 FR 12325]
Revision	Vol. 54	February 14, 1989	[54 FR 6667]

Subpart J—"Standards of Performance for Petroleum Refineries"

The provisions of 40 CFR Part 60 Subpart J, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart J			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 39	March 8, 1974	[39 FR 9315]
Revision	Vol. 40	October 6, 1975	[40 FR 46259]
Revision	Vol. 42	June 24, 1977	[42 FR 32427]
Revision	Vol. 42	August 4, 1977	[42 FR 39389]
Revision	Vol. 43	March 15, 1978	[43 FR 10868]
Revision	Vol. 44	March 12, 1979	[44 FR 13481]
Revision	Vol. 44	October 25, 1979	[44 FR 61543]

40 CFR Part 60 Subpart J			
Federal Register Citation	**Volume**	**Date**	**Notice**
Revision	Vol. 45	December 1, 1980	[45 FR 79453]
Revision	Vol. 48	May 25, 1983	[48 FR 23611]
Revision	Vol. 50	August 5, 1985	[50 FR 31701]
Revision	Vol. 51	November 26, 1986	[51 FR 42842]
Revision	Vol. 52	June 1, 1987	[52 FR 20392]
Revision	Vol. 53	October 21, 1988	[53 FR 41333]
Revision	Vol. 54	August 17, 1989	[54 FR 34026]
Revision	Vol. 55	October 2, 1990	[55 FR 40175]
Revision	Vol. 56	February 4, 1991	[56 FR 4176]
Revision	Vol. 64	February 12, 1999	[64 FR 7465]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 71	September 21, 2006	[71 FR 55119]
Revision	Vol. 73	June 24, 2008	[73 FR 35838]
Revision	Vol. 76	February 25, 2011	[76 FR 10524]
Revision	Vol. 77	September 12, 2012	[77 FR 56422]
Revision	Vol. 80	December 1, 2015	[80 FR 75178]

HISTORY: Amended by State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016.

Subpart Ja—"Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007"

The provisions of 40 CFR Part 60 Subpart Ja, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart Ja			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 73	June 24, 2008	[73 FR 35838]
Revision	Vol. 73	July 28, 2008	[73 FR 43626]
Revision	Vol. 73	September 26, 2008	[73 FR 55751]
Revision	Vol. 73	December 22, 2008	[73 FR 78546]
Revision	Vol. 73	December 22, 2008	[73 FR 78549]
Revision	Vol. 77	September 12, 2012	[77 FR 56422]
Revision	Vol. 78	December 19, 2013	[78 FR 76753]
Revision	Vol. 80	December 1, 2015	[80 FR 75178]
Revision	Vol. 81	July 13, 2016	[81 FR 45232]
Revision	Vol. 83	November 26, 2018	[83 FR 60696]

HISTORY: Amended by State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016; State Register Volume 41, Issue No. 8, Doc. No. 4750, eff August 25, 2017; SCSR43–8 Doc. No. 4881, eff August 23, 2019.

Subpart K—"Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978"

The provisions of 40 CFR Part 60 Subpart K, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart K			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 39	March 8, 1974	[39 FR 9317]

40 CFR Part 60 Subpart K			
Federal Register Citation	**Volume**	**Date**	**Notice**
Revision	Vol. 39	April 17, 1974	[39 FR 13776]
Revision	Vol. 39	June 14, 1974	[39 FR 20794]
Revision	Vol. 42	July 25, 1977	[42 FR 37937]
Revision	Vol. 45	April 4, 1980	[45 FR 23379]
Revision	Vol. 48	January 27, 1983	[48 FR 3737]
Revision	Vol. 52	April 8, 1987	[52 FR 11429]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

Subpart Ka—"Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984"

The provisions of 40 CFR Part 60 Subpart Ka, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart Ka			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 45	April 4, 1980	[45 FR 23379]
Revision	Vol. 45	December 18, 1980	[45 FR 83229]
Revision	Vol. 48	January 27, 1983	[48 FR 3737]
Revision	Vol. 52	April 8, 1987	[52 FR 11429]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 65	December 14, 2000	[65 FR 78268]

Subpart Kb—"Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984"

The provisions of 40 CFR Part 60 Subpart Kb, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart Kb			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 52	April 8, 1987	[52 FR 11429]
Revision	Vol. 52	June 16, 1987	[52 FR 22780]
Revision	Vol. 54	August 11, 1989	[54 FR 32973]
Revision	Vol. 62	October 8, 1997	[62 FR 52641]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 65	December 14, 2000	[65 FR 78268]
Revision	Vol. 68	October 15, 2003	[68 FR 59328]

Subpart L—"Standards of Performance for Secondary Lead Smelters"

The provisions of 40 CFR Part 60 Subpart L, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart L			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 39	March 8, 1974	[39 FR 9317]
Revision	Vol. 39	April 17, 1974	[39 FR 13776]
Revision	Vol. 40	October 6, 1975	[40 FR 46259]

40 CFR Part 60 Subpart L			
Federal Register Citation	**Volume**	**Date**	**Notice**
Revision	Vol. 42	July 25, 1977	[42 FR 37937]
Revision	Vol. 54	February 14, 1989	[54 FR 6667]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

Subpart M—"Standards of Performance for Secondary Brass and Bronze Production Plants"

The provisions of 40 CFR Part 60 Subpart M, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart M			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 39	March 8, 1974	[39 FR 9318]
Revision	Vol. 40	October 6, 1975	[40 FR 46259]
Revision	Vol. 42	July 25, 1977	[42 FR 37937]
Revision	Vol. 49	October 30, 1984	[49 FR 43618]
Revision	Vol. 54	February 14, 1989	[54 FR 6667]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

Subpart N—"Standards of Performance for Primary Emissions from Basic Oxygen Process Furnaces for Which Construction Is Commenced After June 11, 1973"

The provisions of 40 CFR Part 60 Subpart N, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart N			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 39	March 8, 1974	[39 FR 9318]
Revision	Vol. 42	July 25, 1977	[42 FR 37937]
Revision	Vol. 43	April 13, 1978	[43 FR 15602]
Revision	Vol. 51	January 2, 1986	[51 FR 160]
Revision	Vol. 54	February 14, 1989	[54 FR 6667]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

Subpart Na—"Standards of Performance for Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction Is Commenced After January 20, 1983"

The provisions of 40 CFR Part 60 Subpart Na, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart Na			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 51	January 2, 1986	[51 FR 161]
Revision	Vol. 54	February 14, 1989	[54 FR 6667]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

Subpart O—"Standards of Performance for Sewage Treatment Plants"

The provisions of 40 CFR Part 60 Subpart O, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart O			
Federal Register Citation	**Volume**	**Date**	**Notice**

Original Promulgation	Vol. 36	December 23, 1971	[36 FR 24877]
Revision	Vol. 39	March 8, 1974	[39 FR 9319]
Revision	Vol. 40	October 6, 1975	[40 FR 46259]
Revision	Vol. 42	November 10, 1977	[42 FR 58521]
Revision	Vol. 53	October 6, 1988	[53 FR 39416]
Revision	Vol. 54	February 14, 1989	[54 FR 6668]
Revision	Vol. 54	June 27, 1989	[54 FR 27015]
Revision	Vol. 58	April 7, 1993	[58 FR 18014]
Revision	Vol. 59	February 3, 1994	[59 FR 5108]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 79	February 27, 2014	[79 FR 11228]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Subpart P—"Standards of Performance for Primary Copper Smelters"

The provisions of 40 CFR Part 60 Subpart P, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart P			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 41	January 15, 1976	[41 FR 2338]
Revision	Vol. 41	February 26, 1976	[41 FR 8346]
Revision	Vol. 42	July 25, 1977	[42 FR 37937]
Revision	Vol. 42	November 1, 1977	[42 FR 57126]
Revision	Vol. 48	May 25, 1983	[48 FR 23611]
Revision	Vol. 54	February 14, 1989	[54 FR 6667]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

Subpart Q—"Standards of Performance for Primary Zinc Smelters"

The provisions of 40 CFR Part 60 Subpart Q, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart Q			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 41	January 15, 1976	[41 FR 2340]
Revision	Vol. 42	July 25, 1977	[42 FR 37937]
Revision	Vol. 48	May 25, 1983	[48 FR 23611]
Revision	Vol. 54	February 14, 1989	[54 FR 6669]

Subpart R—"Standards of Performance for Primary Lead Smelters"

The provisions of 40 CFR Part 60 Subpart R, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart R			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 41	January 15, 1976	[41 FR 2340]
Revision	Vol. 42	July 25, 1977	[42 FR 37937]
Revision	Vol. 48	May 25, 1983	[48 FR 23611]
Revision	Vol. 54	February 14, 1989	[54 FR 6669]

Subpart S—"Standards of Performance for Primary Aluminum Reduction Plants"

The provisions of 40 CFR Part 60 Subpart S, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart S			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 42	July 25, 1977	[42 FR 37937]
Revision	Vol. 45	June 30, 1980	[45 FR 44207]
Revision	Vol. 54	February 14, 1989	[54 FR 6669]
Revision	Vol. 62	October 7, 1997	[62 FR 52399]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

Subpart T—"Standards of Performance for the Phosphate Fertilizer Industry: Wet-Process Phosphoric Acid Plants"

The provisions of 40 CFR Part 60 Subpart T, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart T			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 40	August 6, 1975	[40 FR 33154]
Revision	Vol. 42	July 25, 1977	[42 FR 37937]
Revision	Vol. 48	February 17, 1983	[48 FR 7129]
Revision	Vol. 54	February 14, 1989	[54 FR 6669]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 80	August 19, 2015	[80 FR 50385]

HISTORY: Amended by State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016.

Subpart U—"Standards of Performance for the Phosphate Fertilizer Industry: Superphosphoric Acid Plants"

The provisions of 40 CFR Part 60 Subpart U, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart U			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 40	August 6, 1975	[40 FR 33155]
Revision	Vol. 42	July 25, 1977	[42 FR 37937]
Revision	Vol. 48	February 17, 1983	[48 FR 7129]
Revision	Vol. 54	February 14, 1989	[54 FR 6670]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 80	August 19, 2015	[80 FR 50385]

HISTORY: Amended by State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016.

Subpart V—"Standards of Performance for the Phosphate Fertilizer Industry: Diammonium Phosphate Plants"

The provisions of 40 CFR Part 60 Subpart V, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart V			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 40	August 6, 1975	[40 FR 33155]
Revision	Vol. 42	July 25, 1977	[42 FR 37937]
Revision	Vol. 48	February 17, 1983	[48 FR 7129]
Revision	Vol. 54	February 14, 1989	[54 FR 6670]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 80	August 19, 2015	[80 FR 50385]

HISTORY: Amended by State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016.

Subpart W—"Standards of Performance for the Phosphate Fertilizer Industry: Triple Superphosphate Plants"

The provisions of 40 CFR Part 60 Subpart W, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart W			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 40	August 6, 1975	[40 FR 33156]
Revision	Vol. 42	July 25, 1977	[42 FR 37938]
Revision	Vol. 48	February 17, 1983	[48 FR 7129]
Revision	Vol. 54	February 14, 1989	[54 FR 6670]
Revision	Vol. 54	May 17, 1989	[54 FR 21344]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 80	August 19, 2015	[80 FR 50385]

HISTORY: Amended by State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016.

Editor's Note

In volume column of the table for Subpart W, "65" was changed to "80" in the row relating to 80 FR 50385, to correct a typographical error.

Subpart X—"Standards of Performance for the Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities"

The provisions of 40 CFR Part 60 Subpart X, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart X			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 40	August 6, 1975	[40 FR 33156]
Revision	Vol. 42	July 25, 1977	[42 FR 37938]
Revision	Vol. 54	February 14, 1989	[54 FR 6670]
Revision	Vol. 62	April 15, 1997	[62 FR 18280]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 80	August 19, 2015	[80 FR 50385]

HISTORY: Amended by State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016.

Subpart Y—"Standards of Performance for Coal Preparation and Processing Plants"

The provisions of 40 CFR Part 60 Subpart Y, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart Y			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 41	January 15, 1976	[41 FR 2234]
Revision	Vol. 42	July 25, 1977	[42 FR 37938]
Revision	Vol. 42	September 7, 1977	[42 FR 44812]
Revision	Vol. 48	January 27, 1983	[48 FR 3738]
Revision	Vol. 54	February 14, 1989	[54 FR 6671]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 74	October 8, 2009	[74 FR 51950]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Subpart Z—"Standards of Performance for Ferroalloy Production Facilities"

The provisions of 40 CFR Part 60 Subpart Z, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart Z			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 41	May 4, 1976	[41 FR 18501]
Revision	Vol. 41	May 20, 1976	[41 FR 20659]
Revision	Vol. 42	July 25, 1977	[42 FR 37938]
Revision	Vol. 48	January 27, 1983	[48 FR 3738]
Revision	Vol. 54	February 14, 1989	[54 FR 6671]
Revision	Vol. 54	May 17, 1989	[54 FR 21344]
Revision	Vol. 55	February 14, 1990	[55 FR 5212]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Subpart AA—"Standards of Performance for Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974, and on or Before August 17, 1983"

The provisions of 40 CFR Part 60 Subpart AA, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart AA			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 40	September 23, 1975	[40 FR 43852]
Revision	Vol. 49	October 31, 1984	[49 FR 43843]
Revision	Vol. 54	February 14, 1989	[54 FR 6672]
Revision	Vol. 54	May 17, 1989	[54 FR 21344]
Revision	Vol. 64	March 2, 1999	[64 FR 10109, 10110]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 70	February 22, 2005	[70 FR 8523]

Subpart AAa—"Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 17, 1983"

The provisions of 40 CFR Part 60 Subpart AAa, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart AAa			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 49	October 31, 1984	[49 FR 43845]
Revision	Vol. 54	February 14, 1989	[54 FR 6672]
Revision	Vol. 54	May 17, 1989	[54 FR 21344]
Revision	Vol. 64	March 2, 1999	[64 FR 10110, 10111]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 70	February 22, 2005	[70 FR 8523]

Subpart BB—"Standards of Performance for Kraft Pulp Mills"

The provisions of 40 CFR Part 60 Subpart BB, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart BB			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 43	February 23, 1978	[43 FR 7572]
Revision	Vol. 50	February 14, 1985	[50 FR 6317]
Revision	Vol. 51	May 20, 1986	[51 FR 18544]
Revision	Vol. 54	February 14,1989	[54 FR 6673]
Revision	Vol. 54	May 17, 1989	[54 FR 21344]
Revision	Vol. 55	February 14, 1990	[55 FR 5212]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 71	September 21, 2006	[71 FR 55119]
Revision	Vol. 79	February 27, 2014	[79 FR 11228]
Revision	Vol. 79	April 4, 2014	[79 FR 18952]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Subpart BBa—"Standards of Performance for Kraft Pulp Mill Affected Sources for Which Construction, Reconstruction, or Modification Commenced After May 23, 2013"

The provisions of 40 CFR Part 60 Subpart BBa, as originally published in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart BBa			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 79	April 4, 2014	[79 FR 18952]

HISTORY: Added by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Subpart CC—"Standards of Performance for Glass Manufacturing Plants"

The provisions of 40 CFR Part 60 Subpart CC, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart CC			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 45	October 7, 1980	[45 FR 66751]
Revision	Vol. 49	October 19, 1984	[49 FR 41035]
Revision	Vol. 54	February 14, 1989	[54 FR 6674]
Revision	Vol. 54	May 17, 1989	[54 FR 21344]
Revision	Vol. 64	February 12, 1999	[64 FR 7466]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

Subpart DD—"Standards of Performance for Grain Elevators"

The provisions of 40 CFR Part 60 Subpart DD, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart DD			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 43	August 3, 1978	[43 FR 34347]
Revision	Vol. 53	November 5, 1988	[53 FR 42434]
Revision	Vol. 54	February 14, 1989	[54 FR 6674]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Subpart EE—"Standards of Performance for Surface Coating of Metal Furniture"

The provisions of 40 CFR Part 60 Subpart EE, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart EE			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 47	October 29, 1982	[47 FR 49287]
Revision	Vol. 50	April 30, 1985	[50 FR 18248]
Revision	Vol. 55	December 13, 1990	[55 FR 51383]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

Subpart FF—[Reserved]

Subpart GG—"Standards of Performance for Stationary Gas Turbines"

The provisions of 40 CFR Part 60 Subpart GG, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart GG			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 44	September 10, 1979	[44 FR 52798]
Revision	Vol. 47	January 27, 1982	[47 FR 3770]
Revision	Vol. 52	November 5, 1987	[52 FR 42434]
Revision	Vol. 54	February 14, 1989	[54 FR 6674]
Revision	Vol. 54	June 27, 1989	[54 FR 27016]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 68	April 14, 2003	[68 FR 17990]
Revision	Vol. 69	July 8, 2004	[69 FR 41346]
Revision	Vol. 71	February 24, 2006	[71 FR 9453]
Revision	Vol. 79	February 27, 2014	[79 FR 11228]
Revision	Vol. 81	June 30, 2016	[81 FR 42542]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015; State Register Volume 41, Issue No. 8, Doc. No. 4750, eff August 25, 2017.

Subpart HH—"Standards of Performance for Lime Manufacturing Plants"

The provisions of 40 CFR Part 60 Subpart HH, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart HH			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 49	April 26, 1984	[49 FR 18080]
Revision	Vol. 52	February 17, 1987	[52 FR 4773]
Revision	Vol. 54	February 14, 1989	[54 FR 6675]
Revision	Vol. 58	April 7, 1993	[58 FR 18014]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

Subpart II—[Reserved]

Subpart JJ—[Reserved]

Subpart KK—"Standards of Performance for Lead-Acid Battery Manufacturing Plants"

The provisions of 40 CFR Part 60 Subpart KK, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart KK			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 47	April 16, 1982	[47 FR 16573]
Revision	Vol. 54	February 14, 1989	[54 FR 6675]
Revision	Vol.65	October 17, 2000	[65 FR 61744]
Revision	Vol. 79	February 27, 2014	[79 FR 11228]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Subpart LL—"Standards of Performance for Metallic Mineral Processing Plants"

The provisions of 40 CFR Part 60 Subpart LL, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart LL			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 49	February 21, 1984	[49 FR 6464]
Revision	Vol. 54	February 14, 1989	[54 FR 6676]
Revision	Vol.65	October 17, 2000	[65 FR 61744]
Revision	Vol. 79	February 27, 2014	[79 FR 11228]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Subpart MM—"Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations"

The provisions of 40 CFR Part 60 Subpart MM, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart MM			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 45	December 24, 1980	[45 FR 85415]
Revision	Vol. 48	February 4, 1983	[48 FR 5454]
Revision	Vol. 50	September 9, 1985	[50 FR 36834]
Revision	Vol. 55	December 13, 1990	[55 FR 51383]
Revision	Vol. 59	October 11, 1994	[59 FR 51386]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

Subpart NN—"Standards of Performance for Phosphate Rock Plants"

The provisions of 40 CFR Part 60 Subpart NN, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart NN			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 47	April 16, 1982	[47 FR 16589]
Revision	Vol. 54	February 14, 1989	[54 FR 6676]
Revision	Vol. 54	May 17, 1989	[54 FR 21344]
Revision	Vol. 64	February 12, 1999	[64 FR 7466]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

Subpart OO—[Reserved]

Subpart PP—"Standards of Performance for Ammonium Sulfate Manufacture"

The provisions of 40 CFR Part 60 Subpart PP, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart PP			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 45	November 12, 1980	[45 FR 74850]
Revision	Vol. 54	February 14, 1989	[54 FR 6676]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

Subpart QQ—"Standards of Performance for the Graphic Arts Industry: Publication Rotogravure Printing"

The provisions of 40 CFR Part 60 Subpart QQ, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart QQ			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 47	November 8, 1982	[47 FR 50649]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Subpart RR—"Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations"

The provisions of 40 CFR Part 60 Subpart RR, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart RR			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 48	October 18, 1983	[48 FR 48375]
Revision	Vol. 55	December 13, 1990	[55 FR 51383]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

Subpart SS—"Standards of Performance for Industrial Surface Coating: Large Appliances"

The provisions of 40 CFR Part 60 Subpart SS, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart SS			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 47	October 27, 1982	[47 FR 47785]
Revision	Vol. 55	December 13, 1990	[55 FR 51383]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

Subpart TT—"Standards of Performance for Metal Coil Surface Coating"

The provisions of 40 CFR Part 60 Subpart TT, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart TT			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 47	November 1, 1982	[47 FR 49612]
Revision	Vol. 48	January 10, 1983	[48 FR 1056]
Revision	Vol. 51	June 24, 1986	[51 FR 22938]
Revision	Vol. 55	December 13, 1990	[55 FR 51383]
Revision	Vol. 56	May 3, 1991	[56 FR 20497]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

Subpart UU—"Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture"

The provisions of 40 CFR Part 60 Subpart UU, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart UU			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 47	August 6, 1982	[47 FR 34143]
Revision	Vol. 54	February 14, 1989	[54 FR 6674]
Revision	Vol. 54	June 27, 1989	[54 FR 27016]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 79	February 27, 2014	[79 FR 11228]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Subpart VV—"Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006"

The provisions of 40 CFR Part 60 Subpart VV, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart VV			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 48	October 18, 1983	[48 FR 48335]
Revision	Vol. 49	May 30, 1984	[49 FR 22607]
Revision	Vol. 49	June 29, 1984	[49 FR 26738]
Revision	Vol. 51	January 21, 1986	[51 FR 2702]
Revision	Vol. 54	February 14, 1989	[54 FR 6678]
Revision	Vol. 54	June 27, 1989	[54 FR 27016]
Revision	Vol. 60	August 18, 1995	[60 FR 43258]
Revision	Vol. 61	June 12, 1996	[61 FR 29878]

40 CFR Part 60 Subpart VV			
Federal Register Citation	**Volume**	**Date**	**Notice**
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 65	December 14, 2000	[65 FR 78268]
Revision	Vol. 72	November 16, 2007	[72 FR 64860]
Revision	Vol. 73	June 2, 2008	[73 FR 31372]
Revision	Vol. 73	June 2, 2008	[73 FR 31376]

Subpart VVa—"Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006"

The provisions of 40 CFR Part 60 Subpart VVa, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart VVa			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 72	November 16, 2007	[72 FR 64860]
Revision	Vol. 73	June 2, 2008	[73 FR 31372]
Revision	Vol. 73	June 2, 2008	[73 FR 31376]

Subpart WW—"Standards of Performance for the Beverage Can Surface Coating Industry"

The provisions of 40 CFR Part 60 Subpart WW, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart WW			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 47	November 1, 1982	[47 FR 49612]
Revision	Vol. 55	December 13, 1990	[55 FR 51384]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

Subpart XX—"Standards of Performance for Bulk Gasoline Terminals"

The provisions of 40 CFR Part 60 Subpart XX, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart XX			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 48	August 18, 1983	[48 FR 37590]
Revision	Vol. 48	December 22, 1983	[48 FR 56580]
Revision	Vol. 54	February 14, 1989	[54 FR 6678]
Revision	Vol. 54	May 17, 1989	[54 FR 21344]
Revision	Vol. 64	February 12, 1999	[64 FR 7466]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 68	December 19, 2003	[68 FR 70960]

Subpart AAA—"Standards of Performance for New Residential Wood Heaters"

The provisions of 40 CFR Part 60 Subpart AAA, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart AAA			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 53	February 26, 1988	[53 FR 5873]

40 CFR Part 60 Subpart AAA			
Federal Register Citation	**Volume**	**Date**	**Notice**
Revision	Vol. 53	April 12, 1988	[53 FR 12009]
Revision	Vol. 53	April 26, 1988	[53 FR 14889]
Revision	Vol. 57	February 13, 1992	[57 FR 5328]
Revision	Vol. 60	June 29, 1995	[60 FR 33925]
Revision	Vol. 63	November 24, 1998	[63 FR 64874]
Revision	Vol. 64	February 12, 1999	[64 FR 7466]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 80	March 16, 2015	[80 FR 13671]

HISTORY: Amended by State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016.

Subpart BBB—"Standards of Performance for the Rubber Tire Manufacturing Industry"

The provisions of 40 CFR Part 60 Subpart BBB, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart BBB			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 52	September 15, 1987	[52 FR 34874]
Revision	Vol. 52	October 9, 1987	[52 FR 37874]
Revision	Vol. 54	September 19, 1989	[54 FR 38635]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 81	June 30, 2016	[81 FR 42542]
Revision	Vol. 81	July 6, 2016	[81 FR 43950]

HISTORY: Amended by State Register Volume 41, Issue No. 8, Doc. No. 4750, eff August 25, 2017.

Subpart CCC—[Reserved]

Subpart DDD—"Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry"

The provisions of 40 CFR Part 60 Subpart DDD, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart DDD			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 55	December 11, 1990	[55 FR 51035]
Revision	Vol. 56	March 5, 1991	[56 FR 9178]
Revision	Vol. 56	March 22, 1991	[56 FR 12299]
Revision	Vol. 58	April 7, 1993	[58 FR 18014]
Revision	Vol. 64	March 9, 1999	[64 FR 11541]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 65	December 14, 2000	[65 FR 78268]
Revision	Vol. 81	June 30, 2016	[81 FR 42542]

HISTORY: Amended by State Register Volume 41, Issue No. 8, Doc. No. 4750, eff August 25, 2017.

Subpart EEE—[Reserved]

Subpart FFF—"Standards of Performance for Flexible Vinyl and Urethane Coating and Printing"

The provisions of 40 CFR Part 60 Subpart FFF, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart FFF			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 49	June 29, 1984	[49 FR 26892]
Revision	Vol. 49	August 17, 1984	[49 FR 32848]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

Subpart GGG—"Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After January 4, 1983, and on or Before November 7, 2006"

The provisions of 40 CFR Part 60 Subpart GGG, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart GGG			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 49	May 30, 1984	[49 FR 22606]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 72	November 16, 2007	[72 FR 64860]
Revision	Vol. 73	June 2, 2008	[73 FR 31372]
Revision	Vol. 73	June 2, 2008	[73 FR 31376]

Subpart GGGa—"Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006"

The provisions of 40 CFR Part 60 Subpart GGGa, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart GGGa			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 72	November 16, 2007	[72 FR 64860]
Revision	Vol. 73	June 2, 2008	[73 FR 31372]
Revision	Vol. 73	June 2, 2008	[73 FR 31376]

Subpart HHH—"Standards of Performance for Synthetic Fiber Production Facilities"

The provisions of 40 CFR Part 60 Subpart HHH, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart HHH			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 49	April 5, 1984	[49 FR 13651]
Revision	Vol. 49	April 27, 1984	[49 FR 18096]
Revision	Vol. 55	December 13, 1990	[55 FR 51384]
Revision	Vol. 59	June 23, 1994	[59 FR 32341]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

Subpart III—"Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes"

The provisions of 40 CFR Part 60 Subpart III, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart III			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 55	June 29, 1990	[55 FR 26922]
Revision	Vol. 55	September 7, 1990	[55 FR 36932]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 65	December 14, 2000	[65 FR 78268]
Revision	Vol. 81	June 30, 2016	[81 FR 42542]
Revision	Vol. 81	July 6, 2016	[81 FR 43950]

HISTORY: Amended by State Register Volume 41, Issue No. 8, Doc. No. 4750, eff August 25, 2017.

Subpart JJJ—"Standards of Performance for Petroleum Dry Cleaners"

The provisions of 40 CFR Part 60 Subpart JJJ, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart JJJ			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 49	September 21, 1984	[49 FR 37331]
Revision	Vol. 50	November 27, 1985	[50 FR 49026]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

Subpart KKK—"Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants"

The provisions of 40 CFR Part 60 Subpart KKK, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart KKK			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 50	June 24, 1985	[50 FR 26124]
Revision	Vol. 51	January 21, 1986	[51 FR 2702]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 77	August 16, 2012	[77 FR 49490]

Subpart LLL—"Standards of Performance for SO_2 Emissions from Onshore Natural Gas Processing for Which Construction, Reconstruction, or Modification Commenced After January 20, 1984, and on or Before August 23, 2011"

The provisions of 40 CFR Part 60 Subpart LLL, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart LLL			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 50	October 1, 1985	[50 FR 40160]
Revision	Vol. 54	February 14, 1989	[54 FR 6679]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 77	August 16, 2012	[77 FR 49490]
Revision	Vol. 81	June 30, 2016	[81 FR 42542]
Revision	Vol. 81	July 6, 2016	[81 FR 43950]

HISTORY: Amended by State Register Volume 39, Issue No. 6, Doc. No. 4481, eff June 26, 2015; State Register Volume 41, Issue No. 8, Doc. No. 4750, eff August 25, 2017.

Subpart MMM—[Reserved]

Subpart NNN—"Standards of Performance for Volatile Organic Compound (VOC) Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations"

The provisions of 40 CFR Part 60 Subpart NNN, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart NNN			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 55	June 29, 1990	[55 FR 26942]
Revision	Vol.55	September 7, 1990	[55 FR 36932]
Revision	Vol.60	November 27, 1995	[60 FR 58237, 58238]
Revision	Vol.65	October 17, 2000	[65 FR 61744]
Revision	Vol.65	December 14, 2000	[65 FR 78268]
Revision	Vol.74	June 24, 2009	[74 FR 29948]
Revision	Vol. 79	February 27, 2014	[79 FR 11228]
Revision	Vol. 81	June 30, 2016	[81 FR 42542]
Revision	Vol. 81	July 6, 2016	[81 FR 43950]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015; State Register Volume 40, Issue No. 8, Doc. No. 4750, eff August 25, 2017.

Subpart OOO—"Standards of Performance for Nonmetallic Mineral Processing Plants"

The provisions of 40 CFR Part 60 Subpart OOO, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart OOO			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 51	August 1, 1985	[51 FR 31337]
Revision	Vol. 54	February 14, 1989	[54 FR 6680]
Revision	Vol. 62	June 9, 1997	[62 FR 31360]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 74	April 28, 2009	[74 FR 19294]

Subpart PPP—"Standards of Performance for Wool Fiberglass Insulation Manufacturing Plants"

The provisions of 40 CFR Part 60 Subpart PPP, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart PPP			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 50	February 25, 1985	[50 FR 7699]
Revision	Vol. 54	February 14, 1989	[54 FR 6680]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

Subpart QQQ—"Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems"

The provisions of 40 CFR Part 60 Subpart QQQ, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart QQQ			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 53	November 23, 1988	[53 FR 47623]
Revision	Vol. 60	August 18, 1995	[60 FR 43259]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

Subpart RRR—"Standards of Performance for Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes"

The provisions of 40 CFR Part 60 Subpart RRR, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart RRR			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 58	August 31, 1993	[58 FR 45948]
Revision	Vol. 60	November 27, 1995	[60 FR 58238]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 65	December 14, 2000	[65 FR 78268]

Subpart SSS—"Standards of Performance for Magnetic Tape Coating Facilities"

The provisions of 40 CFR Part 60 Subpart SSS, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart SSS			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 53	October 3, 1988	[53 FR 38914]
Revision	Vol. 53	October 28, 1988	[53 FR 43799]
Revision	Vol. 53	November 29, 1988	[53 FR 47955]
Revision	Vol. 53	December 9, 1988	[53 FR 49822]
Revision	Vol. 64	February 12, 1999	[64 FR 7467]

Subpart TTT—"Standards of Performance for Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines"

The provisions of 40 CFR Part 60 Subpart TTT, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart TTT			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 53	January 29, 1988	[53 FR 2676]
Revision	Vol. 53	May 27, 1988	[53 FR 19300]
Revision	Vol. 54	June 15, 1989	[54 FR 25459]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

Subpart UUU—"Standards of Performance for Calciners and Dryers in Mineral Industries"

The provisions of 40 CFR Part 60 Subpart UUU, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart UUU			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 57	September 28, 1992	[57 FR 44503]
Revision	Vol. 58	July 29, 1993	[58 FR 40591]

40 CFR Part 60 Subpart UUU			
Federal Register Citation	**Volume**	**Date**	**Notice**
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

Subpart VVV—"Standards of Performance for Polymeric Coating of Supporting Substrates Facilities"

The provisions of 40 CFR Part 60 Subpart VVV, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart VVV			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 54	September 11, 1989	[54 FR 37551]
Revision	Vol. 61	March 12, 1996	[61 FR 9905]

Subpart WWW—"Standards of Performance for Municipal Solid Waste Landfills"

The provisions of 40 CFR Part 60 Subpart WWW, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart WWW			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 61	March 12, 1996	[61 FR 9905]
Revision	Vol. 63	June 16, 1998	[63 FR 32743]
Revision	Vol. 64	February 24, 1999	[64 FR 9262]
Revision	Vol. 65	April 10, 2000	[65 FR 18906]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 71	September 21, 2006	[71 FR 55119]

Subpart XXX—"Standards of Performance for Municipal Solid Waste Landfills that Commenced Construction, Reconstruction, or Modification After July 17, 2014"

The provisions of 40 CFR Part 60 Subpart XXX, as originally published in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart XXX			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 81	August 29, 2016	[81 FR 59332]

HISTORY: Added by State Register Volume 41, Issue No. 8, Doc. No. 4750, eff August 25, 2017.

Subpart YYY—[Reserved]

Subpart ZZZ—[Reserved]

Subpart AAAA—"Standards of Performance for Small Municipal Waste Combustion Units for Which Construction Is Commenced After August 30, 1999, or for Which Modification or Reconstruction Is Commenced After June 6, 2001"

The provisions of 40 CFR Part 60 Subpart AAAA, as originally published in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart AAAA			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 65	December 6, 2000	[65 FR 76350]

Subpart BBBB—"Emission Guidelines and Compliance Times for Small Municipal Waste Combustion Units Constructed on or Before August 30, 1999"

The provisions of 40 CFR Part 60 Subpart BBBB, as originally published in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart BBBB			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 65	December 6, 2000	[65 FR 76378]

Subpart CCCC—"Standards of Performance for Commercial and Industrial Solid Waste Incineration Units"

The provisions of 40 CFR Part 60 Subpart CCCC, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart CCCC			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 65	December 1, 2000	[65 FR 75338]
Revision	Vol. 66	March 27, 2001	[66 FR 16605]
Revision	Vol. 70	September 22, 2005	[70 FR 55568]
Revision	Vol. 76	May 18, 2011	[76 FR 28662]
Revision	Vol. 78	February 7, 2013	[78 FR 9112]
Revision	Vol. 81	June 23, 2016	[81 FR 40956]

HISTORY: Amended by State Register Volume 41, Issue No. 8, Doc. No. 4750, eff August 25, 2017.

Subpart DDDD—"Performance Standards and Compliance Times for Existing Commercial and Industrial Solid Waste Incineration Units"

(A) Except as provided in (B) below, incineration units that meet all three criteria set forth in 40 CFR 60.2550(a)(1) through (a)(3) are subject to this subpart and must comply with all applicable requirements of this subpart.

(B) This subpart exempts the types of units described in paragraphs (a) through (j) of 40 CFR 60.2555, but some units are required to provide notifications. For purposes of this paragraph, the words "Administrator" and "Agency" as used in 40 CFR 60.2555 shall be replaced by "Department" and "EPA Administrator" respectively.

(C) If the owner or operator of a CISWI unit or air curtain incinerator makes changes that meet the definition of modification or reconstruction after August 7, 2013, the CISWI unit becomes subject to 40 CFR Part 60, Subpart CCCC and Regulation 61 62.60, Subpart CCCC, and this subpart no longer applies to that unit.

(D) If the owner or operator of a CISWI unit makes physical or operational changes to an existing CISWI unit primarily to comply with this subpart, 40 CFR Part 60, Subpart CCCC and Regulation 61 62.60, Subpart CCCC do not apply to that unit. Such changes do not qualify as modifications or reconstructions under 40 CFR Part 60, Subpart CCCC or Regulation 61 62.60, Subpart CCCC.

(E) For purposes of this subpart, "you" means the owner or operator of a CISWI unit.

(F) Each owner or operator of an existing CISWI unit shall comply with the model rule standards, requirements, and provisions of 40 CFR Part 60, Subpart DDDD (Emissions Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units), as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below:

40 CFR Part 60 Subpart DDDD			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 65	December 1, 2000	[65 FR 75338]
Revision	Vol. 70	September 22, 2005	[70 FR 55568]
Revision	Vol. 76	May 18, 2011	[76 FR 28662]
Revision	Vol. 78	February 7, 2013	[78 FR 9112]
Revision	Vol. 81	June 23, 2016	[81 FR 40956]
Revision	Vol. 84	April 16, 2019	[84 FR 15846]

These standards, requirements, and provisions are hereby incorporated and adopted by reference as follows:

(1) 40 CFR 60.2610 and 40 CFR 60.2615, Increments of Progress.

(2) 40 CFR 60.2620, 40 CFR 60.2625, and 40 CFR 60.2630, Waste Management Plan, due no later than compliance date listed in Table 1 below.

(3) 40 CFR 60.2635 through 40 CFR 60.2665, Operator Training and Qualification.

(4) 40 CFR 60.2670 through 60.2680, Emission Limitations and Operating Limits.

(5) 40 CFR 60.2690 through 60.2695, Performance Testing.

(6) 40 CFR 60.2700 through 60.2706, Initial Compliance Requirements.

(7) 40 CFR 60.2710 through 60.2725, Continuous Compliance Requirements.

(8) 40 CFR 60.2730 through 60.2735, Monitoring.

(9) 40 CFR 60.2740 through 60.2800, Recordkeeping and Reporting, including submission of waste management plan no later than compliance date listed in Table 1 below; with the exception of the following: all reports required under 40 CFR 60.2795(a), (b)(1), and (b)(2) must be submitted to the Department in addition to being sent to the EPA.

(10) 40 CFR 60.2805, Title V Operating Permits.

(11) 40 CFR 60.2810 and 40 CFR 60.2850(b) through 60.2870, Air Curtain Incinerators.

(12) 40 CFR 60.2875, Definitions, except that the word "Administrator" shall mean the Department of Health and Environmental Control, with the exception of provisions within this subpart that may not be delegated by the EPA.

(13) 40 CFR Part 60 Subpart DDDD Table 1, modified as follows:

Table 1 to Subpart DDDD of Part 60 Compliance Schedules

Comply with compliance schedule	By this date
Final compliance with performance standards	February 7, 2018.

(14) 40 CFR Part 60 Subpart DDDD Tables 2 through 9, retitled as follows:

(a) Table 2 to Subpart DDDD - Emission Limitations That Apply to Incinerators Before February 7, 2018;

(b) Table 3 to Subpart DDDD - Operating Limits for Wet Scrubbers;

(c) Table 4 to Subpart DDDD - Toxic Equivalency Factors;

(d) Table 5 to Subpart DDDD - Summary of Reporting Requirements;

(e) Table 6 to Subpart DDDD - Emission Limitations That Apply to Incinerators on and After February 7, 2018;

(f) Table 7 to Subpart DDDD - Emission Limitations That Apply to Energy Recovery Units After February 7, 2018;

(g) Table 8 to Subpart DDDD - Emission Limitations That Apply to Waste-Burning Kilns After February 7, 2018; and

(h) Table 9 to Subpart DDDD - Emission Limitations That Apply to Small, Remote Incinerators After February 7, 2018.

(G) For purposes of this subpart, the authorities referenced in 40 CFR 60.2542 will not be delegated to state, local, or tribal agencies.

HISTORY: Amended by State Register Volume 41, Issue No. 8, Doc. No. 4750, eff August 25, 2017; SCSR43–8 Doc. No. 4881, eff August 23, 2019.

Subpart EEEE—"Standards of Performance for Other Solid Waste Incineration Units for Which Construction Is Commenced After December 9, 2004, or for Which Modification or Reconstruction Is Commenced on or After June 16, 2006"

The provisions of 40 CFR Part 60 Subpart EEEE, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart EEEE			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 70	December 16, 2005	[70 FR 74870]
Revision	Vol. 71	November 24, 2006	[71 FR 67802]

Subpart FFFF—"Emission Guidelines and Compliance Times for Other Solid Waste Incineration Units That Commenced Construction on or Before December 9, 2004"

The provisions of 40 CFR Part 60 Subpart FFFF, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart FFFF			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 70	December 16, 2005	[70 FR 74870]
Revision	Vol. 71	November 24, 2006	[71 FR 67802]

Subpart GGGG—[Reserved]

Subpart HHHH—[Reserved]

Subpart IIII—"Standards of Performance for Stationary Compression Ignition Internal Combustion Engines"

The provisions of 40 CFR Part 60 Subpart IIII, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart IIII			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 71	July 11, 2006	[71 FR 39154]
Revision	Vol. 76	June 28, 2011	[76 FR 37954]
Revision	Vol. 78	January 30, 2013	[78 FR 6674]
Revision	Vol. 79	February 27, 2014	[79 FR 11228]
Revision	Vol. 81	July 7, 2016	[81 FR 44212]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015; State Register Volume 41, Issue No. 8, Doc. No. 4750, eff August 25, 2017.

Subpart JJJJ—"Standards of Performance for Stationary Spark Ignition Internal Combustion Engines"

The provisions of 40 CFR Part 60 Subpart JJJJ, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart JJJJ			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 73	January 18, 2008	[73 FR 3568]
Revision	Vol. 73	October 8, 2008	[73 FR 59034]
Revision	Vol. 78	January 30, 2013	[78 FR 6674]
Revision	Vol. 79	February 27, 2014	[79 FR 11228]
Revision	Vol. 81	August 30, 2016	[81 FR 59800]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015; State Register Volume 41, Issue No. 8, Doc. No. 4750, eff August 25, 2017.

Subpart KKKK—"Standards of Performance for Stationary Combustion Turbines"

The provisions of 40 CFR Part 60 Subpart KKKK, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart KKKK			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 71	July 6, 2006	[71 FR 38482]
Revision	Vol. 74	March 20, 2009	[74 FR 11858]
Revision	Vol. 81	June 30, 2016	[81 FR 42542]

HISTORY: Amended by State Register Volume 41, Issue No. 8, Doc. No. 4750, eff August 25, 2017.

Subpart LLLL—"Standards of Performance for New Sewage Sludge Incineration Units"

The provisions of 40 CFR Part 60 Subpart LLLL, as originally published in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart LLLL			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 76	March 21, 2011	[76 FR 15372]

Subpart MMMM—"Emission Guidelines and Compliance Times for Existing Sewage Sludge Incineration Units"

The provisions of 40 CFR Part 60 Subpart MMMM, as originally published in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart MMMM			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 76	March 21, 2011	[76 FR 15372]

Subpart NNNN—[Reserved]

Subpart OOOO—"Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for which Construction, Modification or Reconstruction Commenced after August 23, 2011, and on or before September 18, 2015"

The provisions of 40 CFR Part 60 Subpart OOOO, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart OOOO			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 77	August 16, 2012	[77 FR 49490]
Revision	Vol. 78	September 23, 2013	[78 FR 58416]
Revision	Vol. 79	December 31, 2014	[79 FR 79018]
Revision	Vol. 80	August 12, 2015	[80 FR 48262]
Revision	Vol. 81	June 3, 2016	[81 FR 35824]
Revision	Vol. 81	June 30, 2016	[81 FR 42542]
Revision	Vol. 81	July 6, 2016	[81 FR 43950]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015; State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016; State Register Volume 41, Issue No. 8, Doc. No. 4750, eff August 25, 2017.

Subpart OOOOa—"Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification, or Reconstruction Commenced After September 18, 2015"

The provisions of 40 CFR Part 60 Subpart OOOOa, as originally published in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart OOOOa			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 81	June 3, 2016	[81 FR 35824]
Revision	Vol. 83	March 12, 2018	[83 FR 10628]

HISTORY: Added by State Register Volume 41, Issue No. 8, Doc. No. 4750, eff August 25, 2017; SCSR43–8 Doc. No. 4881, eff August 23, 2019.

Subpart PPPP—[Reserved]

Subpart QQQQ—"Standards of Performance For New Residential Hydronic Heaters And Forced-Air Furnaces"

The provisions of 40 CFR Part 60 Subpart QQQQ, as originally published in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart QQQQ			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 80	March 16, 2015	[80 FR 13671]
Revision	Vol. 83	November 14, 2018	[83 FR 56713]

HISTORY: Added by State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016; SCSR43–8 Doc. No. 4881, eff August 23, 2019.

Subpart TTTT—"Standards of Performance For Greenhouse Gas Emissions For Electric Generating Units"

The provisions of 40 CFR Part 60 Subpart TTTT, as originally published in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 60 Subpart TTTT			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 80	October 23, 2015	[80 FR 64509]

HISTORY: Added by State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016.

61–62.61
National Emission Standards for Hazardous Air Pollutants

Editor's Note

The following constitutes the history for 61–62.61 unless noted otherwise:

HISTORY: Added by State Register Volume 28, Issue No. 9, eff September 24, 2004. Amended by State Register Volume 28, Issue No. 10, eff October 22, 2004; State Register Volume 29, Issue No. 8, eff August 26, 2005; State Register Volume 32, Issue No. 10, eff October 24, 2008; State Register Volume 33, Issue No. 10, eff October 23, 2009; State Register Volume 34, Issue No. 11, eff November 26, 2010; State Register Volume 36, Issue No. 4, eff April 27, 2012; State Register Volume 36, Issue No. 7, eff July 27, 2012 (errata); State Register Volume 36, Issue No. 9, eff September 28, 2012 (errata); State Register Volume 37, Issue No. 4, eff April 26, 2013; State Register Volume 38, Issue No. 6, Doc. No. 4388, eff June 27, 2014.

Subpart A—"General Provisions"

The provisions of 40 Code of Federal Regulations (CFR) Part 61 Subpart A, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 61 Subpart A			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 38	April 6, 1973	[38 FR 8826]
Revision	Vol. 40	April 25, 1975	[40 FR 18170]
Revision	Vol. 40	October 14, 1975	[40 FR 48299]

40 CFR Part 61 Subpart A			
Federal Register Citation	**Volume**	**Date**	**Notice**
Revision	Vol. 42	September 29, 1977	[42 FR 51574]
Revision	Vol. 44	September 25, 1979	[44 FR 55174]
Revision	Vol. 48	January 27, 1983	[48 FR 3740]
Revision	Vol. 48	December 9, 1983	[48 FR 55266]
Revision	Vol. 49	June 6, 1984	[49 FR 23520]
Revision	Vol. 50	November 7, 1985	[50 FR 46290]
Revision	Vol. 50	November 7, 1985	[50 FR 46291]
Revision	Vol. 50	November 7, 1985	[50 FR 46292]
Revision	Vol. 50	November 7, 1985	[50 FR 46293]
Revision	Vol. 50	November 7, 1985	[50 FR 46294]
Revision	Vol. 51	March 5, 1986	[51 FR 7715]
Revision	Vol. 51	March 5, 1986	[51 FR 7719]
Revision	Vol. 51	April 1, 1986	[51 FR 11022]
Revision	Vol. 51	September 30, 1986	[51 FR 34914]
Revision	Vol. 52	October 8, 1987	[52 FR 37617]
Revision	Vol. 54	September 14, 1989	[54 FR 38073]
Revision	Vol. 54	December 15, 1989	[54 FR 51704]
Revision	Vol. 55	March 7, 1990	[55 FR 8341]
Revision	Vol. 55	May 2, 1990	[55 FR 18331]
Revision	Vol. 55	May 31, 1990	[55 FR 22027]
Revision	Vol. 55	August 13, 1990	[55 FR 32914]
Revision	Vol. 57	January 13, 1992	[57 FR 1226]
Revision	Vol. 57	March 5, 1992	[57 FR 8016]
Revision	Vol. 58	January 7, 1993	[58 FR 3105]
Revision	Vol. 58	January 21, 1993	[58 FR 5299]
Revision	Vol. 58	April 7, 1993	[58 FR 18014]
Revision	Vol. 59	March 11, 1994	[59 FR 11554]
Revision	Vol. 59	March 16, 1994	[59 FR 12408]
Revision	Vol. 59	June 17, 1994	[59 FR 31157]
Revision	Vol. 59	July 15, 1994	[59 FR 36280]
Revision	Vol. 60	March 15, 1995	[60 FR 13912]
Revision	Vol. 60	August 21, 1995	[60 FR 43396]
Revision	Vol. 60	September 5, 1995	[60 FR 46206]
Revision	Vol. 60	September 28, 1995	[60 FR 50244]
Revision	Vol. 61	December 30, 1996	[61 FR 68972]
Revision	Vol. 62	January 14, 1997	[62 FR 1832]
Revision	Vol. 62	February 24, 1997	[62 FR 8314]
Revision	Vol. 63	December 1, 1998	[63 FR 66054]
Revision	Vol. 64	February 3, 1999	[64 FR 5574]
Revision	Vol. 64	February 12, 1999	[64 FR 7458]
Revision	Vol. 64	May 6, 1999	[64 FR 24288]
Revision	Vol. 65	February 28, 2000	[65 FR 10391]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 65	December 14, 2000	[65 FR 78268]
Revision	Vol. 66	June 15, 2001	[66 FR 32545]
Revision	Vol. 66	August 13, 2001	[66 FR 42425, 42427]
Revision	Vol. 66	September 19, 2001	[66 FR 48211]
Revision	Vol. 67	January 23, 2002	[67 FR 3106]
Revision	Vol. 67	March 14, 2002	[67 FR 11417]
Revision	Vol. 67	April 26, 2002	[67 FR 20652]
Revision	Vol. 67	June 10, 2002	[67 FR 39622]

40 CFR Part 61 Subpart A			
Federal Register Citation	**Volume**	**Date**	**Notice**
Revision	Vol. 67	September 9, 2002	[67 FR 57159]
Revision	Vol. 67	October 7, 2002	[67 FR 62395]
Revision	Vol. 68	April 7, 2003	[68 FR 16726]
Revision	Vol. 68	May 28, 2003	[68 FR 31611]
Revision	Vol. 68	June 17, 2003	[68 FR 35792]
Revision	Vol. 68	December 11, 2003	[68 FR 69036]
Revision	Vol. 69	March 26, 2004	[69 FR 15687]
Revision	Vol. 69	April 9, 2004	[69 FR 18801]
Revision	Vol. 72	May 16, 2007	[72 FR 27437]
Revision	Vol. 73	April 3, 2008	[73 FR 18162]
Revision	Vol. 73	May 6, 2008	[73 FR 24870]
Revision	Vol. 74	October 27, 2009	[74 FR 55142]
Revision	Vol. 75	September 13, 2010	[75 FR 55636]
Revision	Vol. 79	February 27, 2014	[79 FR 11228]
Revision	Vol. 81	August 30, 2016	[81 FR 59800]
Revision	Vol. 82	July 17, 2017	[82 FR 32644]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015; State Register Volume 41, Issue No. 8, Doc. No. 4750, eff August 25, 2017; SCSR43–1 Doc. No. 4870, eff January 25, 2019.

Subpart B—"National Emission Standards for Radon Emissions from Underground Uranium Mines"

The provisions of 40 CFR Part 61 Subpart B, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 61 Subpart B			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 54	December 15, 1989	[54 FR 51694]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

Subpart C—"National Emission Standard for Beryllium"

The provisions of Title 40 CFR Part 61 Subpart C, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 61 Subpart C			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 38	April 6, 1973	[38 FR 8826]
Revision	Vol. 50	November 7, 1985	[50 FR 46294]
Revision	Vol. 58	April 7, 1993	[58 FR 18014]
Revision	Vol. 79	February 27, 2014	[79 FR 11228]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Subpart D—"National Emission Standard for Beryllium Rocket Motor Firing"

The provisions of Title 40 CFR Part 61 Subpart D, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 61 Subpart D

Federal Register Citation	Volume	Date	Notice
Original Promulgation	Vol. 38	April 6, 1973	[38 FR 8826]
Revision	Vol. 50	November 7, 1985	[50 FR 46294]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 79	February 27, 2014	[79 FR 11228]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Subpart E—"National Emission Standard for Mercury"

The provisions of Title 40 CFR Part 61 Subpart E, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 61 Subpart E			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 38	April 6, 1973	[38 FR 8826]
Revision	Vol. 40	October 14, 1975	[40 FR 48302]
Revision	Vol. 47	June 8, 1982	[47 FR 24704]
Revision	Vol. 49	September 12, 1984	[49 FR 35770]
Revision	Vol. 50	November 7, 1985	[50 FR 46294]
Revision	Vol. 52	March 19, 1987	[52 FR 8726]
Revision	Vol. 53	September 23, 1988	[53 FR 36972]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 79	February 27, 2014	[79 FR 11228]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Subpart F—"National Emission Standard for Vinyl Chloride"

The provisions of 40 CFR Part 61 Subpart F, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 61 Subpart F			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 41	October 21, 1976	[41 FR 46564]
Revision	Vol. 41	December 3, 1976	[41 FR 53017]
Revision	Vol. 42	June 7, 1977	[42 FR 29006]
Revision	Vol. 47	September 8, 1982	[47 FR 39486]
Revision	Vol. 50	November 7, 1985	[50 FR 46295]
Revision	Vol. 51	September 30, 1986	[51 FR 34908]
Revision	Vol. 53	September 23, 1988	[53 FR 36972]
Revision	Vol. 53	November 21, 1988	[53 FR 46976]
Revision	Vol. 55	July 10, 1990	[55 FR 28348]
Revision	Vol. 57	December 23, 1992	[57 FR 60999]
Revision	Vol. 58	April 7, 1993	[58 FR 18014]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

Subpart G—[Reserved]

Subpart H—"National Emission Standards for Emissions of Radionuclides Other Than Radon from Department of Energy Facilities"

The provisions of 40 CFR Part 61 Subpart H, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 61 Subpart H			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 54	December 15, 1989	[54 FR 51695]
Revision	Vol. 61	December 30, 1996	[61 FR 68972]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 67	September 9, 2002	[67 FR 57159]

Subpart I—"National Emission Standards for Radionuclide Emissions from Federal Facilities Other Than Nuclear Regulatory Commission Licensees and Not Covered by Subpart H"

The provisions of 40 CFR Part 61 Subpart I, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 61 Subpart I			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 54	December 15, 1989	[54 FR 51695]
Revision	Vol. 56	April 24, 1991	[56 FR 18736]
Revision	Vol. 56	August 5, 1991	[56 FR 37160]
Revision	Vol. 60	September 5, 1995	[60 FR 46206]
Revision	Vol. 61	December 30, 1996	[61 FR 68972]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 67	September 9, 2002	[67 FR 57159]

Subpart J—"National Emission Standard for Equipment Leaks (Fugitive Emission Sources) of Benzene"

The provisions of 40 CFR Part 61 Subpart J, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 61 Subpart J			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 49	June 6, 1984	[49 FR 23513]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 65	December 14, 2000	[65 FR 78268]

Subpart K—"National Emission Standards for Radionuclide Emissions from Elemental Phosphorus Plants"

The provisions of 40 CFR Part 61 Subpart K, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 61 Subpart K			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 54	December 15, 1989	[54 FR 51699]
Revision	Vol. 56	December 19, 1991	[56 FR 65943]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

Subpart L—"National Emission Standard for Benzene Emissions from Coke By-Product Recovery Plants"

The provisions of 40 CFR Part 61 Subpart L, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 61 Subpart L			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 54	September 14, 1989	[54 FR 38073]
Revision	Vol. 55	April 13, 1990	[55 FR 14037]
Revision	Vol. 55	September 14, 1990	[55 FR 38073]
Revision	Vol. 56	September 19, 1991	[56 FR 47406]
Revision	Vol. 64	February 12, 1999	[64 FR 7458]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

Subpart M—"National Emission Standard for Asbestos"

The provisions of 40 CFR Part 61 Subpart M, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 61 Subpart M			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 49	April 5, 1984	[49 FR 13661]
Revision	Vol. 49	June 21, 1984	[49 FR 25453]
Revision	Vol. 51	March 10, 1986	[51 FR 8199]
Revision	Vol. 53	September 23, 1988	[53 FR 36972]
Revision	Vol. 55	November 20, 1990	[55 FR 48414]
Revision	Vol. 56	January 16, 1991	[56 FR 1669]
Revision	Vol. 59	June 17, 1994	[59 FR 31157]
Revision	Vol. 64	February 12, 1999	[64 FR 7458]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 68	September 18, 2003	[68 FR 54790]
Revision	Vol. 69	July 20, 2004	[69 FR 43322]

Subpart N—"National Emission Standard for Inorganic Arsenic Emissions from Glass Manufacturing Plants"

The provisions of Title 40 CFR Part 61 Subpart N, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 61 Subpart N			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 51	August 4, 1986	[51 FR 28025]
Revision	Vol. 51	October 3, 1986	[51 FR 35355]
Revision	Vol. 55	May 31, 1990	[55 FR 22027]
Revision	Vol. 64	February 12, 1999	[64 FR 7458]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 79	February 27, 2014	[79 FR 11228]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Subpart O—"National Emission Standard for Inorganic Arsenic Emissions from Primary Copper Smelters"

The provisions of 40 CFR Part 61 Subpart O, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 61 Subpart O			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 51	August 4, 1986	[51 FR 28029]
Revision	Vol. 55	May 31, 1990	[55 FR 22027]
Revision	Vol. 58	April 7, 1993	[58 FR 18014]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

Subpart P—"National Emission Standard for Inorganic Arsenic Emissions from Arsenic Trioxide and Metallic Arsenic Production Facilities"

The provisions of 40 CFR Part 61 Subpart P, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 61 Subpart P			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 51	August 4, 1986	[51 FR 28033]
Revision	Vol. 51	October 3, 1986	[51 FR 35355]
Revision	Vol. 58	April 7, 1993	[58 FR 18014]

Subpart Q—"National Emission Standards for Radon Emissions from Department of Energy Facilities"

The provisions of 40 CFR Part 61 Subpart Q, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 61 Subpart Q			
Federal Register Citation	**Volume**	**Date**	**Notice**
Revision	Vol. 54	December 15, 1989	[54 FR 51701]
Original Promulgation	Vol. 65	October 17, 2000	[65 FR 61744]

Subpart R—"National Emission Standards for Radon Emissions from Phosphogypsum Stacks"

The provisions of 40 CFR Part 61 Subpart R, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 61 Subpart R			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 57	June 3, 1992	[57 FR 23305]
Revision	Vol. 64	February 3, 1999	[64 FR 5574]
Revision	Vol. 64	October 1, 1999	[64 FR 53212]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

Subpart S—[Reserved]

Subpart T—"National Emission Standards for Radon Emissions from the Disposal of Uranium Mill Tailings"

The provisions of 40 CFR Part 61 Subpart T, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 61 Subpart T			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 54	December 15, 1989	[54 FR 51702]
Revision	Vol. 56	December 31, 1991	[56 FR 67542]

40 CFR Part 61 Subpart T			
Federal Register Citation	**Volume**	**Date**	**Notice**
Revision	Vol. 59	July 15, 1994	[59 FR 36280]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]

Subpart U—[Reserved]

Subpart V—"National Emission Standard for Equipment Leaks (Fugitive Emission Sources)"

The provisions of 40 CFR Part 61 Subpart V, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 61 Subpart V			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 49	June 6, 1984	[49 FR 23513]
Revision	Vol. 49	October 2, 1984	[49 FR 38946]
Revision	Vol. 49	October 31, 1984	[49 FR 43647]
Revision	Vol. 51	January 21, 1986	[51 FR 2702]
Revision	Vol. 51	September 30, 1986	[51 FR 34915]
Revision	Vol. 53	September 23, 1988	[53 FR 36972]
Revision	Vol. 54	September 14, 1989	[54 FR 38076]
Revision	Vol. 55	July 10, 1990	[55 FR 28349]
Revision	Vol. 58	April 7, 1993	[58 FR 18014]
Revision	Vol. 65	December 14, 2000	[65 FR 78268]

Subpart W—"National Emission Standards for Radon Emissions from Operating Mill Tailings"

The provisions of 40 CFR Part 61 Subpart W, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 61 Subpart W			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 54	December 15, 1989	[54 FR 51703]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 82	January 17, 2017	[82 FR 5142]

HISTORY: Amended by SCSR43–1 Doc. No. 4870, eff January 25, 2019.

Subpart X—[Reserved]

Subpart Y—"National Emission Standard for Benzene Emissions from Benzene Storage Vessels"

The provisions of 40 CFR Part 61 Subpart Y, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 61 Subpart Y			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 54	September 14, 1989	[54 FR 38077]
Revision	Vol. 54	December 11, 1989	[54 FR 50887]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 65	December 14, 2000	[65 FR 78268]

Subpart Z—[Reserved]

Subpart AA—[Reserved]

Subpart BB—"National Emission Standard for Benzene Emissions from Benzene Transfer Operations"

The provisions of 40 CFR Part 61 Subpart BB, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 61 Subpart BB			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 55	March 7, 1990	[55 FR 8341]
Revision	Vol. 55	April 3, 1990	[55 FR 12444]
Revision	Vol. 55	October 31, 1990	[55 FR 45804]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 65	December 14, 2000	[65 FR 78268]

Subpart CC—[Reserved]

Subpart DD—[Reserved]

Subpart EE—[Reserved]

Subpart FF—"National Emission Standard for Benzene Waste Operations"

The provisions of 40 CFR Part 61 Subpart FF, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 61 Subpart FF			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 55	March 7, 1990	[55 FR 8346]
Revision	Vol. 55	April 3, 1990	[55 FR 12444]
Revision	Vol. 55	May 2, 1990	[55 FR 18331]
Revision	Vol. 55	September 10, 1990	[55 FR 37231]
Revision	Vol. 57	March 5, 1992	[57 FR 8016]
Revision	Vol. 58	January 7, 1993	[58 FR 3095]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 67	November 12, 2002	[67 FR 68526]
Revision	Vol. 68	February 6, 2003	[68 FR 6062]
Revision	Vol. 68	December 4, 2003	[68 FR 67932]

61–62.63
National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories

Editor's Note

The following constitutes the history for 61–62.63 unless noted otherwise:

HISTORY: Added by State Register Volume 22, Issue No. 6, Part 2, eff June 26, 1998. Amended by State Register Volume 24, Issue No. 5, eff May 26, 2002; State Register Volume 25, Issue No. 10, eff October 26, 2001; State Register Volume 26, Issue No. 8, eff August 23, 2002; State Register Volume 27, Issue No. 6, Part 1, eff June 27, 2003; State Register Volume 28, Issue No. 9, eff September 24, 2004; State Register Volume 29, Issue No. 8, eff August 26, 2005; State Register Volume 30, Issue No. 9, eff September 22, 2006; State Register Volume 31, Issue No. 12, eff December 28, 2007; State Register Volume 32, Issue No. 10, eff October 24, 2008; State Register Volume 33, Issue No. 10, eff October 23, 2009; State Register Volume 34, Issue No. 5, eff May 28, 2010; State Register Volume 34, Issue No. 11, eff November 26, 2010;

State Register Volume 36, Issue No. 4, eff April 27, 2012; State Register Volume 37, Issue No. 4, eff April 26, 2013; State Register Volume 37, Issue No. 5, eff May 24, 2013 (errata); State Register Volume 37, Issue No. 12, eff December 27, 2013; State Register Volume 38, Issue No. 6, Doc. No. 4388, eff June 27, 2014; State Register Volume 38, Issue No. 8, Doc. No. 4463, eff August 22, 2014 (errata); State Register Volume 38, Issue No. 9, Doc. No. 4465, eff September 26, 2014.

Subpart A—"General Provisions"

Note: Section 112 of the Clean Air Act as amended in 1990 requires the United States Environmental Protection Agency (EPA) to issue emission standards for all major sources of the listed hazardous air pollutants (HAPs). These rules are generally known as "maximum achievable control technology" (MACT) standards. On June 26, 1995 [60 FR 32913], the EPA granted full approval to the State of South Carolina under Section 112(*l*)(5) and 40 CFR 63.91 of the State's program for receiving delegation of Section 112 standards that are unchanged from federal rules as promulgated. These rules are incorporated by reference by the Department and the tables are periodically revised as MACT standards are amended or promulgated. The word "Administrator" as used in these MACT standards shall mean the Department of Health and Environmental Control with the exception of the sections within these subparts that may not be delegated by the EPA.

The provisions of 40 Code of Federal Regulations (CFR) Part 63 Subpart A, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart A			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 59	March 16, 1994	[59 FR 12430]
Revision	Vol. 59	April 22, 1994	[59 FR 19453]
Revision	Vol. 59	December 6, 1994	[59 FR 62589]
Revision	Vol. 60	January 25, 1995	[60 FR 4963]
Revision	Vol. 60	June 27, 1995	[60 FR 33122]
Revision	Vol. 60	September 1, 1995	[60 FR 45980]
Revision	Vol. 61	May 21, 1996	[61 FR 25399]
Revision	Vol. 61	December 17, 1996	[61 FR 66227]
Revision	Vol. 62	December 10, 1997	[62 FR 65024]
Revision	Vol. 63	May 4, 1998	[63 FR 24444]
Revision	Vol. 63	May 13, 1998	[63 FR 26465]
Revision	Vol. 63	September 21, 1998	[63 FR 50326]
Revision	Vol. 63	October 7, 1998	[63 FR 53996]
Revision	Vol. 63	December 1, 1998	[63 FR 66061]
Revision	Vol. 64	January 28, 1999	[64 FR 4300]
Revision	Vol. 64	February 12, 1999	[64 FR 7468]
Revision	Vol. 64	April 12, 1999	[64 FR 17562]
Revision	Vol. 64	June 10, 1999	[64 FR 31375]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 67	February 14, 2002	[67 FR 6968]
Revision	Vol. 67	February 27, 2002	[67 FR 9156]
Revision	Vol. 67	April 5, 2002	[67 FR 16582]
Revision	Vol. 67	June 10, 2002	[67 FR 39794]
Revision	Vol. 67	July 23, 2002	[67 FR 48254]
Revision	Vol. 68	February 18, 2003	[68 FR 7706]
Revision	Vol. 68	April 21, 2003	[68 FR 19375]
Revision	Vol. 68	May 6, 2003	[68 FR 23898]
Revision	Vol. 68	May 8, 2003	[68 FR 24653]
Revision	Vol. 68	May 20, 2003	[68 FR 27646]
Revision	Vol. 68	May 23, 2003	[68 FR 28606]
Revision	Vol. 68	May 27, 2003	[68 FR 28774]

40 CFR Part 63 Subpart A			
Federal Register Citation	**Volume**	**Date**	**Notice**
Revision	Vol. 68	May 28, 2003	[68 FR 31746]
Revision	Vol. 68	May 29, 2003	[68 FR 32172]
Revision	Vol. 68	May 30, 2003	[68 FR 32586]
Revision	Vol. 68	November 13, 2003	[68 FR 64432]
Revision	Vol. 68	December 19, 2003	[68 FR 70960]
Revision	Vol. 69	January 2, 2004	[69 FR 130]
Revision	Vol. 69	February 3, 2004	[69 FR 5038]
Revision	Vol. 69	April 9, 2004	[69 FR 18801]
Revision	Vol. 69	April 19, 2004	[69 FR 20968]
Revision	Vol. 69	April 22, 2004	[69 FR 21737]
Revision	Vol. 69	April 26, 2004	[69 FR 22602]
Revision	Vol. 69	June 15, 2004	[69 FR 33474]
Revision	Vol. 69	July 30, 2004	[69 FR 45944]
Revision	Vol. 69	September 13, 2004	[69 FR 55218]
Revision	Vol. 70	April 15, 2005	[70 FR 19992]
Revision	Vol. 70	May 20, 2005	[70 FR 29400]
Revision	Vol. 70	October 12, 2005	[70 FR 59402]
Revision	Vol. 71	February 16, 2006	[71 FR 8342]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 71	July 28, 2006	[71 FR 42898]
Revision	Vol. 71	December 6, 2006	[71 FR 70651]
Revision	Vol. 72	January 3, 2007	[72 FR 26]
Revision	Vol. 72	January 23, 2007	[72 FR 2930]
Revision	Vol. 72	July 16, 2007	[72 FR 38864]
Revision	Vol. 72	October 29, 2007	[72 FR 61060]
Revision	Vol. 72	November 16, 2007	[72 FR 64860]
Revision	Vol. 72	December 26, 2007	[72 FR 73180]
Revision	Vol. 72	December 28, 2007	[72 FR 74088]
Revision	Vol. 73	January 2, 2008	[73 FR 226]
Revision	Vol. 73	January 9, 2008	[73 FR 1738]
Revision	Vol. 73	January 10, 2008	[73 FR 1916]
Revision	Vol. 73	January 18, 2008	[73 FR 3568]
Revision	Vol. 73	February 7, 2008	[73 FR 7210]
Revision	Vol. 73	March 7, 2008	[73 FR 12275]
Revision	Vol. 73	July 23, 2008	[73 FR 42978]
Revision	Vol. 73	December 22, 2008	[73 FR 78199]
Revision	Vol. 74	June 25, 2009	[74 FR 30366]
Revision	Vol. 74	October 28, 2009	[74 FR 55670]
Revision	Vol. 75	September 9, 2010	[75 FR 54970]
Revision	Vol. 75	September 13, 2010	[75 FR 55636]
Revision	Vol. 76	February 17, 2011	[76 FR 9450]
Revision	Vol. 77	February 16, 2012	[77 FR 9304]
Revision	Vol. 77	April 17, 2012	[77 FR 22848]
Revision	Vol. 77	September 11, 2012	[77 FR 55698]
Revision	Vol. 78	January 30, 2013	[78 FR 6674]
Revision	Vol. 78	January 31, 2013	[78 FR 7138]
Revision	Vol. 78	February 1, 2013	[78 FR 7488]
Revision	Vol. 78	June 20, 2013	[78 FR 37133]
Revision	Vol. 79	February 27, 2014	[79 FR 11228]
Revision	Vol. 79	March 27, 2014	[79 FR 17340]
Revision	Vol. 80	June 30, 2015	[80 FR 37365]

40 CFR Part 63 Subpart A			
Federal Register Citation	**Volume**	**Date**	**Notice**
Revision	Vol. 80	August 19, 2015	[80 FR 50385]
Revision	Vol. 80	September 18, 2015	[80 FR 56699]
Revision	Vol. 80	October 15, 2015	[80 FR 62389]
Revision	Vol. 80	October 26, 2015	[80 FR 65469]
Revision	Vol. 80	December 1, 2015	[80 FR 75178]
Revision	Vol. 80	December 4, 2015	[80 FR 75817]
Revision	Vol. 81	August 30, 2016	[81 FR 59800]
Revision	Vol. 82	January 18, 2017	[82 FR 5401]
Revision	Vol. 82	October 11, 2017	[82 FR 47328]
Revision	Vol. 82	October 16, 2017	[82 FR 48156]
Revision	Vol. 83	October 15, 2018	[83 FR 51842]
Revision	Vol. 83	November 14, 2018	[83 FR 56713]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015; State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016; State Register Volume 41, Issue No. 8, Doc. No. 4750, eff August 25, 2017; SCSR43–1 Doc. No. 4870, eff January 25, 2019; SCSR43–8 Doc. No. 4881, eff August 23, 2019.

Editor's Note

Scrivener's error corrected in 2017, inserting the introductory note paragraph.

Subpart B—"Requirements for Control Technology Determinations for Major Sources in Accordance With Clean Air Act Sections, Sections 112(g) and 112(j)"

Section 63.40 - Applicability.

(a) Applicability. The requirements of Sections 63.40 through 63.44 of this subpart apply to any owner or operator who constructs or reconstructs a major source of HAPs after the effective date of this subpart unless the major source in question has been specifically regulated or exempted from regulation under a standard issued pursuant to Section 112(d), Section 112(h), or Section 112(j) of the Act and incorporated in another subpart of Part 63, or the owner or operator of such major source has received all necessary air quality permits for such construction or reconstruction project before the effective date of Section 112(g)(2)(B) in the State.

(b) Exclusion for electric utility steam generating units. The requirements of this subpart do not apply to electric utility steam generating units unless and until such time as these units are added to the source category list pursuant to Section 112(c)(5) of the Act.

(c) Relationship to local requirements. Nothing in this subpart shall prevent a local agency from imposing more stringent requirements than those contained in this subpart.

(d) Exclusion for stationary sources in deleted source categories. The requirements of this subpart do not apply to stationary sources that are within a source category that has been deleted from the source category list pursuant to Section 112(c)(9) of the Act.

(e) Exclusion for research and development activities. The requirements of this subpart do not apply to research and development activities, as defined in Regulation 61–62.63, Section 63.41.

(f) Synthetic Minor Provisions. Any "affected source," as defined by Regulation 61–62.63, Section 63.41, may request to use federally enforceable permit conditions to limit the source's potential to emit and become a synthetic minor source.

(1) An affected source desiring to be a synthetic minor source shall provide a written request to the Department for a federally enforceable construction permit conditioned to constrain the operation of the source, along with a completed construction permit application package. The construction or reconstruction of the source shall not commence until the source has received an effective permit to construct.

(2) The enforceable permit conditions provisions of Regulation 61–62.1, Section II.E.3, shall apply to synthetic minor source permits.

(3) The public participation procedures of Regulation 61–62.1, Section II.N, shall apply to synthetic minor source permits.

(4) The emergency provisions of Regulation 61–62.1, Section II.L, shall apply to synthetic minor source permits.

(5) The permit application provisions of Regulation 61–62.1, Section II.E.5, shall apply to synthetic minor source permits.

Section 63.41 - Definitions.

Terms used in this subpart that are not defined below or in Regulation 61–62.1, Section I, have the meaning given to them in the Clean Air Act and in 40 CFR 63, Subpart A.

(a) ''Act'' means the Clean Air Act, as amended, 42 U.S.C. 7401, et seq.

(b) ''Affected source'' means the stationary source or group of stationary sources which, when fabricated (on site), erected, or installed meets the definition of ''construct a major source'' or the definition of ''reconstruct a major source'' contained in this subpart.

(c) ''Affected States'' are:

(1) The States of Georgia and/or North Carolina if, as determined by the Department, their air quality may be affected by a Maximum Achievable Control Technology (MACT) determination made in accordance with this subpart; or

(2) Any portions of the State of Tennessee whose air quality may be affected and that are within fifty (50) miles of the major source for which a MACT determination is made in accordance with this subpart.

(d) ''Available information'' means, for purposes of identifying control technology options for the affected source, information contained in the following information sources as of the date of approval of the MACT determination by the Department:

(1) A relevant proposed regulation, including all supporting information;

(2) Background information documents for a draft or proposed regulation;

(3) Data and information available from the Control Technology Center developed pursuant to Section 113 of the Act;

(4) Data and information contained in the Aerometric Informational Retrieval System, including information in the MACT database;

(5) Any additional information that can be expeditiously provided by the Administrator; and

(6) For the purpose of determinations by the Department, any additional information provided by the applicant or others, and any additional information considered available by the Department.

(e) ''Construct a major source'' means:

(1) To fabricate, erect, or install at any greenfield site a stationary source or group of stationary sources which is located within a contiguous area and under common control and which emits or has the potential to emit ten (10) tons per year (tpy) of any HAP or twenty-five (25) tpy of any combination of HAPs, or

(2) To fabricate, erect, or install at any developed site a new process or production unit which in and of itself emits or has the potential to emit ten (10) tpy of any HAP or twenty-five (25) tpy of any combination of HAPs, unless the process or production unit satisfies criteria (e)(2)(i) through (e)(2)(vi) of this paragraph:

(i) All HAPs emitted by the process or production unit that would otherwise be controlled under the requirements of this subpart will be controlled by emission control equipment which was previously installed at the same site as the process or production unit;

(ii)(A) The Department has determined within a period of five (5) years prior to the fabrication, erection, or installation of the process or production unit that the existing emission control equipment represented best available control technology (BACT) or lowest achievable emission rate (LAER) under 40 CFR 51 or 52; or

(B) The Department determines that the control of HAP emissions provided by the existing equipment will be equivalent to that level of control currently achieved by other well-controlled similar sources (that is, equivalent to the level of control that would be provided by a current BACT or LAER);

(iii) The Department determines that the percent control efficiency for emissions of HAPs from all sources to be controlled by the existing control equipment will be equivalent to the percent control efficiency provided by the control equipment prior to the inclusion of the new process or production unit;

(iv) The Department has provided notice and an opportunity for public comment concerning its determination that criteria in paragraphs (e)(2)(i), (e)(2)(ii), and (e)(2)(iii) of this definition apply and concerning the continued adequacy of any prior LAER or BACT;

(v) If any commenter has asserted that a prior LAER or BACT is no longer adequate, the Department has determined that the level of control required by that prior determination remains adequate; and

(vi) Any emission limitations, work practice requirements, or other terms and conditions upon which the above determinations by the Department are predicated will be construed by the Department as applicable requirements under Section 504(a) of the Act and either have been incorporated into any existing Part 70 permit for the affected facility or will be incorporated into such permit upon issuance.

(f) "Control technology" means measures, processes, methods, systems, or techniques to limit the emission of HAPs including, but not limited to, measures that:

(1) Reduce the quantity of or eliminate emissions of such pollutants through process changes, substitution of materials, or other modifications;

(2) Enclose systems or processes to eliminate emissions;

(3) Collect, capture, or treat such pollutants when released from a process, stack, storage, or fugitive emissions point;

(4) Are design, equipment, work practice, or operational standards (including requirements for operator training or certification) as provided in 42 U.S.C. 7412(h); or

(5) Are a combination of paragraphs (f)(1)–(f)(4) of this definition.

(g) "Effective date" in South Carolina of Section 112(g)(2)(B) of the Act is July 1, 1998.

(h) "Electric utility steam generating unit" means any fossil fuel fired combustion unit of more than twenty-five (25) megawatts (MW) that serves a generator that produces electricity for sale. A unit that co-generates steam and electricity and supplies more than one-third of its potential electric output capacity and more than twenty-five (25) MW electric output to any utility power distribution system for sale shall be considered an electric utility steam generating unit.

(i) "Greenfield site" means a contiguous area under common control that is an undeveloped site.

(j) "Hazardous Air Pollutant (HAP)" means any air pollutant defined in or pursuant to Section 112(b) of the Act.

(k) "List of Source Categories" means the Source Category List required by Section 112(c) of the Act.

(*l*) "Maximum achievable control technology (MACT) emission limitation for new sources" means the emission limitation which is not less stringent than the emission limitation achieved in practice by the best controlled similar source, and which reflects the maximum degree of reduction in emissions that the Department, taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements, determines is achievable by the constructed or reconstructed major source.

(m) "Notice of MACT Approval" means a document issued by the Department containing all federally enforceable conditions necessary to enforce the application and operation of MACT or other control technologies such that the MACT emission limitation is met.

(n) "Organic HAP" means the compounds listed in Table 1 to Subpart XX of this part.

(*o*) "Presumptive MACT determination" means an estimation of MACT, based on limited data gathered within a short time frame, that serves as a basis for a decision on how to develop an emission standard for a particular source category. Factors such as control technology costs, non-air quality health and environmental impacts, energy requirements, and benefits are not typically considered in the estimation.

(p) "Process or production unit" means any collection of structures and/or equipment, that processes, assembles, applies, or otherwise uses material inputs to produce or store an intermediate or final product. A single facility may contain more than one process or production unit.

(q) "Reconstruct a major source" means the replacement of components at an existing process or production unit that in and of itself emits or has the potential to emit ten (10) tpy of any HAP or twenty-five (25) tpy of any combination of HAPs, whenever:

(1) The fixed capital cost of the new components exceeds fifty (50) percent of the fixed capital cost that would be required to construct a comparable process or production unit; and

(2) It is technically and economically feasible for the reconstructed major source to meet the applicable MACT emission limitation for new sources established under this subpart.

(r) "Research and development activities" means activities conducted at a research or laboratory facility whose primary purpose is to conduct research and development into new processes and products, where such source is operated under the close supervision of technically trained personnel and is not engaged in the manufacture of products for sale or exchange for commercial profit, except in a de minimis manner.

(s) "Similar source" means a stationary source or process that has comparable emissions and is structurally similar in design and capacity to a constructed or reconstructed major source such that the source could be controlled using the same control technology.

Section 63.42. Program Requirements Governing Construction or Reconstruction of Major Sources.

Prohibition:

After the effective date of Section 112(g)(2)(B) in the State, no person may begin actual construction or reconstruction of a major source of HAPs in the State unless:

(a) The major source in question has been specifically regulated or exempted from regulation under a standard issued pursuant to Section 112(d), Section 112(h), or Section 112(j) in 40 CFR 63, and the owner or operator has fully complied with all procedures and requirements for preconstruction review established by that standard, including any applicable requirements set forth in 40 CFR 63, Subpart A; or

(b) The Department has made a final and effective case-by-case determination pursuant to the provisions of Regulation 61–62.63, Section 63.43, such that emissions from the constructed or reconstructed major source will be controlled to a level no less stringent than the MACT emission limitation for new sources.

Section 63.43 - Maximum Achievable Control Technology (MACT) Determinations for Constructed and Reconstructed Major Sources.

(a) Applicability:

The requirements of this section apply to an owner or operator who constructs or reconstructs a major source of HAPs subject to a case-by-case determination of MACT pursuant to Regulation 61–62.63, Section 63.42.

(b) Requirements for constructed and reconstructed major sources. When a case-by-case determination of MACT is required by Regulation 61–62.63, Section 63.42, the owner or operator shall obtain from the Department an approved MACT determination according to paragraph (c) of this section.

(c) Review Process:

(1) The owner or operator shall apply for and obtain a Notice of MACT Approval according to the procedures outlined in paragraphs (f) through (h) of this section.

(2) The MACT emission limitation and requirements established shall be effective as required by paragraph (j) of this section, consistent with the principles established in paragraph (d) of this section, and supported by the information listed in paragraph (e) of this section. The owner or operator shall comply with the requirements in paragraphs (k) and (*l*) of this section, and with all applicable requirements in 40 CFR 63, Subpart A.

(d) Principles of MACT determinations. The following general principles shall govern preparation by the owner or operator of each permit application or other application requiring a case-by-case MACT determination concerning construction or reconstruction of a major source, and all subsequent review of and actions taken concerning such an application by the Department:

(1) The MACT emission limitation or MACT requirements recommended by the applicant and approved by the Department shall not be less stringent than the emission control which is achieved in practice by the best controlled similar source, as determined by the Department.

(2) Based upon available information, as defined in this subpart, the MACT emission limitation and control technology (including any requirements under paragraph (d)(3) of this section) recommended by the applicant and approved by the Department shall achieve the maximum degree of reduction in emissions of HAPs which can be achieved by utilizing those control technologies that can be identified from the available information, taking into consideration the costs of achieving such emission reduction and any non-air quality health and environmental impacts and energy requirements associated with the emission reduction.

(3) The applicant may recommend a specific design, equipment, work practice, or operational standard, or a combination thereof, and the Department may approve such a standard if the Department specifically determines that it is not feasible to prescribe or enforce an emission limitation under the criteria set forth in Section 112(h)(2) of the Act.

(4) If the Administrator has either proposed a relevant emission standard pursuant to Section 112(d) or Section 112(h) of the Act or adopted a presumptive MACT determination for the source category which includes the constructed or reconstructed major source, then the MACT requirements applied to the constructed or reconstructed major source shall have considered those MACT emission limitations and requirements of the proposed standard or presumptive MACT determination.

(e) Application requirements for a case-by-case MACT determination.

(1) An application for a MACT determination (whether a permit application under Title V of the Act, an application for a Notice of MACT Approval, or other document specified by the Department under paragraph (c) of this section) shall specify a control technology selected by the owner or operator that, if properly operated and maintained, will meet the MACT emission limitation or standard as determined according to the principles set forth in paragraph (d) of this section.

(2) In each instance where a constructed or reconstructed major source would require additional control technology or a change in control technology, the application for a MACT determination shall contain the following information:

(i) The name and address (physical location) of the major source to be constructed or reconstructed;

(ii) A brief description of the major source to be constructed or reconstructed and identification of any listed source category or categories in which it is included;

(iii) The expected commencement date for the construction or reconstruction of the major source;

(iv) The expected completion date for construction or reconstruction of the major source;

(v) The anticipated date of start-up for the constructed or reconstructed major source;

(vi) The HAP emitted by the constructed or reconstructed major source, and the estimated emission rate for each such HAP, to the extent this information is needed by the Department to determine MACT;

(vii) Any federally enforceable emission limitations applicable to the constructed or reconstructed major source;

(viii) The maximum and expected utilization of capacity of the constructed or reconstructed major source, and the associated uncontrolled emission rates for that source, to the extent this information is needed by the Department to determine MACT;

(ix) The controlled emissions for the constructed or reconstructed major source in tpy at expected and maximum utilization of capacity, to the extent this information is needed by the Department to determine MACT;

(x) A recommended emission limitation for the constructed or reconstructed major source consistent with the principles set forth in paragraph (d) of this section;

(xi) The selected control technology to meet the recommended MACT emission limitation, including technical information on the design, operation, size, estimated control efficiency of the control technology (and the manufacturer's name, address, telephone number, and relevant specifications and drawings, if requested by the Department);

(xii) Supporting documentation including identification of alternative control technologies considered by the applicant to meet the emission limitation, and analysis of cost and non-air quality health environmental impacts or energy requirements for the selected control technology; and

(xiii) Any other relevant information required pursuant to 40 CFR 63, Subpart A.

(3) In each instance where the owner or operator contends that a constructed or reconstructed major source will be in compliance, upon startup, with case-by-case MACT under this subpart without a change in control technology, the application for a MACT determination shall contain the following information:

(i) The information described in paragraphs (e)(2)(i) through (e)(2)(x) of this section; and

(ii) Documentation of the control technology in place.

(f) Administrative procedures for review of the Notice of MACT Approval.

(1) The Department will notify the owner or operator in writing, within forty-five (45) days from the date the application is first received, as to whether the application for a MACT determination is complete or whether additional information is required.

(2) The Department will initially approve the recommended MACT emission limitation and other terms set forth in the application, or the Department will notify the owner or operator in writing of its intent to disapprove the application, within thirty (30) calendar days after the owner or operator is notified in writing that the application is complete.

(3) The owner or operator may present, in writing, within sixty (60) calendar days after receipt of notice of the Department's intent to disapprove the application, additional information or arguments pertaining to, or amendments to, the application for consideration by the Department before it decides whether to finally disapprove the application.

(4) The Department will either initially approve or issue a final disapproval of the application within ninety (90) days after it notifies the owner or operator of an intent to disapprove or within thirty (30) days after the date additional information is received from the owner or operator, whichever is earlier.

(5) A final determination by the Department to disapprove any application will be in writing and will specify the grounds on which the disapproval is based. If any application is finally disapproved, the owner or operator may submit a subsequent application concerning construction or reconstruction of the same major source, provided that the subsequent application has been amended in response to the stated grounds for the prior disapproval.

(6) An initial decision to approve an application for a MACT determination will be set forth in the Notice of MACT Approval as described in paragraph (g) of this section.

(g) Notice of MACT Approval.

(1) The Notice of MACT Approval will contain a MACT emission limitation (or a MACT work practice standard if the Department determines it is not feasible to prescribe or enforce an emission standard) to control the emissions of HAPs. The MACT emission limitation or standard will be determined by the Department and will conform to the principles set forth in paragraph (d) of this section.

(2) The Notice of MACT Approval will specify any notification, operation and maintenance, performance testing, monitoring, reporting, and record keeping requirements. The Notice of MACT Approval will include:

(i) In addition to the MACT emission limitation or MACT work practice standard established under this subpart, additional emission limits, production limits, operational limits, or other terms and conditions necessary to ensure federal enforceability of the MACT emission limitation;

(ii) Compliance certifications, testing, monitoring, reporting, and record keeping requirements that are consistent with the requirements of Regulation 61–62.70.6(c);

(iii) In accordance with Section 114(a)(3) of the Act, requirements for monitoring capable of demonstrating continuous compliance during the applicable reporting period. Such monitoring data shall be of sufficient quality to be used as a basis for enforcing all applicable requirements established under this subpart, including emission limitations;

(iv) A statement requiring the owner or operator to comply with all applicable requirements contained in 40 CFR 63, Subpart A;

(3) All provisions contained in the Notice of MACT Approval shall be federally enforceable upon the effective date of issuance of such notice, as provided by paragraph (j) of this section.

(4) The Notice of MACT Approval shall expire if construction or reconstruction has not commenced within eighteen (18) months of issuance, unless the Department has granted an extension which shall not exceed an additional twelve (12) months.

(h) Opportunity for public comment on the Notice of MACT Approval.

(1) The Department will provide opportunity for public comment on the Notice of MACT Approval, including, at a minimum:

(i) Availability for public inspection in at least one location in the area affected of the information submitted by the owner or operator and of the Department's initial decision to approve the application;

(ii) A 30-day period for submittal of public comment; and

(iii) A notice by prominent advertisement in the area affected of the location of the source information and initial decision specified in paragraph (h)(1)(i) of this section.

(2) At the discretion of the Department, the Notice of MACT Approval setting forth the initial decision to approve the application may become final automatically at the end of the comment period if no adverse comments are received. If adverse comments are received, the Department will make any necessary revisions in its analysis and decide whether to finally approve the application within thirty (30) days after the end of the comment period.

(i) EPA notification. The Department will send a copy of the final Notice of MACT Approval to the Administrator through the appropriate Regional Office, and to all other state and local air pollution control agencies having jurisdiction in affected states.

(j) Effective date of MACT determination shall be the date the Notice of MACT Approval becomes final.

(k) Compliance date. On and after the date of start-up, a constructed or reconstructed major source which is subject to the requirements of this subpart shall be in compliance with all applicable requirements specified in the MACT determination.

(*l*) Compliance with MACT determinations.

(1) An owner or operator of a constructed or reconstructed major source that is subject to a MACT determination shall comply with all requirements in the final Notice of MACT Approval, including but not limited to, any MACT emission limitation or MACT work practice standard and any notification, operation and maintenance, performance testing, monitoring, reporting, and recordkeeping requirements.

(2) An owner or operator of a constructed or reconstructed major source which has obtained a MACT determination shall be deemed to be in compliance with Section 112(g)(2)(B) of the Act only to the extent that the constructed or reconstructed major source is in compliance with all requirements set forth in the final Notice of MACT Approval. Any violation of such requirements by the owner or operator shall be deemed by the Department and by EPA to be a violation of the prohibition on construction or reconstruction in Section 112(g)(2)(B) for whatever period the owner or operator is determined to be in violation of such requirements, and shall subject the owner or operator to appropriate enforcement action under the Act.

(m) Reporting to the Administrator. Within sixty (60) days of the issuance of a final Notice of MACT Approval, the Department will provide a copy of such notice to the Administrator, and will provide a summary in a compatible electronic format for inclusion in the MACT database.

Section 63.44. Requirements for Constructed or Reconstructed Major Sources Subject to a Subsequently Promulgated MACT Standard or MACT Requirement.

(a) If the Administrator promulgates an emission standard under Section 112(d) or Section 112(h) of the Act or the Department issues a determination under Section 112(j) of the Act that is applicable to a stationary source or group of sources which would be deemed to be a constructed or reconstructed major source under this subpart before the date that the owner or operator has obtained a final and legally effective MACT determination under any of the review options available pursuant to Regulation 61–62.63, Section 63.43, the owner or operator of the source(s) shall comply with the promulgated standard or determination rather than any MACT determination under Section 112(g) by the

Department, and the owner or operator shall comply with the promulgated standard by the compliance date in the promulgated standard.

(b) If the Administrator promulgates an emission standard under Section 112(d) or Section 112(h) of the Act or the Department makes a determination under Section 112(j) of the Act that is applicable to a stationary source or group of sources which was deemed to be a constructed or reconstructed major source under this subpart and has been subject to a prior case-by-case MACT determination pursuant to Regulation 61–62.63, Section 63.43, and the owner or operator obtained a final and legally effective case-by-case MACT determination prior to the promulgation date of such emission standard, then the Department will (if the initial Part 70 permit has not yet been issued) issue an initial operating permit which incorporates the emission standard or determination, or will (if the initial Part 70 permit has been issued) revise the operating permit according to the reopening procedures in Regulation 61–62.70, or 40 CFR 70 or 71, whichever is relevant, to incorporate the emission standard or determination.

(1) The EPA may include in the emission standard established under Section 112(d) or Section 112(h) of the Act a specific compliance date for those sources which have obtained a final and legally effective MACT determination under this subpart and which have submitted the information required by Regulation 61–62.63, Section 63.43, to the Department before the close of the public comment period for the standard established under Section 112(d) of the Act. Such date shall assure that the owner or operator shall comply with the promulgated standard as expeditiously as practicable, but not longer than eight (8) years after such standard is promulgated. In that event, the Department shall incorporate the applicable compliance date in the Part 70 operating permit.

(2) If no compliance date has been established in the promulgated 112(d) or 112(h) Standard or Section 112(j) determination, for those sources which have obtained a final and legally effective MACT determination under this subpart, then the Department shall establish a compliance date in the permit that assures that the owner or operator shall comply with the promulgated standard or determination as expeditiously as practicable, but not longer than eight (8) years after such standard is promulgated or a Section 112(j) determination is made.

(c) Notwithstanding the requirements of paragraphs (a) and (b) of this section, if the Administrator promulgates an emission standard under Section 112(d) or Section 112(h) of the Act or the Department issues a determination under Section 112(j) of the Act that is applicable to a stationary source or group of sources which was deemed to be a constructed or reconstructed major source under this subpart and which is the subject of a prior case-by-case MACT determination pursuant to Regulation 61-62.63, Section 63.43 of this subpart, and the level of control required by the emission standard issued under Section 112(d) or Section 112(h) or the determination issued under Section 112(j) of the Act is less stringent than the level of control required by any emission limitation or standard in the prior MACT determination, the Department is not required to incorporate any less stringent terms of the promulgated standard in the Part 70 operating permit applicable to such source(s) and may in its discretion consider any more stringent provisions of the prior MACT determination to be applicable legal requirements when issuing or revising such an operating permit.

Section 63.50 - Applicability.

(a) General applicability.

(1) The requirements of this section through Section 63.56 implement Section 112(j) of the Clean Air Act (as amended in 1990). The requirements of this section through Section 63.56 apply in each state beginning on the effective date of an approved Title V permit program in such state. The requirements of this section through Section 63.56 do not apply to research or laboratory activities as defined in Section 63.51.

(2) The requirements of this section through Section 63.56 apply to:

(i) The owner or operator of affected sources within a source category or subcategory under this part that are located at a major source that is subject to an approved Title V permit program and for which the Administrator has failed to promulgate emission standards by the Section 112(j) deadlines. If Title V applicability has been deferred for a source category, then Section 112(j) is not applicable for sources in that category within that state, local, or tribal jurisdiction until those sources become subject to Title V permitting requirements; and

(ii) Permitting authorities with an approved Title V permit program.

(b) Relationship to state and local requirements. Nothing in Sections 63.50 through 63.56 shall prevent a state or local regulatory agency from imposing more stringent requirements, as a matter of state or local law, than those contained in Sections 63.50 through 63.56.

(c) The procedures in Sections 63.50 through 63.56 apply for each affected source only after the Section 112(j) deadline for the source category or subcategory in question has passed, and only until such time as a generally applicable federal standard governing that source has been promulgated under Section 112(d) or 112(h) of the Act. Once a generally applicable federal standard governing that source has been promulgated, the owner or operator of the affected source and the permitting authority are not required to take any further actions to develop an equivalent emission limitation under Section 112(j) of the Act.

(d) Any final equivalent emission limitation for an affected source which is issued by the permitting authority pursuant to Sections 63.50 through 63.56 prior to promulgation of a generally applicable federal standard governing that source under Section 112(d) or 112(h) of the Act shall be deemed an applicable federal requirement adopted pursuant to Section 112(j) of the Act. Each such equivalent emission limitation shall take effect upon issuance of the permit containing that limitation under Section 112(j)(5) of the Act, and shall remain applicable to the source until such time as it may be revised or supplanted pursuant to the procedures established by Sections 63.50 through 63.56. Such a final equivalent emission limitation, and all associated requirements adopted pursuant to Section 63.52(f)(2), are directly enforceable under federal law regardless of whether or not any permit in which they may be contained remains in effect.

Section 63.51 - Definitions.

Terms used in Sections 63.50 through 63.56 that are not defined in this section have the meaning given to them in the Act, or in Subpart A of this part.

(a) "Affected source" means the collection of equipment, activities, or both within a single contiguous area and under common control that is in a Section 112(c) source category or subcategory for which the Administrator has failed to promulgate an emission standard by the Section 112(j) deadline, and that is addressed by an applicable MACT emission limitation established pursuant to this subpart.

(b) "Available information" means, for purposes of conducting a MACT floor finding and identifying control technology options under this subpart, any information that is available as of the date on which the first Part 2 MACT application is filed for a source in the relevant source category or subcategory in the state or jurisdiction; and, pursuant to the requirements of this subpart, is additional relevant information that can be expeditiously provided by the Administrator, is submitted by the applicant or others prior to or during the public comment period on the Section 112(j) equivalent emission limitation for that source, or information contained in the information sources in paragraphs (b)(1) through (b)(5) of this definition.

(1) A relevant proposed regulation, including all supporting information.

(2) Relevant background information documents for a draft or proposed regulation.

(3) Any relevant regulation, information, or guidance collected by the Administrator establishing a MACT floor finding and/or MACT determination.

(4) Relevant data and information available from the Clean Air Technology Center developed pursuant to Section 112(*l*)(3) of the Act.

(5) Relevant data and information contained in the Aerometric Information Retrieval System (AIRS).

(6) Any additional information that can be expeditiously provided by the Administrator.

(7) Any information provided by applicants in an application for a permit, permit modification, administrative amendment, or Notice of MACT Approval pursuant to the requirements of this subpart.

(8) Any additional relevant information provided by the applicant.

(c) "Control technology" means measures, processes, methods, systems, or techniques to limit the emission of HAPs including, but not limited to, measures which:

(1) Reduce the quantity or eliminate emissions of such pollutants through process changes, substitution of materials, or other modifications;

(2) Enclose systems or processes to eliminate emissions;

(3) Collect, capture, or treat such pollutants when released from a process, stack, storage, or fugitive emissions point;

(4) Are design, equipment, work practice, or operational standards (including requirements for operator training or certification) as provided in 42 U.S.C. 7412(h); or

(5) Are a combination of paragraphs (c)(1) through (c)(4) of this definition.

(d) "Enhanced review" means a review process containing all administrative steps needed to ensure that the terms and conditions resulting from the review process can be incorporated using Title V permitting procedures.

(e) "Equivalent emission limitation" means an emission limitation, established under Section 112(j) of the Act, which is equivalent to the MACT standard that EPA would have promulgated under Section 112(d) or Section 112 (h) of the Act.

(f) "Maximum achievable control technology (MACT) emission limitation for existing sources" means the emission limitation reflecting the maximum degree of reduction in emissions of HAPs (including a prohibition on such emissions, where achievable) that the Administrator, taking into consideration the cost of achieving such emission reductions, and any non-air quality health and environmental impacts and energy requirements, determines is achievable by sources in the category or subcategory to which such emission standard applies. This limitation shall not be less stringent than the MACT floor.

(g) "Maximum achievable control technology (MACT) emission limitation for new sources" means the emission limitation which is not less stringent than the emission limitation achieved in practice by the best controlled similar source, and which reflects the maximum degree of reduction in emissions of HAPs (including a prohibition on such emissions, where achievable) that the Administrator, taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements, determines is achievable by sources in the category or subcategory to which such emission standard applies.

(h) "Maximum Achievable Control Technology (MACT) floor" means:

(1) For existing sources:

(i) The average emission limitation achieved by the best performing twelve (12) percent of the existing sources in the United States (for which the Administrator has emissions information), excluding those sources that have, within eighteen (18) months before the emission standard is proposed or within thirty (30) months before such standard is promulgated, whichever is later, first achieved a level of emission rate or emission reduction which complies, or would comply if the source is not subject to such standard, with the LAER (as defined in Section 171 of the Act) applicable to the source category and prevailing at the time, in the category or subcategory, for categories and subcategories of stationary sources with thirty (30) or more sources; or

(ii) The average emission limitation achieved by the best performing five (5) sources (for which the Administrator has or could reasonably obtain emissions information) in the category or subcategory, for categories or subcategories with fewer than thirty (30) sources;

(2) For new sources, the emission limitation achieved in practice by the best controlled similar source.

(i) "New affected source" means the collection of equipment, activities, or both, that if constructed after the issuance of a Section 112(j) permit for the source pursuant to Section 63.52, is subject to the applicable MACT emission limitation for new sources. Each permit must define the term "new affected source," which will be the same as the "affected source" unless a different collection is warranted based on consideration of factors including:

(1) Emission reduction impacts of controlling individual sources versus groups of sources;

(2) Cost effectiveness of controlling individual equipment;

(3) Flexibility to accommodate common control strategies;

(4) Cost/benefits of emissions averaging;

(5) Incentives for pollution prevention;

(6) Feasibility and cost of controlling processes that share common equipment (for example, product recovery devices);

(7) Feasibility and cost of monitoring; and

(8) Other relevant factors.

(j) "Permitting authority" means the permitting authority as defined in Part 70 of this chapter.

(k) "Research or laboratory activities" means activities whose primary purpose is to conduct research and development into new processes and products where such activities are operated under the close supervision of technically trained personnel and are not engaged in the manufacture of products for commercial sale in commerce, except in a de minimis manner; and where the source is not in a source category, specifically addressing research or laboratory activities, that is listed pursuant to Section 112(c)(7) of the Act.

(*l*) "Section 112(j) deadline" means the date eighteen (18) months after the date for which a relevant standard is scheduled to be promulgated under this part, except that for all major sources listed in the source category schedule for which a relevant standard is scheduled to be promulgated by November 15, 1994, the Section 112(j) deadline is November 15, 1996, and for all major sources listed in the source category schedule for which a relevant standard is scheduled to be promulgated by November 15, 1997, the Section 112(j) deadline is December 15, 1999.

(m) "Similar source" means that equipment or collection of equipment that, by virtue of its structure, operability, type of emissions, and volume and concentration of emissions, is substantially equivalent to the new affected source and employs control technology for control of emissions of HAPs that is practical for use on the new affected source.

(n) "Source category schedule for standards" means the schedule for promulgating MACT standards issued pursuant to Section 112(e) of the Act.

Section 63.52 - Approval Process for New and Existing Affected Sources.

(a) Sources subject to Section 112(j) as of the Section 112(j) deadline. The requirements of paragraphs (a)(1) and (a)(2) of this section apply to major sources that include, as of the Section 112(j) deadline, one or more sources in a category or subcategory for which the Administrator has failed to promulgate an emission standard under this part on or before an applicable Section 112(j) deadline. Existing source MACT requirements (including relevant compliance deadlines), as specified in a Title V permit issued to the source pursuant to the requirements of the subpart, must apply to such sources.

(1) The owner or operator must submit an application for a Title V permit or for a revision to an existing Title V permit or a pending Title V permit meeting the requirements of Section 63.53(a) by the Section 112(j) deadline if the owner or operator can reasonably determine that one or more sources at the major source belong in the category or subcategory subject to Section 112(j).

(2) If an application was not submitted under paragraph (a)(1) of this section and if notified by the permitting authority, the owner or operator must submit an application for a Title V permit or for a revision to an existing Title V permit or a pending Title V permit meeting the requirements of Section 63.53(a) within thirty (30) days after being notified in writing by the permitting authority that one or more sources at the major source belong to such category or subcategory. Permitting authorities are not required to make such notification.

(3) The requirements in paragraphs (a)(3)(i) through (a)(3)(ii) of this section apply when the owner or operator has obtained a Title V permit that incorporates a case-by-case MACT determination by the permitting authority under Section 112(g) or has submitted a Title V permit application for a revision that incorporates a case-by-case MACT determination under Section 112(g), but has not submitted an application for a Title V permit revision that addresses the emission limitation requirements of Section 112(j).

(i) When the owner or operator has a Title V permit that incorporates a case-by-case MACT determination by the permitting authority under Section 112(g), the owner or operator must submit an application meeting the requirements of Section 63.53(a) for a Title V permit revision within thirty (30) days of the Section 112(j) deadline or within thirty (30) days of being notified in writing by the permitting authority that one or more sources at the major source belong in such category or subcategory. Using the procedures established in paragraph (e) of this section, the permitting authority must determine whether the emission limitations adopted pursuant to the prior case-by-case MACT determination under Section 112(g) are substantially as effective as the emission limitations which the permitting authority would otherwise adopt pursuant to Section 112(j) for the source in question. If the permitting authority determines that the emission limitations previously adopted to effectuate Section 112(g) are substantially as effective as the emission limitations which

the permitting authority would otherwise adopt to effectuate Section 112(j) for the source, then the permitting authority must retain the existing emission limitations in the permit as the emission limitations to effectuate Section 112(j). The Title V permit applicable to that source must be revised accordingly. If the permitting authority does not retain the existing emission limitations in the permit as the emission limitations to effectuate Section 112(j), the MACT requirements of this subpart are satisfied upon issuance of a revised Title V permit incorporating any additional Section 112(j) requirements.

(ii) When the owner or operator has submitted a Title V permit application that incorporates a case-by-case MACT determination by the permitting authority under Section 112(g), but has not received the permit incorporating the Section 112(g) requirements, the owner or operator must continue to pursue a Title V permit that addresses the emission limitation requirements of Section 112(g). Within thirty (30) days of issuance of that Title V permit, the owner or operator must submit an application meeting the requirements of Section 63.53(a) for a change to the existing Title V permit. Using the procedures established in paragraph (e) of this section, the permitting authority must determine whether the emission limitations adopted pursuant to the prior case-by-case MACT determination under Section 112(g) are substantially as effective as the emission limitations which the permitting authority would otherwise adopt pursuant to Section 112(j) for the source in question. If the permitting authority determines that the emission limitations previously adopted to effectuate Section 112(g) are substantially as effective as the emission limitations which the permitting authority would otherwise adopt to effectuate Section 112(j) for the source, then the permitting authority must retain the existing emission limitations in the permit as the emission limitations to effectuate Section 112(j). The Title V permit applicable to that source must be revised accordingly. If the permitting authority does not retain the existing emission limitations in the permit as the emission limitations to effectuate Section 112(j), the MACT requirements of this subpart are satisfied upon issuance of a revised Title V permit incorporating any additional Section 112(j) requirements.

(b) Sources that become subject to Section 112(j) after the Section 112(j) deadline and that do not have a Title V permit addressing Section 112(j) requirements. The requirements of paragraphs (b)(1) through (b)(4) of this section apply to sources that do not meet the criteria in paragraph (a) of this section on the Section 112(j) deadline and are, therefore, not subject to Section 112(j) on that date, but where events occur subsequent to the Section 112(j) deadline that would bring the source under the requirements of this subpart, and the source does not have a Title V permit that addresses the requirements of Section 112(j).

(1) When one (1) or more sources in a category or subcategory subject to the requirements of this subpart are installed at a major source, or result in the source becoming a major source due to the installation, and the installation does not invoke Section 112(g) requirements, the owner or operator must submit an application meeting the requirements of Section 63.53(a) within thirty (30) days of startup of the source. This application shall be reviewed using the procedures established in paragraph (e) of this section. Existing source MACT requirements (including relevant compliance deadlines), as specified in a Title V permit issued pursuant to the requirements of this subpart, shall apply to such sources.

(2) The requirements in this paragraph apply when one or more sources in a category or subcategory subject to this subpart are installed at a major source, or result in the source becoming a major source due to the installation, and the installation does require emission limitations to be established and permitted under Section 112(g), and the owner or operator has not submitted an application for a Title V permit revision that addresses the emission limitation requirements of Section 112(j). In this case, the owner or operator must apply for and obtain a Title V permit that addresses the emission limitation requirements of Section 112(g). Within thirty (30) days of issuance of that Title V permit, the owner or operator must submit an application meeting the requirements of Section 63.53(a) for a revision to the existing Title V permit. Using the procedures established in paragraph (e) of this section, the permitting authority must determine whether the emission limitations adopted pursuant to the prior case-by-case MACT determination under Section 112(g) are substantially as effective as the emission limitations which the permitting authority would otherwise adopt pursuant to Section 112(j) for the source in question. If the permitting authority determines that the emission limitations previously adopted to effectuate Section 112(g) are substantially as effective as the emission limitations which the permitting authority would otherwise adopt to effectuate Section 112(j) for the

source, then the permitting authority must retain the existing emission limitations in the permit as the emission limitations to effectuate Section 112(j). The Title V permit applicable to that source must be revised accordingly. If the permitting authority does not retain the existing emission limitations in the permit as the emission limitations to effectuate Section 112(j), the MACT requirements of this subpart are satisfied upon issuance of a revised Title V permit incorporating any additional Section 112(j) requirements.

(3) The owner or operator of an area source that, due to a relaxation in any federally enforceable emission limitation (such as a restriction on hours of operation), increases its potential to emit HAPs such that the source becomes a major source that is subject to this subpart, must submit an application meeting the requirements of Section 63.53(a) for a Title V permit or for an application for a Title V permit revision within thirty (30) days after the date that such source becomes a major source. This application must be reviewed using the procedures established in paragraph (e) of this section. Existing source MACT requirements (including relevant compliance deadlines), as specified in a Title V permit issued pursuant to the requirements of this subpart, must apply to such sources.

(4) On or after April 5, 2002, if the Administrator establishes a lesser quantity emission rate under Section 112(a)(1) of the Act that results in an area source becoming a major source that is subject to this subpart, then the owner or operator of such a major source must submit an application meeting the requirements of Section 63.53(a) for a Title V permit or for a change to an existing Title V permit or pending Title V permit on or before the date six (6) months after the date that such source becomes a major source. Existing source MACT requirements (including relevant compliance deadlines), as specified in a Title V permit issued pursuant to the requirements of this subpart, shall apply to such sources.

(c) Sources that have a Title V permit addressing Section 112(j) requirements. The requirements of paragraphs (c)(1) and (c)(2) of this section apply to major sources that include one or more sources in a category or subcategory for which the Administrator fails to promulgate an emission standard under this part on or before an applicable Section 112(j) deadline, and the owner or operator has a permit meeting the Section 112(j) requirements, and where changes occur at the major source to equipment, activities, or both, subsequent to the Section 112(j) deadline.

(1) If the Title V permit already provides the appropriate requirements that address the events that occur under paragraph (c) of this section subsequent to the Section 112(j) deadline, then the source must comply with the applicable new source MACT or existing source MACT requirements as specified in the permit, and the Section 112(j) requirements are thus satisfied.

(2) If the Title V permit does not contain the appropriate requirements that address the events that occur under paragraph (c) of this section subsequent to the Section 112(j) deadline, then the owner or operator must submit an application for a revision to the existing Title V permit that meets the requirements of Section 63.53(a). The application must be submitted within thirty (30) days of beginning construction and must be reviewed using the procedures established in paragraph (e) of this section. Existing source MACT requirements (including relevant compliance deadlines), as specified in a Title V permit issued pursuant to the requirements of this subpart, shall apply to such sources.

(d) Requests for applicability determination or notice of MACT approval.

(1) An owner or operator who is unsure of whether one or more sources at a major source belong in a category or subcategory for which the Administrator has failed to promulgate an emission standard under this part may, on or before an applicable Section 112(j) deadline, request an applicability determination from the permitting authority by submitting an application meeting the requirements of Section 63.53(a) by the applicable deadlines specified in paragraphs (a), (b), or (c) of this section.

(2) In addition to meeting the requirements of paragraphs (a), (b), and (c) of this section, the owner or operator of a new affected source may submit an application for a Notice of MACT Approval before construction, pursuant to Section 63.54.

(e) Permit application review.

(1) Each owner or operator who is required to submit to the permitting authority a Part 1 MACT application which meets the requirements of Section 63.53(a) for one or more sources in a category or subcategory subject to Section 112(j) must also submit to the permitting authority a timely Part 2 MACT application for the same sources which meets the requirements of Section 63.53(b). Each owner or operator shall submit the Part 2 MACT application for the sources in a particular category or

subcategory no later than the applicable date specified in Table 1 to this subpart. The submission date specified in Table 1 to this subpart for Miscellaneous Organic Chemical Manufacturing shall apply to sources in each of the source categories listed in Table 2 to this subpart. When the owner or operator is required by Sections 63.50 through 63.56 to submit an application meeting the requirements of Section 63.53(a) by a date which is after the date for a Part 2 MACT application for sources in the category or subcategory in question established by Table 1 to this subpart, the owner or operator shall submit a Part 2 MACT application meeting the requirements of Section 63.53(b) within sixty (60) additional days after the applicable deadline for submission of the Part 1 MACT application. Part 2 MACT applications must be reviewed by the permitting authority according to procedures established in Section 63.55. The resulting MACT determination must be incorporated into the source's Title V permit according to procedures established under Title V, and any other regulations approved under Title V in the jurisdiction in which the affected source is located.

(2) Notwithstanding paragraph (e)(1) of this section, the owner or operator may request either an applicability determination or an equivalency determination by the permitting authority as provided in paragraphs (e)(2)(i) and (e)(2)(ii) of this section.

(i) Each owner or operator who submitted a request for an applicability determination pursuant to paragraph (d)(1) of this section on or before May 15, 2002, which remains pending before the permitting authority on May 30, 2003, and who still wishes to obtain such a determination, must resubmit that request by July 29, 2003, or by the date which is sixty (60) days after the Administrator publishes in the Federal Register a proposed standard under Section 112(d) or 112(h) of the Act for the category or subcategory in question, whichever is later. Each request for an applicability determination which is resubmitted under this paragraph (e)(2)(i) must be supplemented to discuss the relation between the source(s) in question and the applicability provision in the proposed standard for the category or subcategory in question, and to explain why there may still be uncertainties that require a determination of applicability. The permitting authority must take action upon each properly resubmitted and supplemented request for an applicability determination within an additional sixty (60) days after the applicable deadline for the resubmitted request. If the applicability determination is positive, the owner or operator must submit a Part 2 MACT application meeting the requirements of Section 63.53(b) by the date specified for the category or subcategory in question in Table 1 to this subpart. If the applicability determination is negative, then no further action by the owner or operator is necessary.

(ii) As specified in paragraphs (a) and (b) of this section, an owner or operator who has submitted an application meeting the requirements of Section 63.53(a) may request a determination by the permitting authority of whether emission limitations adopted pursuant to a prior case-by-case MACT determination under Section 112(g) that apply to one or more sources at a major source in a relevant category or subcategory are substantially as effective as the emission limitations which the permitting authority would otherwise adopt pursuant to Section 112(j) for the source in question. Such a request must be submitted by the date for the category or subcategory in question specified in Table 1 to this subpart. Any owner or operator who previously submitted such a request under a prior version of this paragraph (e)(2)(ii) need not resubmit the request. Each request for an equivalency determination under this paragraph (e)(2)(ii), regardless of when it was submitted, will be construed in the alternative as a complete application for an equivalent emission limitation under Section 112(j). The process for determination by the permitting authority of whether the emission limitations in the prior case-by-case MACT determination are substantially as effective as the emission limitations which the permitting authority would otherwise adopt under Section 112(j) must include the opportunity for full public, EPA, and affected state review prior to a final determination. If the permitting authority determines that the emission limitations in the prior case-by-case MACT determination are substantially as effective as the emission limitations which the permitting authority would otherwise adopt under Section 112(j), then the permitting authority must adopt the existing emission limitations in the permit as the emission limitations to effectuate Section 112(j) for the source in question. If more than three (3) years remain on the current Title V permit, the owner or operator must submit an application for a Title V permit revision to make any conforming changes in the permit required to adopt the existing emission limitations as the Section 112(j) MACT emission limitations. If less than three (3) years remain on the current Title V permit, any required conforming changes must be made when the permit is renewed. If the permitting authority determines that the emission limitations in the prior case-by-case MACT determination under

Section 112(g) are not substantially as effective as the emission limitations which the permitting authority would otherwise adopt for the source in question under Section 112(j), the permitting authority must make a new MACT determination and adopt a Title V permit incorporating an appropriate equivalent emission limitation under Section 112(j). Such a determination constitutes final action for purposes of judicial review under 40 CFR 70.4(b)(3)(x) and corresponding state Title V program provisions.

(3) Within sixty (60) days of submittal of the Part 2 MACT application, the permitting authority must notify the owner or operator in writing whether the application is complete or incomplete. The Part 2 MACT application shall be deemed complete on the date it was submitted unless the permitting authority notifies the owner or operator in writing within sixty (60) days of the submittal that the Part 2 MACT application is incomplete. A Part 2 MACT application is complete if it is sufficient to begin processing the application for a Title V permit addressing Section 112(j) requirements. In the event that the permitting authority disapproves a permit application or determines that the application is incomplete, the owner or operator must revise and resubmit the application to meet the objections of the permitting authority. The permitting authority must specify a reasonable period in which the owner or operator is required to remedy the deficiencies in the disapproved or incomplete application. This period may not exceed six (6) months from the date the owner or operator is first notified that the application has been disapproved or is incomplete.

(4) Following submittal of a Part 1 or Part 2 MACT application, the permitting authority may request additional information from the owner or operator. The owner or operator must respond to such requests in a timely manner.

(5) If the owner or operator has submitted a timely and complete application as required by this section, any failure to have a Title V permit addressing Section 112(j) requirements shall not be a violation of Section 112(j), unless the delay in final action is due to the failure of the applicant to submit, in a timely manner, information required or requested to process the application. Once a complete application is submitted, the owner or operator shall not be in violation of the requirement to have a Title V permit addressing Section 112(j) requirements.

(f) Permit content. The Title V permit must contain an equivalent emission limitation (or limitations) for the relevant category or subcategory determined on a case-by-case basis by the permitting authority, or, if the applicable criteria in Subpart D of this part are met, the Title V permit may contain an alternative emission limitation. For the purposes of the preceding sentence, early reductions made pursuant to Section 112(i)(5)(A) of the Act must be achieved not later than the date on which the relevant standard should have been promulgated according to the source category schedule for standards.

(1) The Title V permit must contain an emission standard or emission limitation that is equivalent to existing source MACT and an emission standard or emission limitation that is equivalent to new source MACT for control of emissions of HAPs. The MACT emission standards or limitations must be determined by the permitting authority and must be based on the degree of emission reductions that can be achieved if the control technologies or work practices are installed, maintained, and operated properly. The permit must also specify the affected source and the new affected source. If construction of a new affected source or reconstruction of an affected source commences after a Title V permit meeting the requirements of Section 112(j) has been issued for the source, the new source MACT compliance dates must apply.

(2) The Title V permit must specify any notification, operation and maintenance, performance testing, monitoring, and reporting and recordkeeping requirements. In developing the Title V permit, the permitting authority must consider and specify the appropriate provisions of Subpart A of this part. The Title V permit must also include the information in paragraphs (f)(2)(i) through (f)(2)(iii) of this section.

(i) In addition to the MACT emission limitation required by paragraph (f)(1) of this section, additional emission limits, production limits, operational limits, or other terms and conditions necessary to ensure practicable enforceability of the MACT emission limitation.

(ii) Compliance certifications, testing, monitoring, reporting, and recordkeeping requirements that are consistent with requirements established pursuant to Title V and paragraph (h) of this section.

(iii) Compliance dates by which the owner or operator must be in compliance with the MACT emission limitation and all other applicable terms and conditions of the permit.

(A) The owner or operator of an affected source subject to the requirements of this subpart must comply with the emission limitation(s) by the date established in the source's Title V permit. In no case shall such compliance date be later than three (3) years after the issuance of the permit for that source, except where the permitting authority issues a permit that grants an additional year to comply in accordance with Section 112(i)(3)(B) of the Act, or unless otherwise specified in Section 112(i), or in Subpart D of this part.

(B) The owner or operator of a new affected source, as defined in the Title V permit meeting the requirements of Section 112(j), that is subject to the requirements of this subpart must comply with a new source MACT level of control immediately upon startup of the new affected source.

(g) Permit issuance dates. The permitting authority must issue a Title V permit meeting Section 112(j) requirements within eighteen (18) months after submittal of the complete Part 2 MACT application.

(h) Enhanced monitoring. In accordance with Section 114(a)(3) of the Act, monitoring shall be capable of demonstrating continuous compliance for each compliance period during the applicable reporting period. Such monitoring data shall be of sufficient quality to be used as a basis for directly enforcing all applicable requirements established under this subpart, including emission limitations.

(i) MACT emission limitations.

(1) The owner or operator of affected sources subject to paragraphs (a), (b), and (c) of this section must comply with all requirements of this subpart that are applicable to affected sources, including the compliance date for affected sources established in paragraph (f)(2)(iii)(A) of this section.

(2) The owner or operator of new affected sources subject to paragraph (c)(1) of this section must comply with all requirements of this subpart that are applicable to new affected sources, including the compliance date for new affected sources established in paragraph (f)(2)(iii)(B) of this section.

Section 63.53 - Application Content for Case-by-Case MACT Determinations.

(a) Part 1 MACT application. The Part 1 application for a MACT determination must contain the information in paragraphs (a)(1) through (a)(4) of this section.

(1) The name and address (physical location) of the major source.

(2) A brief description of the major source and an identification of the relevant source category.

(3) An identification of the types of emission points belonging to the relevant source category.

(4) An identification of any affected sources for which a Section 112(g) MACT determination has been made.

(b) Part 2 MACT application.

(1) In compiling a Part 2 MACT application, the owner or operator may cross-reference specific information in any prior submission by the owner or operator to the permitting authority, but in cross-referencing such information the owner or operator may not presume favorable action on any prior application or request which is still pending. In compiling a Part 2 MACT application, the owner or operator may also cross-reference any part of a standard proposed by the Administrator pursuant to Section 112(d) or 112(h) of the Act for any category or subcategory which includes sources to which the Part 2 application applies.

(2) The Part 2 application for a MACT determination must contain the information in paragraphs (b)(2)(i) through (b)(2)(v) of this section.

(i) For a new affected source, the anticipated date of startup of operation.

(ii) Each emission point or group of emission points at the affected source which is part of a category or subcategory for which a Part 2 MACT application is required, and each of the HAPs emitted at those emission points. When the Administrator has proposed a standard pursuant to Section 112(d) or 112(h) of the Act for a category or subcategory, such information may be limited to those emission points and HAPs which would be subject to control under the proposed standard.

(iii) Any existing federal, state, or local limitations or requirements governing emissions of HAPs from those emission points which are part of a category or subcategory for which a Part 2 application is required.

(iv) For each identified emission point or group of affected emission points, an identification of control technology in place.

(v) Any additional emission data or other information specifically requested by the permitting authority.

(3) The Part 2 application for a MACT determination may, but is not required to, contain the following information:

(i) Recommended emission limitations for the affected source and support information consistent with Section 63.52(f). The owner or operator may recommend a specific design, equipment, work practice, or operational standard, or combination thereof, as an emission limitation.

(ii) A description of the control technologies that would be applied to meet the emission limitation including technical information on the design, operation, size, estimated control efficiency and any other information deemed appropriate by the permitting authority, and identification of the affected sources to which the control technologies must be applied.

(iii) Relevant parameters to be monitored and frequency of monitoring to demonstrate continuous compliance with the MACT emission limitation over the applicable reporting period.

Section 63.54 - Preconstruction Review Procedures for New Affected Sources.

The requirements of this section apply to an owner or operator who constructs a new affected source subject to Section 63.52(c)(1). The purpose of this section is to describe alternative review processes that the permitting authority may use to make a MACT determination for the new affected source.

(a) Review process for new affected sources.

(1) If the permitting authority requires an owner or operator to obtain or revise a Title V permit before construction of the new affected source, or when the owner or operator chooses to obtain or revise a Title V permit before construction, the owner or operator must follow the procedures established under the applicable Title V permit program before construction of the new affected source.

(2) If an owner or operator is not required to obtain or revise a Title V permit before construction of the new affected source (and has not elected to do so), but the new affected source is covered by any preconstruction or preoperation review requirements established pursuant to Section 112(g) of the Act, then the owner or operator must comply with those requirements in order to ensure that the requirements of Section 112(j) and 112(g) are satisfied. If the new affected source is not covered by Section 112(g), the permitting authority, in its discretion, may issue a Notice of MACT Approval, or the equivalent, in accordance with the procedures set forth in paragraphs (b) through (f) of this section, or an equivalent permit review process, before construction or operation of the new affected source.

(3) Regardless of the review process, the MACT determination shall be consistent with the principles established in Section 63.55. The application for a Notice of MACT Approval or a Title V permit, permit modification, or administrative amendment, whichever is applicable, shall include the documentation required by Section 63.53.

(b) Optional administrative procedures for preconstruction or preoperation review for new affected sources. The permitting authority may provide for an enhanced review of Section 112(j) MACT determinations for review procedures and compliance requirements equivalent to those set forth in paragraphs (b) through (f) of this section.

(1) The permitting authority will notify the owner or operator in writing as to whether the application for a MACT determination is complete or whether additional information is required.

(2) The permitting authority will approve an applicant's proposed control technology, or the permitting authority will notify the owner or operator in writing of its intention to disapprove a control technology.

(3) The owner or operator may present in writing, within a time frame specified by the permitting authority, additional information, considerations, or amendments to the application before the permitting authority's issuance of a final disapproval.

(4) The permitting authority will issue a preliminary approval or issue a disapproval of the application, taking into account additional information received from the owner or operator.

(5) A determination to disapprove any application will be in writing and will specify the grounds on which the disapproval is based.

(6) Approval of an applicant's proposed control technology must be set forth in a Notice of MACT Approval (or the equivalent) as described in Section 63.52(f).

(c) Opportunity for public comment on Notice of MACT Approval. The permitting authority will provide opportunity for public comment on the preliminary Notice of MACT Approval prior to issuance, including, at a minimum:

(1) Availability for public inspection in at least one location in the area affected of the information submitted by the owner or operator and of the permitting authority's tentative determination;

(2) A period for submittal of public comment of at least thirty (30) days; and

(3) A notice by prominent advertisement in the area affected of the location of the source information and analysis specified in Section 63.52(f). The form and content of the notice must be substantially equivalent to that found in Section 70.7 of this chapter.

(4) An opportunity for a public hearing, if one is requested. The permitting authority will give at least thirty (30) days notice in advance of any hearing.

(d) Review by the EPA and affected states. The permitting authority must send copies of the preliminary notice (in time for comment) and final notice required by paragraph (c) of this section to the Administrator through the appropriate Regional Office, and to all other state and local air pollution control agencies having jurisdiction in affected states. The permitting authority must provide EPA with a review period for the final notice of at least forty-five (45) days and shall not issue a final Notice of MACT Approval until EPA objections are satisfied.

(e) Compliance with MACT determinations. An owner or operator of a major source that is subject to a MACT determination must comply with notification, operation and maintenance, performance testing, monitoring, reporting, and recordkeeping requirements established under Section 63.52(h), under Title V, and at the discretion of the permitting authority, under Subpart A of this part. The permitting authority must provide the EPA with the opportunity to review compliance requirements for consistency with requirements established pursuant to Title V during the review period under paragraph (d) of this section.

(f) Equivalency under Section 112(*l*). If a permitting authority requires preconstruction review for new source MACT determinations under this subpart, such requirement shall not necessitate a determination under Subpart E of this part.

Section 63.55 - Maximum Achievable Control Technology (MACT) Determinations for Affected Sources Subject to Case-by-Case Determination of Equivalent Emission Limitations.

(a) Requirements for permitting authorities. The permitting authority must determine whether the Section 63.53(a) Part 1 and Section 63.53(b) Part 2 MACT application is complete or an application for a Notice of MACT Approval is approvable. In either case, when the application is complete or approvable, the permitting authority must establish HAP emissions limitations equivalent to the limitations that would apply if an emission standard had been issued in a timely manner under Section 112(d) or 112(h) of the Act. The permitting authority must establish these emissions limitations consistent with the following requirements and principles:

(1) Emission limitations must be established for the equipment and activities within the affected sources within a source category or subcategory for which the Section 112(j) deadline has passed.

(2) Each emission limitation for an existing affected source must reflect the maximum degree of reduction in emissions of HAPs (including a prohibition on such emissions, where achievable) that the permitting authority, taking into consideration the cost of achieving such emission reduction and any non-air quality health and environmental impacts and energy requirements, determines is achievable by affected sources in the category or subcategory for which the Section 112(j) deadline has passed. This limitation must not be less stringent than the MACT floor which must be established by the permitting authority according to the requirements of Section 112(d)(3)(A) and 112(d)(3)(B) and must be based upon available information.

(3) Each emission limitation for a new affected source must reflect the maximum degree of reduction in emissions of HAPs (including a prohibition on such emissions, where achievable) that the permitting authority, taking into consideration the cost of achieving such emission reduction and any non-air quality health and environmental impacts and energy requirements, determines is achievable. This limitation must not be less stringent than the emission limitation achieved in practice by the best

controlled similar source which must be established by the permitting authority according to the requirements of Section 112(d)(3). This limitation must be based upon available information.

(4) The permitting authority must select a specific design, equipment, work practice, or operational standard, or combination thereof, when it is not feasible to prescribe or enforce an equivalent emission limitation due to the nature of the process or pollutant. It is not feasible to prescribe or enforce a limitation when the Administrator determines that HAPs cannot be emitted through a conveyance designed and constructed to capture such pollutant, or that any requirement for, or use of, such a conveyance would be inconsistent with any federal, state, or local law, or the application of measurement methodology to a particular class of sources is not practicable due to technological and economic limitations.

(5) Nothing in this subpart shall prevent a state or local permitting authority from establishing an emission limitation more stringent than required by federal regulations.

(b) Reporting to EPA. The owner or operator must submit additional copies of its Part 1 and Part 2 MACT application for a Title V permit, permit revision, or Notice of MACT Approval, whichever is applicable, to the EPA at the same time the material is submitted to the permitting authority.

Section 63.56 - Requirements for Case-by-Case Determination of Equivalent Emission Limitations After Promulgation of Subsequent MACT Standard.

(a) If the Administrator promulgates a relevant emission standard that is applicable to one or more affected sources within a major source before the date a permit application under this paragraph (a) is approved, the Title V permit must contain the promulgated standard rather than the emission limitation determined under Section 63.52, and the owner or operator must comply with the promulgated standard by the compliance date in the promulgated standard.

(b) If the Administrator promulgates a relevant emission standard under Section 112(d) or 112(h) of the Act that is applicable to a source after the date a permit is issued pursuant to Section 63.52 or Section 63.54, the permitting authority must incorporate requirements of that standard in the Title V permit upon its next renewal. The permitting authority must establish a compliance date in the revised permit that assures that the owner or operator must comply with the promulgated standard within a reasonable time, but not longer than eight (8) years after such standard is promulgated or eight (8) years after the date by which the owner or operator was first required to comply with the emission limitation established by the permit, whichever is earlier. However, in no event shall the period for compliance for existing sources be shorter than that provided for existing sources in the promulgated standard.

3(c) Notwithstanding the requirements of paragraph (a) or (b) of this section, the requirements of paragraphs (c)(1) and (c)(2) of this section shall apply.

(1) If the Administrator promulgates an emission standard under Section 112(d) or 112(h) that is applicable to an affected source after the date a permit application under this paragraph is approved under Section 63.52 or Section 63.54, the permitting authority is not required to change the emission limitation in the permit to reflect the promulgated standard if the permitting authority determines that the level of control required by the emission limitation in the permit is substantially as effective as that required by the promulgated standard pursuant to Section 63.1(e).

(2) If the Administrator promulgates an emission standard under Section 112(d) or 112(h) of the Act that is applicable to an affected source after the date a permit application is approved under Section 63.52 or Section 63.54, and the level of control required by the promulgated standard is less stringent than the level of control required by any emission limitation in the prior MACT determination, the permitting authority is not required to incorporate any less stringent emission limitation of the promulgated standard in the Title V permit and may in its discretion consider any more stringent provisions of the MACT determination to be applicable legal requirements when issuing or revising such a Title V permit.

TABLE 1 TO SUBPART B OF PART 63—
SECTION 112(J) PART 2 APPLICATION DUE DATES

Due date	MACT standard
10/30/03	Combustion Turbines. Lime Manufacturing.

TABLE 1 TO SUBPART B OF PART 63—
SECTION 112(J) PART 2 APPLICATION DUE DATES

Due date	MACT standard
	Site Remediation. Iron and Steel Foundries. Taconite Iron Ore Processing. Miscellaneous Organic Chemical. Manufacturing (MON).[1] Organic Liquids Distribution. Primary Magnesium Refining. Metal Can (Surface Coating). Plastic Parts and Products (Surface Coating). Chlorine Production. Miscellaneous Metal Parts and Products (Surface Coating) (and Asphalt/Coal Tar Application-Metal Pipes).[2]
4/28/04	Industrial Boilers, Institutional/Commercial Boilers, and Process Heaters.[3] Plywood and Composite Wood Products. Reciprocating Internal Combustion Engines.[4] Auto and Light-Duty Truck (Surface Coating).
11/14/05	Industrial Boilers, Institutional/Commercial Boilers, and Process Heaters.[5] Hydrochloric Acid Production.[6]

[1] Covers 23 source categories, see Table 2 to this subpart.
[2] Two source categories.
[3] Includes all sources in the three categories, Industrial Boilers, Institutional/Commercial Boilers, and Process Heaters that burn no hazardous waste.
[4] Includes engines greater than 500 brake horsepower.
[5] Includes all sources in the three categories, Industrial Boilers, Institutional/Commercial Boilers, and Process Heaters that burn hazardous waste.
[6] Includes furnaces that produce acid from hazardous waste at sources in the category Hydrochloric Acid Production.

TABLE 2 TO SUBPART B OF PART 63—NON SOURCE CATEGORIES

Manufacture of Paints, Coatings, and Adhesives.
Alkyd Resins Production.
Maleic Anhydride Copolymers Production.
Polyester Resins Production.
Polymerized Vinylidene Chloride Production.
Polymethyl Methacrylate Resins Production.
Polyvinyl Acetate Emulsions Production.
Polyvinyl Alcohol Production.
Polyvinyl Butyral Production.
Ammonium Sulfate Production-Caprolactam By-Product Plants.
Quaternary Ammonium Compounds Production.
Benzyltrimethylammonium Chloride Production.
Carbonyl Sulfide Production.
Chelating Agents Production.
Chlorinated Paraffins Production.
Ethylidene Norbornene Production.
Explosives Production.
Hydrazine Production.
OBPA/1,3-Diisocyanate Production.
Photographic Chemicals Production.

Phthalate Plasticizers Production.

Rubber Chemicals Manufacturing.

Symmetrical Tetrachloropyridine Production.

Editor's Note

Scrivener's error corrected in 2017, substituting Section 63.44(c) for note paragraph which previously followed Section 63.44(b)(2).

Subpart C—"List of Hazardous Air Pollutants, Petition Process, Lesser Quantity Designations, Source Category List"

The provisions of 40 CFR Part 63 Subpart C, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart C			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 61	June 18, 1996	[61 FR 30816]
Revision	Vol. 65	August 2, 2000	[65 FR 37342]
Revision	Vol. 69	November 29, 2004	[69 FR 69320]
Revision	Vol. 70	December 19, 2005	[70 FR 75047]

Subpart D—"Regulations Governing Compliance Extensions for Early Reduction of Hazardous Air Pollutants"

The provisions of 40 CFR Part 63 Subpart D, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart D			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 57	December 29, 1992	[57 FR 61970]
Revision	Vol. 58	June 25, 1993	[58 FR 34369]
Revision	Vol. 58	October 27, 1993	[58 FR 57911]
Revision	Vol. 58	November 29, 1993	[58 FR 62539]
Revision	Vol. 59	October 21, 1994	[59 FR 53109]
Revision	Vol. 59	November 21, 1994	[59 FR 59921]

Subpart E—"Approval of State Programs and Delegation of Federal Authorities"

The provisions of 40 CFR Part 63 Subpart E, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart E			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 69	February 17, 2004	[69 FR 7372]
Revision	Vol. 70	October 13, 2005	[70 FR 59848]
Revision	Vol. 72	May 16, 2007	[72 FR 27437]

Subpart F—"National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry"

The provisions of 40 CFR Part 63 Subpart F, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart F

Federal Register Citation	Volume	Date	Notice
Original Promulgation	Vol. 59	April 22, 1994	[59 FR 19402]
Revision	Vol. 59	September 20, 1994	[59 FR 48175]
Revision	Vol. 59	October 24, 1994	[59 FR 53359]
Revision	Vol. 59	October 28, 1994	[59 FR 54131]
Revision	Vol. 60	January 27, 1995	[60 FR 5321]
Revision	Vol. 60	April 10, 1995	[60 FR 18020]
Revision	Vol. 60	April 10, 1995	[60 FR 18026]
Revision	Vol. 60	December 12, 1995	[60 FR 63624]
Revision	Vol. 61	February 29, 1996	[61 FR 7716]
Revision	Vol. 61	June 20, 1996	[61 FR 31435]
Revision	Vol. 61	December 5, 1996	[61 FR 64572]
Revision	Vol. 62	January 17, 1997	[62 FR 2722]
Revision	Vol. 63	May 12, 1998	[63 FR 26078]
Revision	Vol. 64	April 26, 1999	[64 FR 20189]
Revision	Vol. 65	May 8, 2000	[65 FR 26491]
Revision	Vol. 66	January 22, 2001	[66 FR 6922]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 71	December 21, 2006	[71 FR 76603]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Subpart G—"National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater"

The provisions of 40 CFR Part 63 Subpart G, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart G			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 59	April 22, 1994	[59 FR 19402]
Revision	Vol. 59	June 6, 1994	[59 FR 29196]
Revision	Vol. 59	October 24, 1994	[59 FR 53359]
Revision	Vol. 60	January 27, 1995	[60 FR 5321]
Revision	Vol. 60	April 10, 1995	[60 FR 18020]
Revision	Vol. 60	April 10, 1995	[60 FR 18026]
Revision	Vol. 60	December 12, 1995	[60 FR 63624]
Revision	Vol. 61	February 29, 1996	[61 FR 7716]
Revision	Vol. 61	December 5, 1996	[61 FR 64572]
Revision	Vol. 62	January 17, 1997	[62 FR 2722]
Revision	Vol. 63	December 9, 1998	[63 FR 67787]
Revision	Vol. 64	April 26, 1999	[64 FR 20189]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 65	December 14, 2000	[65 FR 78268]
Revision	Vol. 66	January 22, 2001	[66 FR 6922]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 69	December 23, 2004	[69 FR 76859]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 71	December 21, 2006	[71 FR 76603]
Revision	Vol. 73	December 22, 2008	[73 FR 78199]

40 CFR Part 63 Subpart G			
Federal Register Citation	**Volume**	**Date**	**Notice**
Revision	Vol. 79	February 27, 2014	[79 FR 11228]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Subpart H—"National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks"

The provisions of 40 CFR Part 63 Subpart H, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart H			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 59	April 22, 1994	[59 FR 19402]
Revision	Vol. 59	September 20, 1994	[59 FR 48175]
Revision	Vol. 59	October 24, 1994	[59 FR 53359]
Revision	Vol. 60	January 27, 1995	[60 FR 5321]
Revision	Vol. 60	April 10, 1995	[60 FR 18020]
Revision	Vol. 60	April 10, 1995	[60 FR 18026]
Revision	Vol. 60	December 12, 1995	[60 FR 63624]
Revision	Vol. 61	June 20, 1996	[61 FR 31435]
Revision	Vol. 62	January 17, 1997	[62 FR 2722]
Revision	Vol. 64	April 26, 1999	[64 FR 20189]
Revision	Vol. 65	December 14, 2000	[65 FR 78268]
Revision	Vol. 66	January 22, 2001	[66 FR 6922]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 73	December 22, 2008	[73 FR 78199]

Subpart I—"National Emission Standards for Organic Hazardous Air Pollutants for Certain Processes Subject to the Negotiated Regulation for Equipment Leaks"

The provisions of 40 CFR Part 63 Subpart I, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart I			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 59	April 22, 1994	[59 FR 19402]
Revision	Vol. 59	September 20, 1994	[59 FR 48175]
Revision	Vol. 59	October 24, 1994	[59 FR 53359]
Revision	Vol. 59	October 28, 1994	[59 FR 54131]
Revision	Vol. 60	January 27, 1995	[60 FR 5321]
Revision	Vol. 60	April 10, 1995	[60 FR 18020]
Revision	Vol. 60	April 10, 1995	[60 FR 18026]
Revision	Vol. 61	February 29, 1996	[61 FR 7716]
Revision	Vol. 61	June 20, 1996	[61 FR 31435]
Revision	Vol. 62	January 17, 1997	[62 FR 2722]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]

Subpart J—"National Emission Standards for Hazardous Air Pollutants for Polyvinyl Chloride and Copolymers Production"

The provisions of 40 CFR Part 63 Subpart J, as originally published in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart J			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 67	July 10, 2002	[67 FR 45866]

Subpart K—[Reserved]

Subpart L—"National Emission Standards for Coke Oven Batteries"

The provisions of 40 CFR Part 63 Subpart L, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart L			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 58	October 27, 1993	[58 FR 57911]
Revision	Vol. 59	January 13, 1994	[59 FR 1992]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 70	April 15, 2005	[70 FR 19992]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]

Subpart M—"National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities"

The provisions of 40 CFR Part 63 Subpart M, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart M			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 58	September 22, 1993	[58 FR 49354]
Revision	Vol. 58	December 20, 1993	[58 FR 66287]
Revision	Vol. 61	June 3, 1996	[61 FR 27785]
Revision	Vol. 61	June 11, 1996	[61 FR 29485]
Revision	Vol. 61	September 19, 1996	[61 FR 49263]
Revision	Vol. 64	December 14, 1999	[64 FR 69637]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 70	December 19, 2005	[70 FR 75320]
Revision	Vol. 71	July 27, 2006	[71 FR 42724]
Revision	Vol. 71	September 21, 2006	[71 FR 55280]
Revision	Vol. 73	April 1, 2008	[73 FR 17252]
Revision	Vol. 73	July 11, 2008	[73 FR 39871]

Subpart N—"National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks"

The provisions of 40 CFR Part 63 Subpart N, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart N			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 60	January 25, 1995	[60 FR 4948]
Revision	Vol. 60	May 24, 1995	[60 FR 27598]
Revision	Vol. 60	June 27, 1995	[60 FR 33122]
Revision	Vol. 61	June 3, 1996	[61 FR 27785]
Revision	Vol. 62	January 30, 1997	[62 FR 4463]

Revision	Vol. 64	December 14, 1999	[64 FR 69637]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 69	July 19, 2004	[69 FR 42885]
Revision	Vol. 70	December 19, 2005	[70 FR 75320]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 77	September 19, 2012	[77 FR 58220]
Revision	Vol. 79	February 27, 2014	[79 FR 11228]
Revision	Vol. 80	April 21, 2015	[80 FR 22116]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015; State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016.

Subpart O—"Ethylene Oxide Emission Standards for Sterilization Facilities"

The provisions of 40 CFR Part 63 Subpart O, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart O			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 59	December 6, 1994	[59 FR 62585]
Revision	Vol. 61	June 3, 1996	[61 FR 27785]
Revision	Vol. 62	December 9, 1997	[62 FR 64736]
Revision	Vol. 63	December 4, 1998	[63 FR 66990]
Revision	Vol. 64	December 14, 1999	[64 FR 69637]
Revision	Vol. 66	November 2, 2001	[66 FR 55577]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 70	December 19, 2005	[70 FR 75320]
Revision	Vol. 71	April 7, 2006	[71 FR 17712]
Revision	Vol. 79	February 27, 2014	[79 FR 11228]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Subpart P—[Reserved]

Subpart Q—"National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers"

The provisions of 40 CFR Part 63 Subpart Q, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart Q			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 59	September 8, 1994	[59 FR 46350]
Revision	Vol. 63	July 23, 1998	[63 FR 39519]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 69	April 9, 2004	[69 FR 18801]
Revision	Vol. 71	April 7, 2006	[71 FR 17729]

Subpart R—"National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)"

The provisions of 40 CFR Part 63 Subpart R, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart R			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 59	December 14, 1994	[59 FR 64303]
Revision	Vol. 60	February 8, 1995	[60 FR 7627]
Revision	Vol. 60	June 26, 1995	[60 FR 32912]
Revision	Vol. 60	August 18, 1995	[60 FR 43244]
Revision	Vol. 60	December 8, 1995	[60 FR 62991]
Revision	Vol. 61	February 29, 1996	[61 FR 7718]
Revision	Vol. 62	February 28, 1997	[62 FR 9087]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 68	December 19, 2003	[68 FR 70960]
Revision	Vol. 71	April 6, 2006	[71 FR 17352]
Revision	Vol. 73	December 22, 2008	[73 FR 78199]

Subpart S—"National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry"

The provisions of 40 CFR Part 63 Subpart S, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart S			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 63	April 15, 1998	[63 FR 18504]
Revision	Vol. 63	August 7, 1998	[63 FR 42238]
Revision	Vol. 63	September 16, 1998	[63 FR 49455]
Revision	Vol. 63	December 28, 1998	[63 FR 71385]
Revision	Vol. 64	April 12, 1999	[64 FR 17555]
Revision	Vol. 65	December 22, 2000	[65 FR 80755]
Revision	Vol. 66	May 14, 2001	[66 FR 24268]
Revision	Vol. 66	October 16, 2001	[66 FR 52537]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 77	September 11, 2012	[77 FR 55698]

Subpart T—"National Emission Standards for Halogenated Solvent Cleaning"

The provisions of 40 CFR Part 63 Subpart T, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart T			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 59	December 2, 1994	[59 FR 61801]
Revision	Vol. 59	December 30, 1994	[59 FR 67750]
Revision	Vol. 60	June 5, 1995	[60 FR 29484]
Revision	Vol. 63	May 5, 1998	[63 FR 24749]
Revision	Vol. 63	December 11, 1998	[63 FR 68397]
Revision	Vol. 64	July 13, 1999	[64 FR 37683]
Revision	Vol. 64	August 19, 1999	[64 FR 45187]
Revision	Vol. 64	October 18, 1999	[64 FR 56173]
Revision	Vol. 64	December 3, 1999	[64 FR 67793]
Revision	Vol. 64	December 14, 1999	[64 FR 69637]
Revision	Vol. 65	September 8, 2000	[65 FR 54419]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]

40 CFR Part 63 Subpart T			
Federal Register Citation	**Volume**	**Date**	**Notice**
Revision	Vol. 70	December 19, 2005	[70 FR 75320]
Revision	Vol. 72	May 3, 2007	[72 FR 25138]

Subpart U—"National Emission Standards for Hazardous Air Pollutant Emissions: Group I Polymers and Resins"

The provisions of 40 CFR Part 63 Subpart U, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart U			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 61	September 5, 1996	[61 FR 46924]
Revision	Vol. 62	January 14, 1997	[62 FR 1837]
Revision	Vol. 62	March 17, 1997	[62 FR 12549]
Revision	Vol. 62	July 15, 1997	[62 FR 37722]
Revision	Vol. 64	March 9, 1999	[64 FR 11542]
Revision	Vol. 64	May 7, 1999	[64 FR 24511]
Revision	Vol. 64	June 30, 1999	[64 FR 35028]
Revision	Vol. 65	June 19, 2000	[65 FR 38030]
Revision	Vol. 66	July 16, 2001	[66 FR 36924]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 73	December 22, 2008	[73 FR 78199]
Revision	Vol. 76	April 21, 2011	[76 FR 22566]

Subpart V—[Reserved]

Subpart W—"National Emission Standards for Hazardous Air Pollutants for Epoxy Resins Production and Non-Nylon Polyamides Production"

The provisions of 40 CFR Part 63 Subpart W, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart W			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 60	March 8, 1995	[60 FR 12676]
Revision	Vol. 65	May 8, 2000	[65 FR 26491]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]

Subpart X—"National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting"

The provisions of 40 CFR Part 63 Subpart X, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart X			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 60	June 23, 1995	[60 FR 32587]
Revision	Vol. 61	June 3, 1996	[61 FR 27785]
Revision	Vol. 61	December 12, 1996	[61 FR 65334]
Revision	Vol. 62	June 13, 1997	[62 FR 32210]
Revision	Vol. 63	August 24, 1998	[63 FR 45007]

Revision	Vol. 64	January 29, 1999	[64 FR 4570]
Revision	Vol. 64	December 14, 1999	[64 FR 69637]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 70	December 19, 2005	[70 FR 75320]
Revision	Vol. 77	January 5, 2012	[77 FR 556]
Revision	Vol. 79	January 3, 2014	[79 FR 367]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Subpart Y—"National Emission Standards for Marine Tank Vessel Loading Operations"

The provisions of 40 CFR Part 63 Subpart Y, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart Y			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 60	September 19, 1995	[60 FR 48388]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 76	April 21, 2011	[76 FR 22566]
Revision	Vol. 79	February 27, 2014	[79 FR 11228]
Revision	Vol. 80	December 1, 2015	[80 FR 75178]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015; State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016.

Subpart Z—[Reserved]

Subpart AA—"National Emission Standards for Hazardous Air Pollutants from Phosphoric Acid Manufacturing Plants"

The provisions of 40 CFR Part 63 Subpart AA, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart AA			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 64	June 10, 1999	[64 FR 31376]
Revision	Vol. 66	December 17, 2001	[66 FR 65072]
Revision	Vol. 67	June 12, 2002	[67 FR 40578]
Revision	Vol. 67	June 13, 2002	[67 FR 40814]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 80	August 19, 2015	[80 FR 50385]
Revision	Vol. 82	September 28, 2017	[82 FR 45193]

HISTORY: Amended by State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016; SCSR43–1 Doc. No. 4870, eff January 25, 2019.

Subpart BB—"National Emission Standards for Hazardous Air Pollutants from Phosphate Fertilizer Production Plants"

The provisions of 40 CFR Part 63 Subpart BB, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart BB			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 64	June 10, 1999	[64 FR 31382]
Revision	Vol. 66	December 17, 2001	[66 FR 65072]
Revision	Vol. 67	June 13, 2002	[67 FR 40814]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 80	August 19, 2015	[80 FR 50385]
Revision	Vol. 82	September 28, 2017	[82 FR 45193]

HISTORY: Amended by State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016; SCSR43–1 Doc. No. 4870, eff January 25, 2019.

Subpart CC—"National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries"

The provisions of 40 CFR Part 63 Subpart CC, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart CC			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 60	August 18, 1995	[60 FR 43260]
Revision	Vol. 60	September 27, 1995	[60 FR 49976]
Revision	Vol. 61	February 23, 1996	[61 FR 7051]
Revision	Vol. 61	June 12, 1996	[61 FR 29878]
Revision	Vol. 61	June 28, 1996	[61 FR 33799]
Revision	Vol. 62	February 21, 1997	[62 FR 7938]
Revision	Vol. 63	March 20, 1998	[63 FR 13537]
Revision	Vol. 63	May 18, 1998	[63 FR 27212]
Revision	Vol. 63	June 9, 1998	[63 FR 31361]
Revision	Vol. 63	August 18, 1998	[63 FR 44140]
Revision	Vol. 65	May 8, 2000	[65 FR 26491]
Revision	Vol. 65	July 6, 2000	[65 FR 41594]
Revision	Vol. 66	May 25, 2001	[66 FR 28840]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 74	October 28, 2009	[74 FR 55670]
Revision	Vol. 75	June 30, 2010	[75 FR 37730]
Revision	Vol. 76	July 18, 2011	[76 FR 42052]
Revision	Vol. 78	June 20, 2013	[78 FR 37133]
Revision	Vol. 80	December 1, 2015	[80 FR 75178]
Revision	Vol. 81	July 13, 2016	[81 FR 45232]
Revision	Vol. 83	November 26, 2018	[83 FR 60696]

HISTORY: Amended by State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016; State Register Volume 41, Issue No. 8, Doc. No. 4750, eff August 25, 2017; SCSR43–8 Doc. No. 4881, eff August 23, 2019.

Subpart DD—"National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations"

The provisions of 40 CFR Part 63 Subpart DD, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart DD			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 61	July 1, 1996	[61 FR 34140]
Revision	Vol. 64	July 20, 1999	[64 FR 38950]
Revision	Vol. 66	January 8, 2001	[66 FR 1263]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 80	March 18, 2015	[80 FR 14247]

HISTORY: Amended by State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016.

Subpart EE—"National Emission Standards for Magnetic Tape Manufacturing Operations"

The provisions of 40 CFR Part 63 Subpart EE, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart EE			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 59	December 15, 1994	[59 FR 64596]
Revision	Vol. 64	April 9, 1999	[64 FR 17464]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]

Subpart FF—[Reserved]

Subpart GG—"National Emission Standards for Aerospace Manufacturing and Rework Facilities"

The provisions of 40 CFR Part 63 Subpart GG, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart GG			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 60	September 1, 1995	[60 FR 45956]
Revision	Vol. 61	February 9, 1996	[61 FR 4903]
Revision	Vol. 61	December 17, 1996	[61 FR 66227]
Revision	Vol. 63	March 27, 1998	[63 FR 15006]
Revision	Vol. 63	September 1, 1998	[63 FR 46526]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 65	December 8, 2000	[65 FR 76941]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 79	February 27, 2014	[79 FR 11228]
Revision	Vol. 80	December 7, 2015	[80 FR 76151]
Revision	Vol. 81	August 3, 2016	[81 FR 51114]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015; State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016; State Register Volume 41, Issue No. 8, Doc. No. 4750, eff August 25, 2017.

Subpart HH—"National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities"

The provisions of 40 CFR Part 63 Subpart HH, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart HH			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 64	June 17, 1999	[64 FR 32628]
Revisions	Vol. 66	June 29, 2001	[66 FR 34548]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 72	January 3, 2007	[72 FR 26]
Revision	Vol. 73	December 22, 2008	[73 FR 78199]
Revision	Vol. 77	August 16, 2012	[77 FR 49490]

Subpart II—"National Emission Standards for Shipbuilding and Ship Repair (Surface Coating)"

The provisions of 40 CFR Part 63 Subpart II, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart II			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 60	December 15, 1995	[60 FR 64330]
Revision	Vol. 61	June 18, 1996	[61 FR 30814]
Revision	Vol. 61	December 17, 1996	[61 FR 66226]
Revision	Vol. 65	October 17, 2000	[65 FR 61744]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 71	December 29, 2006	[71 FR 78392]
Revision	Vol. 72	February 27, 2007	[72 FR 8630]
Revision	Vol. 76	November 21, 2011	[76 FR 72050]

Subpart JJ—"National Emission Standards for Wood Furniture Manufacturing Operations"

The provisions of 40 CFR Part 63 Subpart JJ, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart JJ			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 60	December 7, 1995	[60 FR 62930]
Revision	Vol. 62	June 3, 1997	[62 FR 30257]
Revision	Vol. 62	June 9, 1997	[62 FR 31361]
Revision	Vol. 63	December 28, 1998	[63 FR 71376]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 76	November 21, 2011	[76 FR 72050]

Subpart KK—"National Emission Standards for the Printing and Publishing Industry"

The provisions of 40 CFR Part 63 Subpart KK, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart KK			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 61	May 30, 1996	[61 FR 27132]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 71	May 24, 2006	[71 FR 29792]
Revision	Vol. 76	April 21, 2011	[76 FR 22566]

Subpart LL—"National Emission Standards for Hazardous Air Pollutants for Primary Aluminum Reduction Plants"

The provisions of 40 CFR Part 63 Subpart LL, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart LL			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 62	October 7, 1997	[62 FR 52407]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 70	November 2, 2005	[70 FR 66280]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 80	October 15, 2015	[80 FR 62389]

HISTORY: Amended by State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016.

Subpart MM—"National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills"

The provisions of 40 CFR Part 63 Subpart MM, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart MM			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 66	January 12, 2001	[66 FR 3180]
Revision	Vol. 66	March 26, 2001	[66 FR 16400]
Revision	Vol. 66	July 19, 2001	[66 FR 37591]
Revision	Vol. 66	August 6, 2001	[66 FR 41086]
Revision	Vol. 68	February 18, 2003	[68 FR 7706]
Revision	Vol. 68	May 8, 2003	[68 FR 24653]
Revision	Vol. 68	July 18, 2003	[68 FR 42603]
Revision	Vol. 68	December 5, 2003	[68 FR 67953]
Revision	Vol. 69	May 6, 2004	[69 FR 25321]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 82	October 11, 2017	[82 FR 47328]

HISTORY: Amended by SCSR43–1 Doc. No. 4870, eff January 25, 2019.

Subpart NN—"National Emissions Standards for Hazardous Air Pollutants for Wool Fiberglass Manufacturing at Area Sources"

The provisions of 40 CFR Part 63 Subpart NN, as originally published in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart NN			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 80	July 29, 2015	[80 FR 45279]

HISTORY: Amended by State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016.

Subpart OO—"National Emission Standards for Tanks - Level 1"

The provisions of 40 CFR Part 63 Subpart OO, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart OO			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 61	July 1, 1996	[61 FR 34184]
Revision	Vol. 64	July 20, 1999	[64 FR 38985]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]

Subpart PP—"National Emission Standards for Containers"

The provisions of 40 CFR Part 63 Subpart PP, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart PP			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 61	July 1, 1996	[61 FR 34186]
Revision	Vol. 64	July 20, 1999	[64 FR 38987]
Revision	Vol. 66	January 8, 2001	[66 FR 1263]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]

Subpart QQ—"National Emission Standards for Surface Impoundments"

The provisions of 40 CFR Part 63 Subpart QQ, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart QQ			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 61	July 1, 1996	[61 FR 34190]
Revision	Vol. 64	July 20, 1999	[64 FR 38988]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]

Subpart RR—"National Emission Standards for Individual Drain Systems"

The provisions of 40 CFR Part 63 Subpart RR, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart RR			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 61	July 1, 1996	[61 FR 34193]
Revision	Vol. 64	July 20, 1999	[64 FR 38989]
Revision	Vol. 66	January 8, 2001	[66 FR 1263]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]

Subpart SS—"National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process"

The provisions of 40 CFR Part 63 Subpart SS, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart SS			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 64	June 29, 1999	[64 FR 34854]
Revision	Vol. 64	November 22, 1999	[64 FR 63702]
Revision	Vol. 67	July 12, 2002	[67 FR 46258]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]

Subpart TT—"National Emission Standards for Equipment Leaks - Control Level 1"

The provisions of 40 CFR Part 63 Subpart TT, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart TT			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 64	June 29, 1999	[64 FR 34854]
Revision	Vol. 64	November 22, 1999	[64 FR 63702]
Revision	Vol. 67	July 12, 2002	[67 FR 46258]

Subpart UU—"National Emission Standards for Equipment Leaks - Control Level 2 Standards"

The provisions of 40 CFR Part 63 Subpart UU, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart UU			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 64	June 29, 1999	[64 FR 34854]
Revision	Vol. 64	November 22, 1999	[64 FR 63702]
Revision	Vol. 67	July 12, 2002	[67 FR 46258]

Subpart VV—"National Emission Standards for Oil-Water Separators and Organic-Water Separators"

The provisions of 40 CFR Part 63 Subpart VV, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart VV			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 61	July 1, 1996	[61 FR 34195]
Revision	Vol. 64	July 20, 1999	[64 FR 38991]
Revision	Vol. 66	January 8, 2001	[66 FR 1263]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]

Subpart WW—"National Emission Standards for Storage Vessels (Tanks) - Control Level 2"

The provisions of 40 CFR Part 63 Subpart WW, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart WW			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 64	June 29, 1999	[64 FR 34854]
Revision	Vol. 67	July 12, 2002	[67 FR 46258]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Subpart XX—"National Emission Standards for Ethylene Manufacturing Process Units: Heat Exchange Systems and Waste Operations"

The provisions of 40 CFR Part 63 Subpart XX, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart XX			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 67	July 12, 2002	[67 FR 46258]
Revision	Vol. 70	April 13, 2005	[70 FR 19266]

Subpart YY—"National Emission Standards for Hazardous Air Pollutants for Source Categories: Generic Maximum Achievable Control Technology Standards"

The provisions of 40 CFR Part 63 Subpart YY, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart YY			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 64	June 29, 1999	[64 FR 34854]
Revision	Vol. 64	November 22, 1999	[64 FR 63695]
Revision	Vol. 64	December 22, 1999	[64 FR 71852]
Revision	Vol. 66	November 2, 2001	[66 FR 55844]
Revision	Vol. 67	June 7, 2002	[67 FR 39301]
Revision	Vol. 67	July 12, 2002	[67 FR 46258, 46289]
Revision	Vol. 68	February 10, 2003	[68 FR 6635]
Revision	Vol. 70	April 13, 2005	[70 FR 19266]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 72	June 29, 2007	[72 FR 35663]
Revision	Vol. 79	October 8, 2014	[79 FR 60898]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Subpart ZZ—[Reserved]

Subpart AAA—[Reserved]

Subpart BBB—[Reserved]

Subpart CCC—"National Emission Standards for Hazardous Air Pollutants for Steel Pickling-HCl Process Facilities and Hydrochloric Acid Regeneration Plants"

The provisions of 40 CFR Part 63 Subpart CCC, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart CCC			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 64	June 22, 1999	[64 FR 33218]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 77	September 19, 2012	[77 FR 58220]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Subpart DDD—"National Emission Standards for Hazardous Air Pollutants for Mineral Wool Production"

The provisions of 40 CFR Part 63 Subpart DDD, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart DDD			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 64	June 1, 1999	[64 FR 29503]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 76	December 1, 2011	[76 FR 74708]
Revision	Vol. 80	July 29, 2015	[80 FR 45279]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015; State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016.

Subpart EEE—"National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors"

The provisions of 40 CFR Part 63 Subpart EEE, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart EEE			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 63	June 19, 1998	[63 FR 33820]
Revision	Vol. 64	September 30, 1999	[64 FR 52828]
Revision	Vol. 64	November 19, 1999	[64 FR 63209]
Revision	Vol. 65	July 10, 2000	[65 FR 42292]
Revision	Vol. 65	November 9, 2000	[65 FR 67268]
Revision	Vol. 66	May 14, 2001	[66 FR 24270]
Revision	Vol. 66	July 3, 2001	[66 FR 35087]
Revision	Vol. 66	October 15, 2001	[66 FR 52361]
Revision	Vol. 66	December 6, 2001	[66 FR 63313]
Revision	Vol. 67	February 13, 2002	[67 FR 6792]
Revision	Vol. 67	February 14, 2002	[67 FR 6968]
Revision	Vol. 67	December 19, 2002	[67 FR 77687]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 69	April 9, 2004	[69 FR 18801]
Revision	Vol. 70	June 14, 2005	[70 FR 34538]
Revision	Vol. 70	October 12, 2005	[70 FR 59402]
Revision	Vol. 70	December 19, 2005	[70 FR 75042]
Revision	Vol. 71	March 23, 2006	[71 FR 14655]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 71	October 25, 2006	[71 FR 62388]
Revision	Vol. 73	April 8, 2008	[73 FR 18970]
Revision	Vol. 73	October 28, 2008	[73 FR 64068]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Subpart FFF—[Reserved]

Subpart GGG—"National Emission Standards for Pharmaceuticals Production"

The provisions of 40 CFR Part 63 Subpart GGG, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart GGG			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 63	September 21, 1998	[63 FR 50280]
Revision	Vol. 65	August 29, 2000	[65 FR 52588]
Revision	Vol. 66	August 2, 2001	[66 FR 40121]

Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 70	May 13, 2005	[70 FR 25671]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 73	December 22, 2008	[73 FR 78199]
Revision	Vol. 76	April 21, 2011	[76 FR 22566]
Revision	Vol. 79	February 27, 2014	[79 FR 11228]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Subpart HHH—"National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities"

The provisions of 40 CFR Part 63 Subpart HHH, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart HHH			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 64	June 17, 1999	[64 FR 32647]
Revision	Vol. 66	June 29, 2001	[66 FR 34548]
Revision	Vol. 66	September 27, 2001	[66 FR 49299]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 73	December 22, 2008	[73 FR 78199]
Revision	Vol. 77	August 16, 2012	[77 FR 49490]

Subpart III—"National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production"

The provisions of 40 CFR Part 63 Subpart III, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart III			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 63	October 7, 1998	[63 FR 53996]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 79	August 15, 2014	[79 FR 48073]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Subpart JJJ—"National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins"

The provisions of 40 CFR Part 63 Subpart JJJ, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart JJJ			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 61	September 12, 1996	[61 FR 48208]
Revision	Vol. 61	October 18, 1996	[61 FR 54342]
Revision	Vol. 62	January 14, 1997	[62 FR 1835]
Revision	Vol. 62	June 6, 1997	[62 FR 30993]
Revision	Vol. 62	July 15, 1997	[62 FR 37720]
Revision	Vol. 63	February 27, 1998	[63 FR 9944]

Revision	Vol. 63	March 31, 1998	[63 FR 15312]
Revision	Vol. 64	March 9, 1999	[64 FR 11536]
Revision	Vol. 64	June 8, 1999	[64 FR 30406]
Revision	Vol. 64	June 30, 1999	[64 FR 35023]
Revision	Vol. 65	June 19, 2000	[65 FR 38030]
Revision	Vol. 65	August 29, 2000	[65 FR 52319]
Revision	Vol. 65	October 26, 2000	[65 FR 64161]
Revision	Vol. 66	February 23, 2001	[66 FR 11233]
Revision	Vol. 66	February 26, 2001	[66 FR 11543]
Revision	Vol. 66	July 16, 2001	[66 FR 36924]
Revision	Vol. 66	August 6, 2001	[66 FR 40903]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 69	June 2, 2004	[69 FR 31008]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 73	December 22, 2008	[73 FR 78199]
Revision	Vol. 79	March 27, 2014	[79 FR 17340]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Subpart KKK—[Reserved]

Subpart LLL—"National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry"

The provisions of 40 CFR Part 63 Subpart LLL, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart LLL			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 64	June 14, 1999	[64 FR 31898]
Revision	Vol. 64	September 30, 1999	[64 FR 52828]
Revision	Vol. 67	April 5, 2002	[67 FR 16614]
Revision	Vol. 67	December 6, 2002	[67 FR 72580]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 71	December 20, 2006	[71 FR 76518]
Revision	Vol. 75	September 9, 2010	[75 FR 54970]
Revision	Vol. 76	January 18, 2011	[76 FR 2832]
Revision	Vol. 78	February 12, 2013	[78 FR 10006]
Revision	Vol. 80	July 27, 2015	[80 FR 44771]
Revision	Vol. 80	September 11, 2015	[80 FR 54728]
Revision	Vol. 81	July 25, 2016	[81 FR 48356]
Revision	Vol. 82	June 23, 2017	[82 FR 28562]
Revision	Vol. 82	August 22, 2017	[82 FR 39671]
Revision	Vol. 83	July 25, 2018	[83 FR 35122]
Revision	Vol. 83	August 3, 2018	[83 FR 38036]

HISTORY: Amended by State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016; State Register Volume 41, Issue No. 8, Doc. No. 4750, eff August 25, 2017; SCSR43–1 Doc. No. 4870, eff January 25, 2019; SCSR43–8 Doc. No. 4881, eff August 23, 2019.

Subpart MMM—"National Emission Standards for Hazardous Air Pollutants for Pesticide Active Ingredient Production"

The provisions of 40 CFR Part 63 Subpart MMM, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart MMM			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 64	June 23, 1999	[64 FR 33550]
Revision	Vol. 66	November 21, 2001	[66 FR 58393, 58396]
Revision	Vol. 67	March 22, 2002	[67 FR 13508, 13514]
Revision	Vol. 67	May 1, 2002	[67 FR 21579]
Revision	Vol. 67	June 3, 2002	[67 FR 38200]
Revision	Vol. 67	September 20, 2002	[67 FR 59336]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 79	March 27, 2014	[79 FR 17340]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Subpart NNN—"National Emission Standards for Hazardous Air Pollutants for Wool Fiberglass Manufacturing"

The provisions of 40 CFR Part 63 Subpart NNN, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart NNN			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 64	June 14, 1999	[64 FR 31695]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 80	July 29, 2015	[80 FR 45279]
Revision	Vol. 82	December 26, 2017	[82 FR 60873]

HISTORY: Amended by State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016; SCSR43–1 Doc. No. 4870, eff January 25, 2019.

Subpart OOO—"National Emission Standards for Hazardous Air Pollutant Emissions: Manufacture of Amino/Phenolic Resins"

The provisions of 40 CFR Part 63 Subpart OOO, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart OOO			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 65	January 20, 2000	[65 FR 3276]
Revision	Vol. 65	February 22, 2000	[65 FR 8768]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 79	October 8, 2014	[79 FR 60898]
Revision	Vol. 83	October 15, 2018	[83 FR 51842]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015; SCSR43–8 Doc. No. 4881, eff August 23, 2019.

Subpart PPP—"National Emission Standards for Hazardous Air Pollutant Emissions for Polyether Polyols Production"

The provisions of 40 CFR Part 63 Subpart PPP, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart PPP			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 64	June 1, 1999	[64 FR 29420]
Revision	Vol. 64	June 14, 1999	[64 FR 31895]
Revision	Vol. 65	May 8, 2000	[65 FR 26491]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 69	July 1, 2004	[69 FR 39862]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 79	March 27, 2014	[79 FR 17340]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Subpart QQQ—"National Emission Standards for Hazardous Air Pollutants for Primary Copper Smelting"

The provisions of 40 CFR Part 63 Subpart QQQ, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart QQQ			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 67	June 12, 2002	[67 FR 40478]
Revision	Vol. 70	July 14, 2005	[70 FR 40672]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]

Subpart RRR—"National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production"

The provisions of 40 CFR Part 63 Subpart RRR, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart RRR			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 65	March 23, 2000	[65 FR 15690]
Revision	Vol. 67	June 14, 2002	[67 FR 41118]
Revision	Vol. 67	August 13, 2002	[67 FR 52616]
Revision	Vol. 67	September 24, 2002	[67 FR 59787]
Revision	Vol. 67	November 8, 2002	[67 FR 68038]
Revision	Vol. 67	December 30, 2002	[67 FR 79808]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 69	September 3, 2004	[69 FR 53980]
Revision	Vol. 70	October 3, 2005	[70 FR 57513]
Revision	Vol. 70	December 19, 2005	[70 FR 75320]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 79	February 27, 2014	[79 FR 11228]
Revision	Vol. 80	September 18, 2015	[80 FR 56699]
Revision	Vol. 81	June 13, 2016	[81 FR 38085]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015; State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016; State Register Volume 41, Issue No. 8, Doc. No. 4750, eff August 25, 2017.

Subpart SSS—[Reserved]

Subpart TTT—"National Emission Standards for Hazardous Air Pollutants for Primary Lead Smelting"

The provisions of 40 CFR Part 63 Subpart TTT, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart TTT			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 64	June 4, 1999	[64 FR 30204]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 76	November 15, 2011	[76 FR 70834]

Subpart UUU—"National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units"

The provisions of 40 CFR Part 63 Subpart UUU, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart UUU			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 67	April 11, 2002	[67 FR 17762]
Revision	Vol. 69	April 9, 2004	[69 FR 18801]
Revision	Vol. 70	February 9, 2005	[70 FR 6930]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 80	December 1, 2015	[80 FR 75178]
Revision	Vol. 81	July 13, 2016	[81 FR 45232]
Revision	Vol. 83	November 26, 2018	[83 FR 60696]

HISTORY: Amended by State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016; State Register Volume 41, Issue No. 8, Doc. No. 4750, eff August 25, 2017; SCSR43–8 Doc. No. 4881, eff August 23, 2019.

Subpart VVV—"National Emission Standards for Hazardous Air Pollutants: Publicly Owned Treatment Works"

The provisions of 40 CFR Part 63 Subpart VVV, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart VVV			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 64	October 26, 1999	[64 FR 57572]
Revision	Vol. 66	March 23, 2001	[66 FR 16140]
Revision	Vol. 67	October 10, 2002	[67 FR 64742]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 73	December 22, 2008	[73 FR 78199]
Revision	Vol. 82	October 26, 2017	[82 FR 49513]

HISTORY: Amended by SCSR43–1 Doc. No. 4870, eff January 25, 2019.

Subpart WWW—[Reserved]

Subpart XXX—"National Emission Standards for Hazardous Air Pollutants for Ferroalloys Production: Ferromanganese and Silicomanganese"

The provisions of 40 CFR Part 63 Subpart XXX, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart XXX			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 64	May 20, 1999	[64 FR 27458]
Revision	Vol. 66	March 22, 2001	[66 FR 16007]
Revision	Vol. 68	June 23, 2003	[68 FR 37334]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 80	June 30, 2015	[80 FR 37365]
Revision	Vol. 82	January 18, 2017	[82 FR 5401]

HISTORY: Amended by State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016; SCSR43–1 Doc. No. 4870, eff January 25, 2019.

Subpart YYY—[Reserved]

Subpart ZZZ—[Reserved]

Subpart AAAA—"National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills"

The provisions of 40 CFR Part 63 Subpart AAAA, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart AAAA			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 68	January 16, 2003	[68 FR 2227]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]

Subpart BBBB—[Reserved]

Subpart CCCC—"National Emission Standards for Hazardous Air Pollutants: Manufacturing of Nutritional Yeast"

The provisions of 40 CFR Part 63 Subpart CCCC, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart CCCC			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 66	May 21, 2001	[66 FR 27876]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 79	February 27, 2014	[79 FR 11228]
Revision	Vol. 82	October 16, 2017	[82 FR 48156]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015; SCSR43–1 Doc. No. 4870, eff January 25, 2019.

Subpart DDDD—"National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products"

The provisions of 40 CFR Part 63 Subpart DDDD, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart DDDD			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 69	July 30, 2004	[69 FR 45944]
Revision	Vol. 71	February 16, 2006	[71 FR 8347]
Revision	Vol. 72	October 29, 2007	[72 FR 61060]

Subpart EEEE—"National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline)"

The provisions of 40 CFR Part 63 Subpart EEEE, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart EEEE			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 69	February 3, 2004	[69 FR 5038]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 71	July 28, 2006	[71 FR 42898]
Revision	Vol. 73	April 23, 2008	[73 FR 21825]
Revision	Vol. 73	July 17, 2008	[73 FR 40977]
Revision	Vol. 73	December 22, 2008	[73 FR 78199]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Subpart FFFF—"National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing"

The provisions of 40 CFR Part 63 Subpart FFFF, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart FFFF			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 68	November 10, 2003	[68 FR 63852]
Revision	Vol. 70	July 1, 2005	[70 FR 38554]
Revision	Vol. 70	August 30, 2005	[70 FR 51269]
Revision	Vol. 71	March 1, 2006	[71 FR 10439]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 71	July 14, 2006	[71 FR 40316]
Revision	Vol. 73	December 22, 2008	[73 FR 78199]

Subpart GGGG—"National Emission Standards for Hazardous Air Pollutants: Solvent Extraction for Vegetable Oil Production"

The provisions of 40 CFR Part 63 Subpart GGGG, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart GGGG			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 66	April 12, 2001	[66 FR 19006]
Revision	Vol. 67	April 5, 2002	[67 FR 16317]
Revision	Vol. 69	September 1, 2004	[69 FR 53338]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]

Subpart HHHH—"National Emission Standards for Hazardous Air Pollutants for Wet-Formed Fiberglass Mat Production"

The provisions of 40 CFR Part 63 Subpart HHHH, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart HHHH			
Federal Register Citation	**Volume**	**Date**	**Notice**

Original Promulgation	Vol. 67	April 11, 2002	[67 FR 17824]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]

Subpart IIII—"National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks"

The provisions of 40 CFR Part 63 Subpart IIII, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart IIII			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 69	April 26, 2004	[69 FR 22602]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 71	December 22, 2006	[71 FR 76922]
Revision	Vol. 72	April 24, 2007	[72 FR 20227]

Subpart JJJJ—"National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating"

The provisions of 40 CFR Part 63 Subpart JJJJ, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart JJJJ			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 67	December 4, 2002	[67 FR 72330]
Revision	Vol. 71	May 24, 2006	[71 FR 29792]

Subpart KKKK—"National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Cans"

The provisions of 40 CFR Part 63 Subpart KKKK, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart KKKK			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 68	November 12, 2003	[68 FR 64432]
Revision	Vol. 71	January 6, 2006	[71 FR 1378]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]

Subpart LLLL—[Reserved]

Subpart MMMM—"National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products"

The provisions of 40 CFR Part 63 Subpart MMMM, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart MMMM			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 69	January 2, 2004	[69 FR 130]
Revision	Vol. 69	April 26, 2004	[69 FR 22602]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 71	December 22, 2006	[71 FR 76922]

Subpart NNNN—"National Emission Standards for Hazardous Air Pollutants: Surface Coating of Large Appliances"

The provisions of 40 CFR Part 63 Subpart NNNN, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart NNNN			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 67	July 23, 2002	[67 FR 48254]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]

Subpart OOOO—"National Emission Standards for Hazardous Air Pollutants: Printing, Coating, and Dyeing of Fabrics and Other Textiles"

The provisions of 40 CFR Part 63 Subpart OOOO, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart OOOO			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 68	May 29, 2003	[68 FR 32172]
Revision	Vol. 69	August 4, 2004	[69 FR 47001]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 71	May 24, 2006	[71 FR 29792]

Subpart PPPP—"National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products"

The provisions of 40 CFR Part 63 Subpart PPPP, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart PPPP			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 69	April 19, 2004	[69 FR 20968]
Revision	Vol. 69	April 26, 2004	[69 FR 22602]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 71	December 22, 2006	[71 FR 76922]
Revision	Vol. 72	April 24, 2007	[72 FR 20227]

Subpart QQQQ—"National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products"

The provisions of 40 CFR Part 63 Subpart QQQQ, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart QQQQ			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 68	May 28, 2003	[68 FR 31746]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]

Subpart RRRR—"National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Furniture"

The provisions of 40 CFR Part 63 Subpart RRRR, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart RRRR			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 68	May 23, 2003	[68 FR 28606]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]

Subpart SSSS—"National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Coil"

The provisions of 40 CFR Part 63 Subpart SSSS, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart SSSS			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 67	June 10, 2002	[67 FR 39794]
Revision	Vol. 68	March 17, 2003	[68 FR 12590]

Subpart TTTT—"National Emission Standards for Hazardous Air Pollutants for Leather Finishing Operations"

The provisions of 40 CFR Part 63 Subpart TTTT, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart TTTT			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 67	February 27, 2002	[67 FR 9156]
Revision	Vol. 70	February 7, 2005	[70 FR 6355]

Subpart UUUU—"National Emission Standards for Hazardous Air Pollutants for Cellulose Products Manufacturing"

The provisions of 40 CFR Part 63 Subpart UUUU, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart UUUU			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 67	June 11, 2002	[67 FR 40044]
Revision	Vol. 70	June 24, 2005	[70 FR 36523]
Revision	Vol. 70	August 10, 2005	[70 FR 46684]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 73	December 22, 2008	[73 FR 78199]
Revision	Vol. 79	February 27, 2014	[79 FR 11228]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Subpart VVVV—"National Emission Standards for Hazardous Air Pollutants for Boat Manufacturing"

The provisions of 40 CFR Part 63 Subpart VVVV, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart VVVV			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 66	August 22, 2001	[66 FR 44218]
Revision	Vol. 66	October 3, 2001	[66 FR 50504]

Subpart WWWW—"National Emissions Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production"

The provisions of 40 CFR Part 63 Subpart WWWW, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart WWWW			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 68	April 21, 2003	[68 FR 19375]
Revision	Vol. 70	August 25, 2005	[70 FR 50118]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]

Subpart XXXX—"National Emission Standards for Hazardous Air Pollutants: Rubber Tire Manufacturing"

The provisions of 40 CFR Part 63 Subpart XXXX, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart XXXX			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 67	July 9, 2002	[67 FR 45588]
Revision	Vol. 68	March 12, 2003	[68 FR 11745]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]

Subpart YYYY—"National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines"

The provisions of 40 CFR Part 63 Subpart YYYY, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart YYYY			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 69	March 5, 2004	[69 FR 10512]
Revision	Vol. 69	August 18, 2004	[69 FR 51184]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]

Subpart ZZZZ—"National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines"

The provisions of 40 CFR Part 63 Subpart ZZZZ, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart ZZZZ			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 69	June 15, 2004	[69 FR 33474]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 73	January 18, 2008	[73 FR 3568]
Revision	Vol. 75	March 3, 2010	[75 FR 9648]
Revision	Vol. 75	June 30, 2010	[75 FR 37732]
Revision	Vol. 75	August 20, 2010	[75 FR 51570]
Revision	Vol. 76	March 9, 2011	[76 FR 12863]
Revision	Vol. 78	January 30, 2013	[78 FR 6674]

Revision	Vol. 78	March 6, 2013	[78 FR 14457]
Revision	Vol. 79	February 27, 2014	[79 FR 11228]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

Subpart AAAAA—"National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants"

The provisions of 40 CFR Part 63 Subpart AAAAA, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart AAAAA			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 69	January 5, 2004	[69 FR 394]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]

Subpart BBBBB—"National Emission Standards for Hazardous Air Pollutants for Semiconductor Manufacturing"

The provisions of 40 CFR Part 63 Subpart BBBBB, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart BBBBB			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 68	May 22, 2003	[68 FR 27913]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 73	July 22, 2008	[73 FR 42529]

Subpart CCCCC—"National Emission Standards for Hazardous Air Pollutants for Coke Ovens: Pushing, Quenching, and Battery Stacks"

The provisions of 40 CFR Part 63 Subpart CCCCC, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart CCCCC			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 68	April 14, 2003	[68 FR 18008]
Revision	Vol. 69	October 13, 2004	[69 FR 60813]
Revision	Vol. 70	January 10, 2005	[70 FR 1670]
Revision	Vol. 70	August 2, 2005	[70 FR 44285]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]

Subpart DDDDD—"National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Industrial Boilers and Process Heaters"

The provisions of 40 CFR Part 63, Subpart DDDDD as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart DDDDD			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 69	September 13, 2004	[69 FR 55218]
Revision	Vol. 70	December 28, 2005	[70 FR 76918]
Revision	Vol. 71	April 20, 2006	[71 FR 20445]
Revision	Vol. 71	December 6, 2006	[71 FR70651]

40 CFR Part 63 Subpart DDDDD			
Federal Register Citation	**Volume**	**Date**	**Notice**
Revision	Vol. 76	March 21, 2011	[76 FR 15608]
Revision	Vol. 76	May 18, 2011	[76 FR 28662]
Revision	Vol. 78	January 31, 2013	[78 FR 7138]
Revision	Vol. 80	November 20, 2015	[80 FR 72789]
Revision	Vol. 83	November 14, 2018	[83 FR 56713]

HISTORY: Amended by State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016; SCSR43–8 Doc. No. 4881, eff August 23, 2019.

Subpart EEEEE—"National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries"

The provisions of 40 CFR Part 63 Subpart EEEEE, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart EEEEE			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 69	April 22, 2004	[69 FR 21906]
Revision	Vol. 70	May 20, 2005	[70 FR 29400]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 73	February 7, 2008	[73 FR 7210]

Subpart FFFFF—"National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities"

The provisions of 40 CFR Part 63 Subpart FFFFF, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart FFFFF			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 68	May 20, 2003	[68 FR 27646]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 71	July 13, 2006	[71 FR 39579]

Subpart GGGGG—"National Emission Standards for Hazardous Air Pollutants: Site Remediation"

The provisions of 40 CFR Part 63 Subpart GGGGG, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart GGGGG			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 68	October 8, 2003	[68 FR 58172]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 71	November 29, 2006	[71 FR 69011]
Revision	Vol. 73	December 22, 2008	[73 FR 78199]

Subpart HHHHH—"National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing"

The provisions of 40 CFR Part 63 Subpart HHHHH, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart HHHHH			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 68	December 11, 2003	[68 FR 69164]
Revision	Vol. 68	December 29, 2003	[68 FR 75033]
Revision	Vol. 70	May 13, 2005	[70 FR 25676]
Revision	Vol. 70	July 6, 2005	[70 FR 38780]
Revision	Vol. 70	December 21, 2005	[70 FR 75924]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]
Revision	Vol. 71	October 4, 2006	[71 FR 58499]
Revision	Vol. 73	December 22, 2008	[73 FR 78199]

Subpart IIIII—"National Emission Standards for Hazardous Air Pollutants: Mercury Emissions from Mercury Cell Chlor-Alkali Plants"

The provisions of 40 CFR Part 63 Subpart IIIII, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart IIIII			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 68	December 19, 2003	[68 FR 70904]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]

Subpart JJJJJ—"National Emission Standards For Hazardous Air Pollutants For Brick And Structural Clay Products Manufacturing"

The provisions of 40 CFR Part 63, Subpart JJJJJ, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart JJJJJ			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 68	May 16, 2003	[68 FR 26690]
Revision	Vol. 68	May 28, 2003	[68 FR 31744]
Revision	Vol. 71	April 20, 2006	[71 FR 20445]
Revision	Vol. 71	June 23, 2006	[71 FR 36014]
Revision	Vol. 80	October 26, 2015	[80 FR 65469]

HISTORY: Amended by State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016.

Subpart KKKKK—"National Emission Standards For Hazardous Air Pollutants For Clay Ceramics Manufacturing"

The provisions of 40 CFR Part 63, Subpart KKKKK, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart KKKKK			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 68	May 16, 2003	[67 FR 26690]
Revision	Vol. 68	May 28, 2003	[68 FR 31744]
Revision	Vol. 71	April 20, 2006	[71 FR 20445]
Revision	Vol. 71	June 23, 2006	[71 FR 36014]
Revision	Vol. 80	October 26, 2015	[80 FR 65469]
Revision	Vol. 80	December 4, 2015	[80 FR 75817]

HISTORY: Amended by State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016.

Subpart LLLLL—"National Emission Standards for Hazardous Air Pollutants: Asphalt Processing and Asphalt Roofing Manufacturing"

The provisions of 40 CFR Part 63 Subpart LLLLL, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart LLLLL			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 68	April 29, 2003	[68 FR 22976]
Revision	Vol. 68	May 7, 2003	[68 FR 24562]
Revision	Vol. 70	May 17, 2005	[70 FR 28360]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]

Subpart MMMMM—"National Emission Standards for Hazardous Air Pollutants: Flexible Polyurethane Foam Fabrication Operations"

The provisions of 40 CFR Part 63 Subpart MMMMM, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart MMMMM			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 68	April 14, 2003	[68 FR 18062]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]

Subpart NNNNN—"National Emission Standards for Hazardous Air Pollutants: Hydrochloric Acid Production"

The provisions of 40 CFR Part 63 Subpart NNNNN, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart NNNNN			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 68	April 17, 2003	[68 FR 19076]
Revision	Vol. 71	April 7, 2006	[71 FR 17738]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]

Subpart OOOOO—[Reserved]

Subpart PPPPP—"National Emission Standards for Hazardous Air Pollutants for Engine Test Cells/Stands"

The provisions of 40 CFR Part 63 Subpart PPPPP, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart PPPPP			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 68	May 27, 2003	[68 FR 28774]
Revision	Vol. 68	August 28, 2003	[68 FR 51830]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]

Subpart QQQQQ—"National Emission Standards for Hazardous Air Pollutants for Friction Materials Manufacturing Facilities"

The provisions of 40 CFR Part 63 Subpart QQQQQ, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart QQQQQ			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 67	October 18, 2002	[67 FR 64498]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]

Subpart RRRRR—"National Emission Standards for Hazardous Air Pollutants: Taconite Iron Ore Processing"

The provisions of 40 CFR Part 63 Subpart RRRRR, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart RRRRR			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 68	October 30, 2003	[68 FR 61868]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]

Subpart SSSSS—"National Emission Standards for Hazardous Air Pollutants for Refractory Products Manufacturing"

The provisions of 40 CFR Part 63 Subpart SSSSS, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart SSSSS			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 68	April 16, 2003	[68 FR 18730]
Revision	Vol. 71	February 13, 2006	[71 FR 7415]
Revision	Vol. 71	April 14, 2006	[71 FR 19435]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]

Subpart TTTTT—"National Emissions Standards for Hazardous Air Pollutants for Primary Magnesium Refining"

The provisions of 40 CFR Part 63 Subpart TTTTT, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart TTTTT			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 68	October 10, 2003	[68 FR 58615]
Revision	Vol. 71	April 20, 2006	[71 FR 20446]

Subpart UUUUU—"National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units"

The provisions of 40 CFR Part 63 Subpart UUUUU, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart UUUUU			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 77	February 16, 2012	[77 FR 9304]
Revision	Vol. 77	April 19, 2012	[77 FR 23399]
Revision	Vol. 77	August 2, 2012	[77 FR 45967]
Revision	Vol. 78	April 24, 2013	[78 FR 24073]
Revision	Vol. 79	November 19, 2014	[79 FR 68777, 68795]
Revision	Vol. 80	March 24, 2015	[80 FR 15510]
Revision	Vol. 81	April 6, 2016	[81 FR 20172]
Revision	Vol. 82	April 6, 2017	[82 FR 16736]
Revision	Vol. 83	November 14, 2018	[83 FR 56713]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015; State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016; State Register Volume 41, Issue No. 8, Doc. No. 4750, eff August 25, 2017; SCSR43–1 Doc. No. 4870, eff January 25, 2019; SCSR43–8 Doc. No. 4881, eff August 23, 2019.

Subpart VVVVV—[Reserved]

Subpart WWWWW—"National Emission Standards for Hospital Ethylene Oxide Sterilizers"

The provisions of 40 CFR Part 63 Subpart WWWWW, as originally published in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart WWWWW			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 72	December 28, 2007	[72 FR 73611]

Subpart XXXXX—[Reserved]

Subpart YYYYY—"National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities"

The provisions of 40 CFR Part 63 Subpart YYYYY, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart YYYYY			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 72	December 28, 2007	[72 FR 74088]
Revision	Vol. 73	December 1, 2008	[73 FR 72727]
Revision	Vol. 74	February 26, 2009	[74 FR 8756]
Revision	Vol. 80	June 24, 2015	[80 FR 36247]

HISTORY: Amended by State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016.

Subpart ZZZZZ—"National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources"

The provisions of 40 CFR Part 63 Subpart ZZZZZ, as originally published in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart ZZZZZ			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 73	January 2, 2008	[73 FR 226]

Subpart AAAAAA—[Reserved]

Subpart BBBBBB—"National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities"

The provisions of 40 CFR Part 63 Subpart BBBBBB, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart BBBBBB			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 73	January 10, 2008	[73 FR 1916]
Revision	Vol. 73	March 7, 2008	[73 FR 12275]
Revision	Vol. 76	January 24, 2011	[76 FR 4156]

Subpart CCCCCC—"National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities"

The provisions of 40 CFR Part 63 Subpart CCCCCC, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart CCCCCC			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 73	January 10, 2008	[73 FR 1916]
Revision	Vol. 73	March 7, 2008	[73 FR 12275]
Revision	Vol. 73	June 25, 2008	[73 FR 35939]
Revision	Vol. 76	January 24, 2011	[76 FR 4156]

Subpart DDDDDD—"National Emission Standards for Hazardous Air Pollutants for Polyvinyl Chloride and Copolymers Production Area Sources"

The provisions of 40 CFR Part 63 Subpart DDDDDD, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart DDDDDD			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 72	January 23, 2007	[72 FR 2930]
Revision	Vol. 77	April 17, 2012	[77 FR 22848]
Revision	Vol. 80	February 4, 2015	[80 FR 5938]

HISTORY: Amended by State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015; State Register Volume 40, Issue No. 9, Doc. No. 4650, eff September 23, 2016.

Subpart EEEEEE—"National Emission Standards for Hazardous Air Pollutants for Primary Copper Smelting Area Sources"

The provisions of 40 CFR Part 63 Subpart EEEEEE, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart EEEEEE			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 72	January 23, 2007	[72 FR 2930]
Revision	Vol. 72	July 3, 2007	[72 FR 36363]

HISTORY: Amended by State Register Volume 41, Issue No. 8, Doc. No. 4750, eff August 25, 2017.

Subpart FFFFFF—"National Emission Standards for Hazardous Air Pollutants for Secondary Copper Smelting Area Sources"

The provisions of 40 CFR Part 63 Subpart FFFFFF, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart FFFFFF			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 72	January 23, 2007	[72 FR 2930]
Revision	Vol. 72	July 3, 2007	[72 FR 36363]

Subpart GGGGGG—"National Emission Standards for Hazardous Air Pollutants for Primary Nonferrous Metals Area Sources—Zinc, Cadmium, and Beryllium"

The provisions of 40 CFR Part 63 Subpart GGGGGG, as originally published in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart GGGGGG			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 72	January 23, 2007	[72 FR 2930]

Subpart HHHHHH—"National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources"

The provisions of 40 CFR Part 63 Subpart HHHHHH, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart HHHHHH			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 73	January 9, 2008	[73 FR 1738]
Revision	Vol. 73	February 13, 2008	[73 FR 8408]

Subpart IIIIII—[Reserved]

Subpart JJJJJJ—"National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources"

The provisions of 40 CFR Part 63 Subpart JJJJJJ, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart JJJJJJ			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 69	September 13, 2004	[69 FR 55217]
Revision	Vol. 70	December 28, 2005	[70 FR 76918]
Revision	Vol. 71	December 6, 2006	[71 FR 70651]
Revision	Vol. 76	March 21, 2011	[76 FR 15554]
Revision	Vol. 76	March 21, 2011	[76 FR 15608]
Revision	Vol. 76	May 18, 2011	[76 FR 28662]
Revision	Vol. 78	January 31, 2013	[78 FR 7138]
Revision	Vol. 78	February 1, 2013	[78 FR 7488]
Revision	Vol. 81	September 14, 2016	[81 FR 63112]

HISTORY: Amended by State Register Volume 41, Issue No. 8, Doc. No. 4750, eff August 25, 2017.

Subpart KKKKKK—[Reserved]

Subpart LLLLLL—"National Emission Standards for Hazardous Air Pollutants for Acrylic and Modacrylic Fibers Production Area Sources"

The provisions of 40 CFR Part 63 Subpart LLLLLL, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart LLLLLL			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 72	July 16, 2007	[72 FR 38864]
Revision	Vol. 73	March 26, 2008	[73 FR 15923]

Subpart MMMMMM—"National Emission Standards for Hazardous Air Pollutants for Carbon Black Production Area Sources"

The provisions of 40 CFR Part 63 Subpart MMMMMM, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart MMMMMM			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 72	July 16, 2007	[72 FR 38864]
Revision	Vol. 73	March 26, 2008	[73 FR 15923]

Subpart NNNNNN—"National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources: Chromium Compounds"

The provisions of 40 CFR Part 63 Subpart NNNNNN, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart NNNNNN			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 72	July 16, 2007	[72 FR 38864]
Revision	Vol. 73	March 26, 2008	[73 FR 15923]

Subpart OOOOOO—"National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production and Fabrication Area Sources"

The provisions of 40 CFR Part 63 Subpart OOOOOO, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart OOOOOO			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 72	July 16, 2007	[72 FR 38864]
Revision	Vol. 73	March 26, 2008	[73 FR 15923]

Subpart PPPPPP—"National Emission Standards for Hazardous Air Pollutants for Lead Acid Battery Manufacturing Area Sources"

The provisions of 40 CFR Part 63 Subpart PPPPPP, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart PPPPPP			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 72	July 16, 2007	[72 FR 38864]
Revision	Vol. 73	March 26, 2008	[73 FR 15923]

Subpart QQQQQQ—"National Emission Standards for Hazardous Air Pollutants for Wood Preserving Area Sources"

The provisions of 40 CFR Part 63 Subpart QQQQQQ, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart QQQQQQ			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 72	July 16, 2007	[72 FR 38864]
Revision	Vol. 73	March 26, 2008	[73 FR 15923]

Subpart RRRRRR—"National Emission Standards for Hazardous Air Pollutants for Clay Ceramics Manufacturing Area Sources"

The provisions of 40 CFR Part 63 Subpart RRRRRR, as originally published in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart RRRRRR			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 72	December 26, 2007	[72 FR 73180]

Subpart SSSSSS—"National Emission Standards for Hazardous Air Pollutants for Glass Manufacturing Area Sources"

The provisions of 40 CFR Part 63 Subpart SSSSSS, as originally published in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart SSSSSS			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 72	December 26, 2007	[72 FR 73180]

Subpart TTTTTT—"National Emission Standards for Hazardous Air Pollutants for Secondary Nonferrous Metals Processing Area Sources"

The provisions of 40 CFR Part 63 Subpart TTTTTT, as originally published in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart TTTTTT			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 72	December 26, 2007	[72 FR 73180]

Subpart UUUUUU—[Reserved]

Subpart VVVVVV—"National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources"

The provisions of 40 CFR Part 63 Subpart VVVVVV, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart VVVVVV			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 74	October 29, 2009	[74 FR 56008]
Revision	Vol. 75	December 14, 2010	[75 FR 77760]
Revision	Vol. 76	March 14, 2011	[76 FR 13514]
Revision	Vol. 77	December 21, 2012	[77 FR 75740]

Subpart WWWWWW—"National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations"

The provisions of 40 CFR Part 63 Subpart WWWWWW, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart WWWWWW			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 73	July 1, 2008	[73 FR 37728]
Revision	Vol. 76	June 20, 2011	[76 FR 35744]
Revision	Vol. 76	September 19, 2011	[76 FR 57913]

Subpart XXXXXX—"National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories"

The provisions of 40 CFR Part 63 Subpart XXXXXX, as originally published in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart XXXXXX			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 73	July 23, 2008	[73 FR 42978]

Subpart YYYYYY—"National Emission Standards for Hazardous Air Pollutants for Area Sources: Ferroalloys Production Facilities"

The provisions of 40 CFR Part 63 Subpart YYYYYY, as originally published in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart YYYYYY			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 73	December 23, 2008	[73 FR 78637]

Subpart ZZZZZZ—"National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Aluminum, Copper, and Other Nonferrous Foundries"

The provisions of 40 CFR Part 63 Subpart ZZZZZZ, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart ZZZZZZ			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 74	June 25, 2009	[74 FR 30366]
Revision	Vol. 74	September 10, 2009	[74 FR 46493]

Subpart AAAAAAA—"National Emission Standards for Hazardous Air Pollutants for Area Sources: Asphalt Processing and Asphalt Roofing Manufacturing"

The provisions of 40 CFR Part 63 Subpart AAAAAAA, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart AAAAAAA			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 74	December 2, 2009	[74 FR 63236]
Revision	Vol. 75	March 18, 2010	[75 FR 12988]

Subpart BBBBBBB—"National Emission Standards for Hazardous Air Pollutants for Area Sources: Chemical Preparations Industry"

The provisions of 40 CFR Part 63 Subpart BBBBBBB, as originally published in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart BBBBBBB			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 74	December 30, 2009	[74 FR 69194]

Subpart CCCCCCC—"National Emission Standards for Hazardous Air Pollutants for Area Sources: Paints and Allied Products Manufacturing"

The provisions of 40 CFR Part 63 Subpart CCCCCCC, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart CCCCCCC			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 74	December 3, 2009	[74 FR 63504]
Revision	Vol. 75	March 5, 2010	[75 FR 10184]
Revision	Vol. 75	June 3, 2010	[75 FR 31317]

Subpart DDDDDDD—"National Emission Standards for Hazardous Air Pollutants for Area Sources: Prepared Feeds Manufacturing"

The provisions of 40 CFR Part 63 Subpart DDDDDDD, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart DDDDDDD			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 75	January 5, 2010	[75 FR 522]
Revision	Vol. 75	July 20, 2010	[75 FR 41991]
Revision	Vol. 76	December 23, 2011	[76 FR 80261]

Subpart EEEEEEE—"National Emission Standards for Hazardous Air Pollutants: Gold Mine Ore Processing and Production Area Source Category"

The provisions of 40 CFR Part 63 Subpart EEEEEEE, as originally published in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart EEEEEEE			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 76	February 17, 2011	[76 FR 9450]

Subpart FFFFFFF—[Reserved]

Subpart GGGGGGG—[Reserved]

Subpart HHHHHHH—"National Emission Standards for Hazardous Air Pollutant Emissions for Polyvinyl Chloride and Copolymers Production"

The provisions of 40 CFR Part 63 Subpart HHHHHHH, as originally published in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 63 Subpart HHHHHHH			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 77	April 17, 2012	[77 FR 22848]

61–62.68. Chemical Accident Prevention Provisions.

(Statutory Authority: S.C. Code §§ 48–1–30 through 48–1–60)

Subpart A General

Section 68.1. Scope.

This part sets forth the list of regulated substances and thresholds, the requirements for owners or operators of stationary sources concerning the prevention of accidental releases, and the State

accidental release prevention programs approved under section 112(r) of the Clean Air Act. The list of substances, threshold quantities, and accident prevention regulations promulgated under this part do not limit in any way the general duty provisions under section 112(r)(1) of the Act.

Section 68.2. Reserved

Section 68.3. Definitions.

Terms used in this part that are not defined below or in Regulation 61–62.1. Section I, have the meaning given to them in the Clean Air Act and in 40 CFR Part 68, subpart A.

(a) ''Accidental Release'' means an unanticipated emission of a regulated substance or other extremely hazardous substance into the ambient air from a stationary source.

(b) ''Administrative controls'' mean written procedural mechanisms used for hazard control.

(c) ''AIChE/CCPS'' means the American Institute of Chemical Engineers/Center for Chemical Process Safety.

(d) ''API'' means the American Petroleum Institute.

(e) ''Article'' means a manufactured item, as defined under 29 CFR 1910.1200(b), that is formed to a specific shape or design during manufacture, that has end use functions dependent in whole or in part upon the shape or design during end use, and that does not release or otherwise result in exposure to a regulated substance under normal conditions of processing and use.

(f) ''ASME'' means the American Society of Mechanical Engineers.

(g) ''CAS'' means the Chemical Abstracts Service.

(h) ''Catastrophic release'' means a major uncontrolled emission, fire, or explosion, involving one or more regulated substances that presents imminent and substantial endangerment to public health and the environment.

(i) ''Classified information'' means ''classified information'' as defined in the Classified Information Procedures Act, 18 U.S.C. App. 3, section 1(a) as ''any information or material that has been determined by the United States Government pursuant to an executive order, statute, or regulation, to require protection against unauthorized disclosure for reasons of national security.''

(j) ''Condensate'' means hydrocarbon liquid separated from natural gas that condenses due to changes in temperature, pressure, or both, and remains liquid at standard conditions.

(k) ''Covered process'' means a process that has a regulated substance present in more than a threshold quantity as determined under Section 68.115.

(*l*) ''Crude oil'' means any naturally occurring, unrefined petroleum liquid.

(m) ''Environmental receptor'' means natural areas such as national or state parks, forests, or monuments; officially designated wildlife sanctuaries, preserves, refuges, or areas; and Federal wilderness areas, that could be exposed at any time to toxic concentrations, radiant heat, or overpressure greater than or equal to the endpoints provided in Section 68.22(a), as a result of an accidental release and that can be identified on local U.S. Geological Survey maps.

(n) ''Hot work'' means work involving electric or gas welding, cutting, brazing, or similar flame or spark-producing operations.

(*o*) ''Field gas'' means gas extracted from a production well before the gas enters a natural gas processing plant.

(p) ''Injury'' means any effect on a human that results either from direct exposure to toxic concentrations; radiant heat; or overpressures from accidental releases or from the direct consequences of a vapor cloud explosion (such as flying glass, debris, and other projectiles) from an accidental release and that requires medical treatment or hospitalization.

(q) ''Major change'' means introduction of a new process, process equipment, or regulated substance, an alteration of process chemistry that results in any change to safe operating limits, or other alteration that introduces a new hazard.

(r) ''Mechanical integrity'' means the process of ensuring that process equipment is fabricated from the proper materials of construction and is properly installed, maintained, and replaced to prevent failures and accidental releases.

(s) ''Medical treatment'' means treatment, other than first aid, administered by a physician or registered professional personnel under standing orders from a physician.

(t) ''Mitigation or mitigation system'' means specific activities, technologies, or equipment designed or deployed to capture or control substances upon loss of containment to minimize exposure of the public or the environment. Passive mitigation means equipment, devices, or technologies that function without human, mechanical, or other energy input. Active mitigation means equipment, devices, or technologies that need human, mechanical, or other energy input to function.

(u) ''Natural gas processing plant (gas plant)'' means any processing site engaged in the extraction of natural gas liquids from field gas, fractionation of mixed natural gas liquids to natural gas products, or both, classified as North American Industrial Classification System (NAICS) code 211112 (previously Standard Industrial Classification (SIC) code 1321).

(v) ''NAICS'' means North American Industry Classification System.

(w) ''NFPA'' means the National Fire Protection Association.

(x) ''Offsite'' means areas beyond the property boundary of the stationary source, and areas within the property boundary to which the public has routine and unrestricted access during or outside business hours.

(y) ''OSHA'' means the U.S. Occupational Safety and Health Administration.

(z) ''Owner or operator'' means any person who owns, leases, operates, controls, or supervises a stationary source.

(aa) ''Petroleum refining process unit'' means a process unit used in an establishment primarily engaged in petroleum refining as defined in NAICS code 32411 for petroleum refining (formerly SIC code 2911) and used for the following; Producing transportation fuels (such as gasoline, diesel fuels, and jet fuels), heating fuels (such as kerosene, fuel gas distillate, and fuel oils), or lubricants; separating petroleum; or separating, cracking, reacting, or reforming intermediate petroleum streams. Examples of such units include, but are not limited to, petroleum based solvent units, alkylation units, catalytic hydrotreating, catalytic hydrorefining, catalytic hydrocracking, catalytic reforming, catalytic cracking, crude distillation, lube oil processing, hydrogen production, isomerization, polymerization, thermal processes, and blending, sweetening, and treating processes. Petroleum refining process units include sulfur plants.

(bb) ''Population'' means the public.

(cc) ''Process'' means any activity involving a regulated substance including any use, storage, manufacturing, handling, or onsite movement of such substances, or combination of these activities. For the purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process.

(dd) ''Produced water'' means water extracted from the earth from an oil or natural gas production well, or that is separated from oil or natural gas after extraction.

(ee) ''Public'' means any person except employees or contractors at the stationary source.

(ff) ''Public receptor'' means offsite residences, institutions (e.g., schools, hospitals), industrial, commercial, and office buildings, parks, or recreational areas inhabited or occupied by the public at any time without restriction by the stationary source where members of the public could be exposed to toxic concentrations, radiant heat, or overpressure, as a result of an accidental release.

(gg) ''Regulated substance'' means any substance listed pursuant to section 112(r)(3) of the Clean Air Act as amended, in 68.130.

(hh) ''Replacement in kind'' means a replacement that satisfies the design specifications.

(ii) ''Retail facility'' means a stationary source at which more than one-half of the income is obtained from direct sales to end users or at which more than one-half of the fuel sold, by volume, is sold through a cylinder exchange program.

(jj) ''RMP'' means the risk management plan required under subpart G of this part.

(kk) ''Stationary source'' means any buildings, structures, equipment, installations, or substance emitting stationary activities which belong to the same industrial group, which are located on one or more contiguous properties, which are under the control of the same person (or persons under

common control), and from which an accidental release may occur. A stationary source includes transportation containers used for storage not incident to transportation and transportation containers connected to equipment at a stationary source for loading or unloading. Transportation includes, but is not limited to, transportation subject to oversight or regulation under 49 CFR parts 192, 193, or 195, or a state natural gas or hazardous liquid program for which the state has in effect a certification to DOT under 49 U.S.C. section 60105. The term stationary source does not apply to transportation, including storage incident to transportation, of any regulated substance or any other extremely hazardous substance under the provisions of this part. A stationary source does not include naturally occurring hydrocarbon reservoirs. Properties shall not be considered contiguous solely because of a railroad or pipeline right-of-way.

(ll) ''Threshold quantity'' means the quantity specified for regulated substances pursuant to section 112(r)(5) of the Clean Air Act as amended, listed in 68.130 and determined to be present at a stationary source as specified in 68.115 of this part.

(mm) ''Typical meteorological conditions'' means the temperature, wind speed, cloud cover, and atmospheric stability class, prevailing at the site based on data gathered at or near the site or from a local meteorological station.

(nn) ''USDOT'' means the United States Department of Transportation.

(oo) ''Vessel'' means any reactor, tank, drum, barrel, cylinder, vat, kettle, boiler, pipe, hose, or other container.

(pp) ''Worst-case release'' means the release of the largest quantity of a regulated substance from a vessel or process line failure that results in the greatest distance to an endpoint defined in Section 68.22(a).

Section 68.4–9. Reserved

Section 68.10. Applicability.

(a) An owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process, as determined under Section 68.115, shall comply with the requirements of this part no later than the latest of the following dates:

(1) June 21, 1999;

(2) Three years after the date on which a regulated substance is first listed under Section 68.130; or

(3) The date on which a regulated substance is first present above a threshold quantity in a process.

(b) Program 1 eligibility requirements. A covered process is eligible for Program 1 requirements as provided in Section 68.12(b) if it meets all of the following requirements:

(1) For the five years prior to the submission of an RMP, the process has not had an accidental release of a regulated substance where exposure to the substance, its reaction products, overpressure generated by an explosion involving the substance, or radiant heat generated by a fire involving the substance led to any of the following offsite:

(i) Death;

(ii) Injury; or

(iii) Response or restoration activities for an exposure of an environmental receptor;

(2) The distance to a toxic or flammable endpoint for a worst-case release assessment conducted under subpart B and Section 68.25 is less than the distance to any public receptor, as defined in Section 68.30; and

(3) Emergency response procedures have been coordinated between the stationary source and local emergency planning and response organizations.

(c) Program 2 eligibility requirements. A covered process is subject to Program 2 requirements if it does not meet the eligibility requirements of either paragraph (b) or paragraph (d) of this section.

(d) Program 3 eligibility requirements. A covered process is subject to Program 3 if the process does not meet the requirements of paragraph (b) of this section, and if either of the following conditions is met:

(1) The process is in NAICS code 32211, 32411, 32511, 325181, 325188, 325192, 325199, 325211, 325311, or 32532; or

(2) The process is subject to the OSHA process safety management standard, 29 CFR 1910.119.

(e) If at any time a covered process no longer meets the eligibility criteria of its Program level, the owner or operator shall comply with the requirements of the new Program level that applies to the process and update the RMP as provided in Section 68.190.

(f) The provisions of this part shall not apply to an Outer Continental Shelf (OCS) source, as defined in 40 CFR 55.2.

Section 68.11. Reserved

Section 68.12. General requirements.

(a) General requirements. The owner or operator of a stationary source subject to this part shall submit a single RMP, as provided in Secs. 68.150 to 68.185. The RMP shall include a registration that reflects all covered processes.

(b) Program 1 requirements. In addition to meeting the requirements of paragraph (a) of this section, the owner or operator of a stationary source with a process eligible for Program 1, as provided in Section 68.10(b), shall:

(1) Analyze the worst-case release scenario for the process(es), as provided in Section 68.25; document that the nearest public receptor is beyond the distance to a toxic or flammable endpoint defined in Section 68.22(a); and submit in the RMP the worst-case release scenario as provided in Section 68.165;

(2) Complete the five-year accident history for the process as provided in Section 68.42 of this part and submit it in the RMP as provided in Section 68.168;

(3) Ensure that response actions have been coordinated with local emergency planning and response agencies; and

(4) Certify in the RMP the following; "Based on the criteria in Section 68.10, the distance to the specified endpoint for the worst-case accidental release scenario for the following process(es) is less than the distance to the nearest public receptor; [list process(es)]. Within the past five years, the process(es) has (have) had no accidental release that caused offsite impacts provided in the risk management program rule (Sec. 68.10(b)(1)). No additional measures are necessary to prevent offsite impacts from accidental releases. In the event of fire, explosion, or a release of a regulated substance from the process(es), entry within the distance to the specified endpoints may pose a danger to public emergency responders. Therefore, public emergency responders should not enter this area except as arranged with the emergency contact indicated in the RMP. The undersigned certifies that, to the best of my knowledge, information, and belief, formed after reasonable inquiry, the information submitted is true, accurate, and complete. [Signature, title, date signed]."

(c) Program 2 requirements. In addition to meeting the requirements of paragraph (a) of this section, the owner or operator of a stationary source with a process subject to Program 2, as provided in Section68.10(c), shall:

(1) Develop and implement a management system as provided in Section 68.15;

(2) Conduct a hazard assessment as provided in Secs. 68.20 through 68.42;

(3) Implement the Program 2 prevention steps provided in Secs. 68.48 through 68.60 or implement the Program 3 prevention steps provided in Secs. 68.65 through 68.87;

(4) Develop and implement an emergency response program as provided in Secs. 68.90 to 68.95; and

(5) Submit as part of the RMP the data on prevention program elements for Program 2 processes as provided in Section 68.170.

(d) Program 3 requirements. In addition to meeting the requirements of paragraph (a) of this section, the owner or operator of a stationary source with a process subject to Program 3, as provided in Section 68.10(d) shall:

(1) Develop and implement a management system as provided in Section 68.15;

(2) Conduct a hazard assessment as provided in Secs. 68.20 through 68.42;

(3) Implement the prevention requirements of Secs. 68.65 through 68.87;

(4) Develop and implement an emergency response program as provided in Secs. 68.90 to 68.95 of this part; and

(5) Submit as part of the RMP the data on prevention program elements for Program 3 processes as provided in Section 68.175.

Section 68.13–14. Reserved

Section 68.15. Management.

(a) The owner or operator of a stationary source with processes subject to Program 2 or Program 3 shall develop a management system to oversee the implementation of the risk management program elements.

(b) The owner or operator shall assign a qualified person or position that has the overall responsibility for the development, implementation, and integration of the risk management program elements.

(c) When responsibility for implementing individual requirements of this part is assigned to persons other than the person identified under paragraph (b) of this section, the names or positions of these people shall be documented and the lines of authority defined through an organization chart or similar document.

Section 68.16–19. Reserved

SUBPART B HAZARD ASSESSMENT

Section 68.20. Applicability.

The owner or operator of a stationary source subject to this part shall prepare a worst-case release scenario analysis as provided in Section 68.25 of this part and complete the five-year accident history as provided in Section 68.42. The owner or operator of a Program 2 and 3 process must comply with all sections in this subpart for these processes.

Section 68.21. Reserved

Section 68.22. Offsite consequence analysis parameters.

(a) Endpoints. For analyses of offsite consequences, the following endpoints shall be used:

(1) Toxics. The toxic endpoints provided in Appendix A of this part.

(2) Flammables. The endpoints for flammables vary according to the scenarios studied:

(i) Explosion. An overpressure of 1 psi.

(ii) Radiant heat/exposure time. A radiant heat of 5 kw/m2 for 40 seconds.

(iii) Lower flammability limit. A lower flammability limit as provided in NFPA documents or other generally recognized sources.

(b) Wind speed/atmospheric stability class. For the worst-case release analysis, the owner or operator shall use a wind speed of 1.5 meters per second and F atmospheric stability class. If the owner or operator can demonstrate that local meteorological data applicable to the stationary source show a higher minimum wind speed or less stable atmosphere at all times during the previous three years, these minimums may be used. For analysis of alternative scenarios, the owner or operator may use the typical meteorological conditions for the stationary source.

(c) Ambient temperature/humidity. For worst-case release analysis of a regulated toxic substance, the owner or operator shall use the highest daily maximum temperature in the previous three years and average humidity for the site, based on temperature/humidity data gathered at the stationary source or at a local meteorological station; an owner or operator using the RMP Offsite Consequence Analysis Guidance may use 25 degrees Celsius and 50 percent humidity as values for these variables. For analysis of alternative scenarios, the owner or operator may use typical temperature/humidity data gathered at the stationary source or at a local meteorological station.

(d) Height of release. The worst-case release of a regulated toxic substance shall be analyzed assuming a ground level (0 feet) release. For an alternative scenario analysis of a regulated toxic substance, release height may be determined by the release scenario.

(e) Surface roughness. The owner or operator shall use either urban or rural topography, as appropriate. Urban means that there are many obstacles in the immediate area; obstacles include

buildings or trees. Rural means there are no buildings in the immediate area and the terrain is generally flat and unobstructed.

(f) Dense or neutrally buoyant gases. The owner or operator shall ensure that tables or models used for dispersion analysis of regulated toxic substances appropriately account for gas density.

(g) Temperature of released substance. For worst case, liquids other than gases liquified by refrigeration only shall be considered to be released at the highest daily maximum temperature, based on data for the previous three years appropriate for the stationary source, or at process temperature, whichever is higher. For alternative scenarios, substances may be considered to be released at a process or ambient temperature that is appropriate for the scenario.

Section 68.23–24. Reserved

Section 68.25. Worst-case release scenario analysis.

(a) The owner or operator shall analyze and report in the RMP:

(1) For Program 1 processes, one worst-case release scenario for each Program 1 process;

(2) For Program 2 and 3 processes:

(i) One worst-case release scenario that is estimated to create the greatest distance in any direction to an endpoint provided in Appendix A of this part resulting from an accidental release of regulated toxic substances from covered processes under worst-case conditions defined in Section 68.22;

(ii) One worst-case release scenario that is estimated to create the greatest distance in any direction to an endpoint defined in Section 68.22(a) resulting from an accidental release of regulated flammable substances from covered processes under worst-case conditions defined in Section 68.22; and

(iii) Additional worst-case release scenarios for a hazard class if a worst-case release from another covered process at the stationary source potentially affects public receptors different from those potentially affected by the worst-case release scenario developed under paragraphs (a)(2)(i) or (a)(2)(ii) of this section.

(b) Determination of worst-case release quantity. The worst-case release quantity shall be the greater of the following:

(1) For substances in a vessel, the greatest amount held in a single vessel, taking into account administrative controls that limit the maximum quantity; or

(2) For substances in pipes, the greatest amount in a pipe, taking into account administrative controls that limit the maximum quantity.

(c) Worst-case release scenario - toxic gases.

(1) For regulated toxic substances that are normally gases at ambient temperature and handled as a gas or as a liquid under pressure, the owner or operator shall assume that the quantity in the vessel or pipe, as determined under paragraph (b) of this section, is released as a gas over 10 minutes. The release rate shall be assumed to be the total quantity divided by 10 unless passive mitigation systems are in place.

(2) For gases handled as refrigerated liquids at ambient pressure:

(i) If the released substance is not contained by passive mitigation systems or if the contained pool would have a depth of 1 centimeter or less, the owner or operator shall assume that the substance is released as a gas in 10 minutes:

(ii) If the released substance is contained by passive mitigation systems in a pool with a depth greater than 1 centimeter, the owner or operator may assume that the quantity in the vessel or pipe, as determined under paragraph (b) of this section, is spilled instantaneously to form a liquid pool. The volatilization rate (release rate) shall be calculated at the boiling point of the substance and at the conditions specified in paragraph (d) of this section.

(d) Worst-case release scenario - toxic liquids.

(1) For regulated toxic substances that are normally liquids at ambient temperature, the owner or operator shall assume that the quantity in the vessel or pipe, as determined under paragraph (b) of this section, is spilled instantaneously to form a liquid pool.

(i) The surface area of the pool shall be determined by assuming that the liquid spreads to 1 centimeter deep unless passive mitigation systems are in place that serve to contain the spill and limit the surface area. Where passive mitigation is in place, the surface area of the contained liquid shall be used to calculate the volatilization rate.

(ii) If the release would occur onto a surface that is not paved or smooth, the owner or operator may take into account the actual surface characteristics.

(2) The volatilization rate shall account for the highest daily maximum temperature occurring in the past three years, the temperature of the substance in the vessel, and the concentration of the substance if the liquid spilled is a mixture or solution.

(3) The rate of release to air shall be determined from the volatilization rate of the liquid pool. The owner or operator may use the methodology in the RMP Offsite Consequence Analysis Guidance or any other publicly available techniques that account for the modeling conditions and are recognized by industry as applicable as part of current practices. Proprietary models that account for the modeling conditions may be used provided the owner or operator allows the Department access to the model and describes model features and differences from publicly available models to local emergency planners upon request.

(e) Worst-case release scenario - flammable gases. The owner or operator shall assume that the quantity of the substance, as determined under paragraph (b) of this section and the provisions below, vaporizes resulting in a vapor cloud explosion. A yield factor of 10 percent of the available energy released in the explosion shall be used to determine the distance to the explosion endpoint if the model used is based on TNT -equivalent methods.

(1) For regulated flammable substances that are normally gases at ambient temperature and handled as a gas or as a liquid under pressure, the owner or operator shall assume that the quantity in the vessel or pipe, as determined under paragraph (b) of this section, is released as a gas over 10 minutes. The total quantity shall be assumed to be involved in the vapor cloud explosion.

(2) For flammable gases handled as refrigerated liquids at ambient pressure:

(i) If the released substance is not contained by passive mitigation systems or if the contained pool would have a depth of one centimeter or less, the owner or operator shall assume that the total quantity of the substance is released as a gas in 10 minutes, and the total quantity will be involved in the vapor cloud explosion.

(ii) If the released substance is contained by passive mitigation systems in a pool with a depth greater than 1 centimeter, the owner or operator may assume that the quantity in the vessel or pipe, as determined under paragraph (b) of this section, is spilled instantaneously to form a liquid pool. The volatilization rate (release rate) shall be calculated at the boiling point of the substance and at the conditions specified in paragraph (d) of this section. The owner or operator shall assume that the quantity which becomes vapor in the first 10 minutes is involved in the vapor cloud explosion.

(f) Worst-case release scenario - flammable liquids. The owner or operator shall assume that the quantity of the substance, as determined under paragraph (b) of this section and the provisions below, vaporizes resulting in a vapor cloud explosion. A yield factor of 10 percent of the available energy released in the explosion shall be used to determine the distance to the explosion endpoint if the model used is based on TNT equivalent methods.

(1) For regulated flammable substances that are normally liquids at ambient temperature, the owner or operator shall assume that the entire quantity in the vessel or pipe, as determined under paragraph (b) of this section, is spilled instantaneously to form a liquid pool. For liquids at temperatures below their atmospheric boiling point, the volatilization rate shall be calculated at the conditions specified in paragraph (d) of this section.

(2) The owner or operator shall assume that the quantity which becomes vapor in the first 10 minutes is involved in the vapor cloud explosion.

(g) Parameters to be applied. The owner or operator shall use the parameters defined in Section 68.22 to determine distance to the endpoints. The owner or operator may use the methodology provided in the RMP Offsite Consequence Analysis Guidance or any commercially or publicly available air dispersion modeling techniques, provided the techniques account for the modeling conditions and are recognized by industry as applicable as part of current practices. Proprietary models that account

for the modeling conditions may be used provided the owner or operator allows the Department access to the model and describes model features and differences from publicly available models to local emergency planners upon request.

(h) Consideration of passive mitigation. Passive mitigation systems may be considered for the analysis of worst case provided that the mitigation system is capable of withstanding the release event triggering the scenario and would still function as intended.

(i) Factors in selecting a worst-case scenario. Notwithstanding the provisions of paragraph (b) of this section, the owner or operator shall select as the worst case for flammable regulated substances or the worst case for regulated toxic substances, a scenario based on the following factors if such a scenario would result in a greater distance to an endpoint defined in Section 68.22(a) beyond the stationary source boundary than the scenario provided under paragraph (b) of this section:

(1) Smaller quantities handled at higher process temperature or pressure; and

(2) Proximity to the boundary of the stationary source.

Section 68.26–27. Reserved

Section 68.28. Alternative release scenario analysis.

(a) The number of scenarios. The owner or operator shall identify and analyze at least one alternative release scenario for each regulated toxic substance held in a covered process(es) and at least one alternative release scenario to represent all flammable substances held in covered processes.

(b) Scenarios to consider.

(1) For each scenario required under paragraph (a) of this section, the owner or operator shall select a scenario:

(i) That is more likely to occur than the worst-case release scenario under Section 68.25; and

(ii) That will reach an endpoint offsite, unless no such scenario exists.

(2) Release scenarios considered should include, but are not limited to, the following, where applicable:

(i) Transfer hose releases due to splits or sudden hose uncoupling;

(ii) Process piping releases from failures at flanges, joints, welds, valves and valve seals, and drains or bleeds;

(iii) Process vessel or pump releases due to cracks, seal failure, or drain, bleed, or plug failure;

(iv) Vessel overfilling and spill, or overpressurization and venting through relief valves or rupture disks; and

(v) Shipping container mishandling and breakage or puncturing leading to a spill.

(c) Parameters to be applied. The owner or operator shall use the appropriate parameters defined in Section 68.22 to determine distance to the endpoints. The owner or operator may use either the methodology provided in the RMP Offsite Consequence Analysis Guidance or any commercially or publicly available air dispersion modeling techniques, provided the techniques account for the specified modeling conditions and are recognized by industry as applicable as part of current practices. Proprietary models that account for the modeling conditions may be used provided the owner or operator allows the Department access to the model and describes model features and differences from publicly available models to local emergency planners upon request.

(d) Consideration of mitigation. Active and passive mitigation systems may be considered provided they are capable of withstanding the event that triggered the release and would still be functional.

(e) Factors in selecting scenarios. The owner or operator shall consider the following in selecting alternative release scenarios:

(1) The five-year accident history provided in Section 68.42; and

(2) Failure scenarios identified under Secs. 68.50 or 68.67.

Section 68.29. Reserved

Section 68.30. Defining offsite impacts - population.

(a) The owner or operator shall estimate in the RMP the population within a circle with its center at the point of the release and a radius determined by the distance to the endpoint defined in Section 68.22(a).

(b) Population to be defined. Population shall include residential population. The presence of institutions (schools, hospitals, prisons), parks and recreational areas, and major commercial, office, and industrial buildings shall be noted in the RMP.

(c) Data sources acceptable. The owner or operator may use the most recent Census data, or other updated information, to estimate the population potentially affected.

(d) Level of accuracy. Population shall be estimated to two significant digits.

Section 68.31–32. Reserved

Section 68.33. Defining offsite impacts - environment.

(a) The owner or operator shall list in the RMP environmental receptors within a circle with its center at the point of the release and a radius determined by the distance to the endpoint defined in Section 68.22(a) of this part.

(b) Data sources acceptable. The owner or operator may rely on information provided on local U.S. Geological Survey maps or on any data source containing U.S.G.S. data to identify environmental receptors.

Section 68.34–35. Reserved

Section 68.36. Review and update.

(a) The owner or operator shall review and update the offsite consequence analyses at least once every five years.

(b) If changes in processes, quantities stored or handled, or any other aspect of the stationary source might reasonably be expected to increase or decrease the distance to the endpoint by a factor of two or more, the owner or operator shall complete a revised analysis within six months of the change and submit a revised risk management plan as provided in Section 68.190.

Section 68.37–38. Reserved

Section 68.39. Documentation.

The owner or operator shall maintain the following records on the offsite consequence analyses:

(a) For worst-case scenarios, a description of the vessel or pipeline and substance selected as worst case, assumptions and parameters used, and the rationale for selection; assumptions shall include use of any administrative controls and any passive mitigation that were assumed to limit the quantity that could be released. Documentation shall include the anticipated effect of the controls and mitigation on the release quantity and rate.

(b) For alternative release scenarios, a description of the scenarios identified, assumptions and parameters used, and the rationale for the selection of specific scenarios; assumptions shall include use of any administrative controls and any mitigation that were assumed to limit the quantity that could be released. Documentation shall include the effect of the controls and mitigation on the release quantity and rate.

(c) Documentation of estimated quantity released, release rate, and duration of release.

(d) Methodology used to determine distance to endpoints.

(e) Data used to estimate population and environmental receptors potentially affected.

Section 68.40–41. Reserved

Section 68.42. Five-year accident history.

(a) The owner or operator shall include in the five-year accident history all accidental releases from covered processes that resulted in deaths, injuries, or significant property damage on site, or known offsite deaths, injuries, evacuations, sheltering in place, property damage, or environmental damage.

(b) Data required. For each accidental release included, the owner or operator shall report the following information:

(1) Date, time, and, approximate duration of the release;

(2) Chemical(s) released;

(3) Estimated quantity released in pounds and, for mixtures containing regulated toxic substances, percentage concentration by weight of the released regulated toxic substance in the liquid mixture;

(4) Five-or six-digit NAICS code that most closely corresponds to the process;

(5) The type of release event and its source;

(6) Weather conditions, if known;

(7) On-site impacts;

(8) Known offsite impacts;

(9) Initiating event and contributing factors if known;

(10) Whether offsite responders were notified if known; and

(11) Operational or process changes that resulted from investigation of the release and that have been made by the time this information is submitted in accordance with Sec. 68.168.

(c) Level of accuracy. Numerical estimates may be provided to two significant digits.

Section 68.43–47. Reserved

SUBPART C PROGRAM 2 PREVENTION PROGRAM

Section 68.48. Safety information.

(a) The owner or operator shall compile and maintain the following up-to-date safety information related to the regulated substances, processes, and equipment:

(1) Material Safety Data Sheets that meet the requirements of 29 CFR 1910.1200(g);

(2) Maximum intended inventory of equipment in which the regulated substances are stored or processed;

(3) Safe upper and lower temperatures, pressures, flows, and compositions;

(4) Equipment specifications; and

(5) Codes and standards used to design, build, and operate the process.

(b) The owner or operator shall ensure that the process is designed in compliance with recognized and generally accepted good engineering practices. Compliance with Federal or State regulations that address industry-specific safe design or with industry-specific design codes and standards may be used to demonstrate compliance with this paragraph.

(c) The owner or operator shall update the safety information if a major change occurs that makes the information inaccurate.

Section 68.49. Reserved

Section 68.50. Hazard review.

(a) The owner or operator shall conduct a review of the hazards associated with the regulated substances, process, and procedures. The review shall identify the following:

(1) The hazards associated with the process and regulated substances;

(2) Opportunities for equipment malfunctions or human errors that could cause an accidental release;

(3) The safeguards used or needed to control the hazards or prevent equipment malfunction or human error; and

(4) Any steps used or needed to detect or monitor releases.

(b) The owner or operator may use checklists developed by persons or organizations knowledgeable about the process and equipment as a guide to conducting the review. For processes designed to meet industry standards or Federal or State design rules, the hazard review shall, by inspecting all equipment, determine whether the process is designed, fabricated, and operated in accordance with the applicable standards or rules.

(c) The owner or operator shall document the results of the review and ensure that problems identified are resolved in a timely manner.

(d) The owner or operator shall update the review at least once every five years. The owner or operator shall also conduct reviews whenever a major change in the process occurs; all issues identified in the review shall be resolved before startup of the changed process.

Section 68.51. Reserved

Section 68.52. Operating procedures.

(a) The owner or operator shall prepare written operating procedures that provide clear instructions or steps for safely conducting activities associated with each covered process consistent with the safety information for that process. Operating procedures or instructions provided by equipment manufacturers or developed by persons or organizations knowledgeable about the process and equipment may be used as a basis for a stationary source's operating procedures.

(b) The procedures shall address the following:

(1) Initial startup;

(2) Normal operations;

(3) Temporary operations;

(4) Emergency shutdown and operations;

(5) Normal shutdown;

(6) Startup following a normal or emergency shutdown or a major change that requires a hazard review;

(7) Consequences of deviations and steps required to correct or avoid deviations; and

(8) Equipment inspections.

(c) The owner or operator shall ensure that the operating procedures are updated, if necessary, whenever a major change occurs and prior to startup of the changed process.

Section 68.53. Reserved

Section 68.54. Training.

(a) The owner or operator shall ensure that each employee presently operating a process, and each employee newly assigned to a covered process have been trained or tested competent in the operating procedures provided in Section 68.52 that pertain to their duties. For those employees already operating a process on June 21, 1999, the owner or operator may certify in writing that the employee has the required knowledge, skills, and abilities to safely carry out the duties and responsibilities as provided in the operating procedures.

(b) Refresher training. Refresher training shall be provided at least every three years, and more often if necessary, to each employee operating a process to ensure that the employee understands and adheres to the current operating procedures of the process. The owner or operator, in consultation with the employees operating the process, shall determine the appropriate frequency of refresher training.

(c) The owner or operator may use training conducted under Federal or State regulations or under industry-specific standards or codes or training conducted by covered process equipment vendors to demonstrate compliance with this section to the extent that the training meets the requirements of this section.

(d) The owner or operator shall ensure that operators are trained in any updated or new procedures prior to startup of a process after a major change.

Section 68.55. Reserved

Section 68.56. Maintenance.

(a) The owner or operator shall prepare and implement procedures to maintain the on-going mechanical integrity of the process equipment. The owner or operator may use procedures or instructions provided by covered process equipment vendors or procedures in Federal or State regulations or industry codes as the basis for stationary source maintenance procedures.

(b) The owner or operator shall train or cause to be trained each employee involved in maintaining the on-going mechanical integrity of the process. To ensure that the employee can perform the job tasks in a safe manner, each such employee shall be trained in the hazards of the process, in how to avoid or correct unsafe conditions, and in the procedures applicable to the employee's job tasks.

(c) Any maintenance contractor shall ensure that each contract maintenance employee is trained to perform the maintenance procedures developed under paragraph (a) of this section.

(d) The owner or operator shall perform or cause to be performed inspections and tests on process equipment. Inspection and testing procedures shall follow recognized and generally accepted good engineering practices. The frequency of inspections and tests of process equipment shall be consistent with applicable manufacturers' recommendations, industry standards or codes, good engineering practices, and prior operating experience.

Section 68.57. Reserved

Section 68.58. Compliance audits.

(a) The owner or operator shall certify that he or she has evaluated compliance with the provisions of this subpart at least every three years to verify that the procedures and practices developed under the rule are adequate and are being followed.

(b) The compliance audit shall be conducted by at least one person knowledgeable in the process.

(c) The owner or operator shall develop a report of the audit findings.

(d) The owner or operator shall promptly determine and document an appropriate response to each of the findings of the compliance audit and document that deficiencies have been corrected.

(e) The owner or operator shall retain the two (2) most recent compliance audit reports. This requirement does not apply to any compliance audit report that is more than five years old.

Section 68.59. Reserved

Section 68.60. Incident investigation.

(a) The owner or operator shall investigate each incident which resulted in, or could reasonably have resulted in a catastrophic release of a regulated substance.

(b) The owner or operator shall initiate an incident investigation as promptly as possible, but not later than 48 hours following the incident.

(c) The owner or operator shall prepare a summary at the conclusion of the investigation which includes at a minimum:

(1) Date of incident;

(2) Date investigation began;

(3) A description of the incident;

(4) The factors that contributed to the incident; and,

(5) Any recommendations resulting from the investigation.

(d) The owner or operator shall promptly address and resolve the investigation findings and recommendations. Resolutions and corrective actions shall be documented.

(e) The owner or operator shall ensure that the findings are reviewed with all affected personnel whose job tasks are affected by the findings.

(f) The owner or operator shall retain the investigation summaries for five years.

Section 68.61–64. Reserved

SUBPART D PROGRAM 3 PREVENTION PROGRAM

Section 68.65. Process safety information.

(a) In accordance with the schedule set forth in Section 68.67, the owner or operator shall complete a compilation of written process safety information before conducting any process hazard analysis required by the rule. The compilation of written process safety information is to enable the owner or operator and the employees involved in operating the process to identify and understand the hazards posed by those processes involving regulated substances. This process safety information shall include information pertaining to the hazards of the regulated substances used or produced by the process, information pertaining to the technology of the process, and information pertaining to the equipment in the process.

(b) Information pertaining to the hazards of the regulated substances in the process. This information shall consist of at least the following:

(1) Toxicity information;

(2) Permissible exposure limits;

(3) Physical data;

(4) Reactivity data;

(5) Corrosivity data;

(6) Thermal and chemical stability data; and

(7) Hazardous effects of inadvertent mixing of different materials that could foreseeably occur.

Material Safety Data Sheets meeting the requirements of 29 CFR 1910.1200(g) may be used to comply with this requirement to the extent they contain the information required by this subparagraph.

(c) Information pertaining to the technology of the process.

(1) Information concerning the technology of the process shall include at least the following:

(i) A block flow diagram or simplified process flow diagram;

(ii) Process chemistry;

(iii) Maximum intended inventory;

(iv) Safe upper and lower limits for such items as temperatures, pressures, flows or compositions; and,

(v) An evaluation of the consequences of deviations.

(2) Where the original technical information no longer exists, such information may be developed in conjunction with the process hazard analysis in sufficient detail to support the analysis.

(d) Information pertaining to the equipment in the process.

(1) Information pertaining to the equipment in the process shall include:

(i) Materials of construction;

(ii) Piping and instrument diagrams;

(iii) Electrical classification;

(iv) Relief system design and design basis;

(v) Ventilation system design;

(vi) Design codes and standards employed;

(vii) Material and energy balances for processes built after June 21, 1999; and

(viii) Safety systems (e.g. interlocks, detection or suppression systems).

(2) The owner or operator shall document that equipment complies with recognized and generally accepted good engineering practices.

(3) For existing equipment designed and constructed in accordance with codes, standards, or practices that are no longer in general use, the owner or operator shall determine and document that the equipment is designed, maintained, inspected, tested, and operating in a safe manner.

Section 68.66. Reserved

Section 68.67. Process hazard analysis.

(a) The owner or operator shall perform an initial process hazard analysis (hazard evaluation) on processes covered by this part. The process hazard analysis shall be appropriate to the complexity of the process and shall identify, evaluate, and control the hazards involved in the process. The owner or operator shall determine and document the priority order for conducting process hazard analyses based on a rationale which includes such considerations as extent of the process hazards, number of potentially affected employees, age of the process, and operating history of the process. The process hazard analysis shall be conducted as soon as possible, but not later than June 21, 1999. Process hazards analyses completed to comply with 29 CFR 1910.119(e) are acceptable as initial process hazards analyses. These process hazard analyses shall be updated and revalidated, based on their completion date.

(b) The owner or operator shall use one or more of the following methodologies that are appropriate to determine and evaluate the hazards of the process being analyzed.

(1) What-If;

(2) Checklist;

(3) What-If/Checklist;

(4) Hazard and Operability Study (HAZOP);

(5) Failure Mode and Effects Analysis (FMEA);

(6) Fault Tree Analysis; or

(7) An appropriate equivalent methodology.

(c) The process hazard analysis shall address:

(1) The hazards of the process;

(2) The identification of any previous incident which had a likely potential for catastrophic consequences;

(3) Engineering and administrative controls applicable to the hazards and their interrelationships such as appropriate application of detection methodologies to provide early warning of releases. (Acceptable detection methods might include process monitoring and control instrumentation with alarms, and detection hardware such as hydrocarbon sensors.);

(4) Consequences of failure of engineering and administrative controls;

(5) Stationary source siting;

(6) Human factors; and

(7) A qualitative evaluation of a range of the possible safety and health effects of failure of controls.

(d) A team with expertise in engineering and process operations shall perform the process hazard analysis. The team shall include at least one employee who has experience and knowledge specific to the process being evaluated. Also, one member of the team must be knowledgeable in the specific process hazard analysis methodology being used.

(e) The owner or operator shall establish a system to promptly address the team's findings and recommendations; assure that the recommendations are resolved in a timely manner and that the resolution is documented; document what actions are to be taken; complete actions as soon as possible; develop a written schedule of when these actions are to be completed; communicate the actions to operating, maintenance and other employees whose work assignments are in the process and who may be affected by the recommendations or actions.

(f) A team meeting the requirements in paragraph (d) of this section shall, at least every five (5) years after the completion of the initial process hazard analysis, updated and revalidate the process hazard analysis to assure that the process hazard analysis is consistent with the current process. Updated and revalidated process hazard analyses completed to comply with 29 CFR 1910.119(e) are acceptable to meet the requirements of this paragraph.

(g) The owner or operator shall retain process hazards analyses and updates or revalidations for each process covered by this section, as well as the documented resolution of recommendations described in paragraph (e) of this section for the life of the process.

Section 68.68. Reserved

Section 68.69. Operating procedures.

(a) The owner or operator shall develop and implement written operating procedures that provide clear instructions for safely conducting activities involved in each covered process consistent with the process safety information and shall address at least the following elements.

(1) Steps for each operating phase:

(i) Initial startup;

(ii) Normal operations;

(iii) Temporary operations;

(iv) Emergency shutdown including the conditions under which emergency shutdown is required, and the assignment of shutdown responsibility to qualified operators to ensure that emergency shutdown is executed in a safe and timely manner.

(v) Emergency operations;

(vi) Normal shutdown; and,

(vii) Startup following a turnaround, or after an emergency shutdown.

(2) Operating limits:

(i) Consequences of deviation; and

(ii) Steps required to correct or avoid deviation.

(3) Safety and health considerations:

(i) Properties of, and hazards presented by, the chemicals used in the process;

(ii) Precautions necessary to prevent exposure, including engineering controls, administrative controls, and personal protective equipment;

(iii) Control measures to be taken if physical contact or airborne exposure occurs;

(iv) Quality control for raw materials and control of hazardous chemical inventory levels; and,

(v) Any special or unique hazards.

(4) Safety systems and their functions.

(b) Operating procedures shall be readily accessible to employees who work in or maintain a process.

(c) The operating procedures shall be reviewed as often as necessary to assure that they reflect current operating practice, including changes that result from changes in process chemicals, technology, and equipment, and changes to stationary sources. The owner or operator shall certify annually that these operating procedures are current and accurate.

(d) The owner or operator shall develop and implement safe work practices to provide for the control of hazards during operations such as lockout/tagout; confined space entry; opening process equipment or piping; and control over entrance into a stationary source by maintenance, contractor, laboratory, or other support personnel. These safe work practices shall apply to employees and contractor employees.

Section 68.70. Reserved

Section 68.71. Training.

(a) Initial training.

(1) Each employee presently involved in operating a process, and each employee before being involved in operating a newly assigned process, shall be trained in an overview of the process and in the operating procedures as specified in Section 68.69. The training shall include emphasis on the specific safety and health hazards, emergency operations including shutdown, and safe work practices applicable to the employee's job tasks.

(2) In lieu of initial training for those employees already involved in operating a process on June 21, 1999 an owner or operator may certify in writing that the employee has the required knowledge, skills, and abilities to safely carry out the duties and responsibilities as specified in the operating procedures.

(b) Refresher training. Refresher training shall be provided at least every three years, and more often if necessary, to each employee involved in operating a process to assure that the employee understands and adheres to the current operating procedures of the process. The owner or operator, in consultation with the employees involved in operating the process, shall determine the appropriate frequency of refresher training.

(c) Training documentation. The owner or operator shall ascertain that each employee involved in operating a process has received and understood the training required by this paragraph. The owner or operator shall prepare a record which contains the identity of the employee, the date of training, and the means used to verify that the employee understood the training.

Section 68.72 Reserved

Section 68.73. Mechanical integrity.

(a) Application. Paragraphs (b) through (f) of this section apply to the following process equipment:

(1) Pressure vessels and storage tanks;

(2) Piping systems (including piping components such as valves);

(3) Relief and vent systems and devices;

(4) Emergency shutdown systems;

(5) Controls (including monitoring devices and sensors, alarms, and interlocks) and,

(6) Pumps.

(b) Written procedures. The owner or operator shall establish and implement written procedures to maintain the on-going integrity of process equipment.

(c) Training for process maintenance activities. The owner or operator shall train each employee involved in maintaining the on-going integrity of process equipment in an overview of that process and its hazards and in the procedures applicable to the employee's job tasks to assure that the employee can perform the job tasks in a safe manner.

(d) Inspection and testing.

(1) Inspections and tests shall be performed on process equipment.

(2) Inspection and testing procedures shall follow recognized and generally accepted good engineering practices.

(3) The frequency of inspections and tests of process equipment shall be consistent with applicable manufacturers' recommendations and good engineering practices, and more frequently if determined to be necessary by prior operating experience.

(4) The owner or operator shall document each inspection and test that has been performed on process equipment. The documentation shall identify the date of the inspection or test, the name of the person who performed the inspection or test, the serial number or other identifier of the equipment on which the inspection or test was performed, a description of the inspection or test performed, and the results of the inspection or test.

(e) Equipment deficiencies. The owner or operator shall correct deficiencies in equipment that are outside acceptable limits (defined by the process safety information in Section 68.65) before further use or in a safe and timely manner when necessary means are taken to assure safe operation.

(f) Quality assurance.

(1) In the construction of new plants and equipment, the owner or operator shall assure that equipment as it is fabricated is suitable for the process application for which it will be used.

(2) Appropriate checks and inspections shall be performed to assure that equipment is installed properly and consistent with design specifications and the manufacturer's instructions.

(3) The owner or operator shall assure that maintenance materials, spare parts and equipment are suitable for the process application for which they will be used.

Section 68.74. Reserved

Section 68.75. Management of change.

(a) The owner or operator shall establish and implement written procedures to manage changes (except for "replacements in kind") to process chemicals, technology, equipment, and procedures; and, changes to stationary sources that affect a covered process.

(b) The procedures shall assure that the following considerations are addressed prior to any change:

(1) The technical basis for the proposed change;

(2) Impact of change on safety and health;

(3) Modifications to operating procedures;

(4) Necessary time period for the change; and,

(5) Authorization requirements for the proposed change.

(c) Employees involved in operating a process and maintenance and contract employees whose job tasks will be affected by a change in the process shall be informed of, and trained in, the change prior to start-up of the process or affected part of the process.

(d) If a change covered by this paragraph results in a change in the process safety information required by Section 68.65 of this part, such information shall be updated accordingly.

(e) If a change covered by this paragraph results in a change in the operating procedures or practices required by Section 68.69, such procedures or practices shall be updated accordingly.

Section 68.76. Reserved

Section 68.77. Pre-startup review.

(a) The owner or operator shall perform a pre-startup safety review for new stationary sources and for modified stationary sources when the modification is significant enough to require a change in the process safety information.

(b) The pre-startup safety review shall confirm that prior to the introduction of regulated substances to a process:

(1) Construction and equipment is in accordance with design specifications;

(2) Safety, operating, maintenance, and emergency procedures are in place and are adequate;

(3) For new stationary sources, a process hazard analysis has been performed and recommendations have been resolved or implemented before startup; and modified stationary sources meet the requirements contained in management of change, Section 68.75.

(4) Training of each employee involved in operating a process has been completed.

Section 68.78. Reserved

Section 68.79. Compliance audits.

(a) The owner or operator shall certify that he or she has evaluated compliance with the provisions of this subpart at least every three years to verify that the procedures and practices developed under the rule are adequate and are being followed.

(b) The compliance audit shall be conducted by at least one person knowledgeable in the process.

(c) A report of the findings of the audit shall be developed.

(d) The owner or operator shall promptly determine and document an appropriate response to each of the findings of the compliance audit, and document that deficiencies have been corrected.

(e) The owner or operator shall retain the two (2) most recent compliance audit reports.

Section 68.80. Reserved

Section 68.81. Incident investigation.

(a) The owner or operator shall investigate each incident which resulted in, or could reasonably have resulted in a catastrophic release of a regulated substance.

(b) An incident investigation shall be initiated as promptly as possible, but not later than 48 hours following the incident.

(c) An incident investigation team shall be established and consist of at least one person knowledgeable in the process involved, including a contract employee if the incident involved work of the contractor, and other persons with appropriate knowledge and experience to thoroughly investigate and analyze the incident.

(d) A report shall be prepared at the conclusion of the investigation which includes at a minimum:

(1) Date of incident;

(2) Date investigation began;

(3) A description of the incident;

(4) The factors that contributed to the incident; and,

(5) Any recommendations resulting from the investigation.

(e) The owner or operator shall establish a system to promptly address and resolve the incident report findings and recommendations. Resolutions and corrective actions shall be documented.

(f) The report shall be reviewed with all affected personnel whose job tasks are relevant to the incident findings including contract employees where applicable.

(g) Incident investigation reports shall be retained for five years.

Section 68.82. Reserved

Section 68.83. Employee participation.

(a) The owner or operator shall develop a written plan of action regarding the implementation of the employee participation required by this section.

(b) The owner or operator shall consult with employees and their representatives on the conduct and development of process hazards analyses and on the development of the other elements of process safety management in this rule.

(c) The owner or operator shall provide to employees and their representatives access to process hazard analyses and to all other information required to be developed under this rule.

Section 68.84. Reserved

Section 68.85. Hot work permit.

(a) The owner or operator shall issue a hot work permit for hot work operations conducted on or near a covered process.

(b) The permit shall document that the fire prevention and protection requirements in 29 CFR 1910.252(a) have been implemented prior to beginning the hot work operations; it shall indicate the date(s) authorized for hot work, and identify the object on which hot work is to be performed. The permit shall be kept on file until completion of the hot work operations.

Section 68.86. Reserved

Section 68.87. Contractors.

(a) Application. This section applies to contractors performing maintenance or repair, turnaround, major renovation, or specialty work on or adjacent to a covered process. It does not apply to contractors providing incidental services which do not influence process safety, such as janitorial work, food and drink services, laundry, delivery or other supply services.

(b) Owner or operator responsibilities:

(1) The owner or operator, when selecting a contractor, shall obtain and evaluate information regarding the contract owner or operator's safety performance and programs.

(2) The owner or operator shall inform contract owner or operator of the known potential fire, explosion, or toxic release hazards related to the contractor's work and the process.

(3) The owner or operator shall explain to the contract owner or operator the applicable provisions of subpart E of this part.

(4) The owner or operator shall develop and implement safe work practices consistent with Section 68.69(d), to control the entrance, presence, and exit of the contract owner or operator and contract employees in covered process areas.

(5) The owner or operator shall periodically evaluate the performance of the contract owner or operator in fulfilling their obligations as specified in paragraph (c) of this section.

(c) Contract owner or operator responsibilities.

(1) The contract owner or operator shall assure that each contract employee is trained in the work practices necessary to safely perform his or her job.

(2) The contract owner or operator shall assure that each contract employee is instructed in the known potential fire, explosion, or toxic release hazards related to his or her job and the process, and the applicable provisions of the emergency action plan.

(3) The contract owner or operator shall document that each contract employee has received and understood the training required by this section. The contract owner or operator shall prepare a record which contains the identity of the contract employee, the date of training, and the means used to verify that the employee understood the training.

(4) The contract owner or operator shall assure that each contract employee follows the safety rules of the stationary source including the safe work practices required by Section 68.69(d).

(5) The contract owner or operator shall advise the owner or operator of any unique hazards presented by the contract owner or operator's work, or of any hazards found by the contract owner or operator's work.

Section 68.88–89. Reserved

SUBPART E EMERGENCY RESPONSE

Section 68.90. Applicability.

(a) Except as provided in paragraph (b) of this section, the owner or operator of a stationary source with Program 2 and Program 3 processes shall comply with the requirements of Section 68.95.

(b) The owner or operator of stationary source whose employees will not respond to accidental releases of regulated substances need not comply with Section 68.95 of this part provided that they meet the following:

(1) For stationary sources with any regulated toxic substance held in a process above the threshold quantity, the stationary source is included in the community emergency response plan developed under 42 U.S.C. 11003;

(2) For stationary sources with only regulated flammable substances held in a process above the threshold quantity, the owner or operator has coordinated response actions with the local fire department; and

(3) Appropriate mechanisms are in place to notify emergency responders when there is a need for a response.

Section 68.91–94. Reserved

Section 68.95. Emergency response program.

(a) The owner or operator shall develop and implement an emergency response program for the purpose of protecting public health and the environment. Such program shall include the following elements:

(1) An emergency response plan, which shall be maintained at the stationary source and contain at least the following elements:

(i) Procedures for informing the public and local emergency response agencies about accidental releases;

(ii) Documentation of proper first-aid and emergency medical treatment necessary to treat accidental human exposures; and

(iii) Procedures and measures for emergency response after an accidental release of a regulated substance;

(2) Procedures for the use of emergency response equipment and for its inspection, testing, and maintenance;

(3) Training for all employees in relevant procedures; and

(4) Procedures to review and update, as appropriate, the emergency response plan to reflect changes at the stationary source and ensure that employees are informed of changes.

(b) A written plan that complies with other Federal contingency plan regulations or is consistent with the approach in the National Response Team's Integrated Contingency Plan Guidance (''One Plan'') and that, among other matters, includes the elements provided in paragraph (a) of this section, shall satisfy the requirements of this section if the owner or operator also complies with paragraph (c) of this section.

(c) The emergency response plan developed under paragraph (a)(1) of this section shall be coordinated with the community emergency response plan developed under 42 U.S.C. 11003. Upon request of the local emergency planning committee or emergency response officials, the owner or operator shall promptly provide to the local emergency response officials information necessary for developing and implementing the community emergency response plan.

Section 68.96–99. Reserved

SUBPART F REGULATED SUBSTANCES FOR ACCIDENTAL RELEASE PREVENTION

Section 68.100. Purpose.

This subpart designates substances to be listed under sections 112(r)(3), (4), and (5) of the Clean Air Act, as amended and identifies their threshold quantities.

Section 68.101–114. Reserved

Section 68.115. Threshold determination.

(a) A threshold quantity of a regulated substance listed in Section 68.130 is present at a stationary source if the total quantity of the regulated substance contained in a process exceeds the threshold.

(b) For the purposes of determining whether more than a threshold quantity of a regulated substance is present at the stationary source, the following exemptions apply:

(1) Concentrations of a regulated toxic substance in a mixture. If a regulated substance is present in a mixture and the concentration of the substance is below one percent by weight of the mixture, the amount of the substance in the mixture need not be considered when determining whether more than a threshold quantity is present at the stationary source. Except for oleum, toluene 2,4-diisocyanate, toluene 2,6-diisocyanate, and toluene diisocyanate (unspecified isomer), if the concentration of the regulated substance in the mixture is one percent or greater by weight, but the owner or operator can demonstrate that the partial pressure of the regulated substance in the mixture (solution) under handling or storage conditions in any portion of the process is less than 10 millimeters of mercury (mm Hg), the amount of the substance in the mixture in that portion of the process need not be considered when determining whether more than a threshold quantity is present at the stationary source. The owner or operator shall document this partial pressure measurement or estimate.

(2) Concentrations of a regulated flammable substance in a mixture.

(i) General provision. If a regulated substance is present in a mixture and the concentration of the substance is below one percent by weight of the mixture, the mixture need not be considered when determining whether more than a threshold quantity of the regulated substance is present at the stationary source. Except as provided in paragraph (b)(2) (ii) and (iii) of this section, if the concentration of the substance is one percent or greater by weight of the mixture, then, for purposes of determining whether a threshold quantity is present at the stationary source, the entire weight of the mixture shall be treated as the regulated substance unless the owner or operator can demonstrate that the mixture itself does not have a National Fire Protection Association flammability hazard rating of 4. The demonstration shall be in accordance with the definition of flammability hazard rating 4 in the NFPA 704, Standard System for the Identification of the Hazards of Materials for Emergency Response, National Fire Protection Association, Quincy, MA, 1996 (available from the National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02269–9101). Boiling point and flash point shall be defined and determined in accordance with NFPA 30, Flammable and Combustible Liquids Code, National Fire Protection Association, Quincy, MA, 1996 (available from the National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02269–9101). The owner or operator shall document the National Fire Protection Association flammability hazard rating.

(ii) Gasoline. Regulated substances in gasoline, when in distribution or related storage for use as fuel for internal combustion engines, need not be considered when determining whether more than a threshold quantity is present at a stationary source.

(iii) Naturally occurring hydrocarbon mixtures. Prior to entry into a natural gas processing plant or a petroleum refining process unit, regulated substances in naturally occurring hydrocarbon mixtures need not be considered when determining whether more than a threshold quantity is present at a stationary source. Naturally occurring hydrocarbon mixtures include any combination of the following; condensate, crude oil, field gas, and produced water, each as defined in Section 68.3 of this part.

(3) Articles. Regulated substances contained in articles need not be considered when determining whether more than a threshold quantity is present at the stationary source.

(4) Uses. Regulated substances, when in use for the following purposes, need not be included in determining whether more than a threshold quantity is present at the stationary source:

(i) Use as a structural component of the stationary source;

(ii) Use of products for routine janitorial maintenance;

(iii) Use by employees of foods, drugs, cosmetics, or other personal items containing the regulated substance; and

(iv) Use of regulated substances present in process water or noncontact cooling water as drawn from the environment or municipal sources, or use of regulated substances present in air used either as compressed air or as part of combustion.

(5) Activities in laboratories. If a regulated substance is manufactured, processed, or used in a laboratory at a stationary source under the supervision of a technically qualified individual as defined in 40 CFR 720.3(ee), the quantity of the substance need not be considered in determining whether a threshold quantity is present. This exemption does not apply to:

(i) Specialty chemical production;

(ii) Manufacture, processing, or use of substances in pilot plant scale operations; and

(iii) Activities conducted outside the laboratory.

Section 68.116–124. Reserved

Section 68.125. Exemptions.

Agricultural nutrients. Ammonia used as an agricultural nutrient, when held by farmers, is exempt from all provisions of this part.

Section 68.126. Exclusion.

Flammable substances used as fuel or held for sale as fuel at retail facilities. A flammable substance listed in Tables 3 and 4 of Section 68.130 is nevertheless excluded from all provisions of this part when the substance is used as a fuel or held for sale as a fuel at a retail facility.

Section 68.127–129. Reserved

Section 68.130. List of substances.

(a) Regulated toxic and flammable substances under section 112(r) of the Clean Air Act are the substances listed in Tables 1, 2, 3, and 4. Threshold quantities for listed toxic and flammable substances are specified in the tables.

(b) The basis for placing toxic and flammable substances on the list of regulated substances are explained in the notes to the list.

TABLE 1 TO 68.130-

TABLE 1 - LIST OF REGULATED TOXIC SUBSTANCES AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION
[Alphabetical Order - 77 Substances]

Chemical Name	CAS Number	Threshold Quantity (lbs)	Basis for Listing
Acrolein [2-Propenal]	107–02–8	5,000	b
Acrylonitrile [2-Propenenitrile]	107–13–1	20,000	b
Acrylyl chloride [2-Propenoyl chloride]	814–68–6	5,000	b
Allyl alcohol [2-Propen-l-ol]	107–18–6	15,000	b
Allylamine [2-Propen-l-amine]	107–11–9	10,000	b
Ammonia (anhydrous)	7664–41–7	10,000	a, b
Ammonia (conc. 20% or greater)	7664–41–7	20,000	a, b
Arsenous trichloride	7784–34–1	15,000	b
Arsine	7784–42–1	1,000	b
Boron trichloride [Borane, trichloro-]	10294–34–5	5,000	b
Boron trifluoride [Borane, trifluoro-]	7637–07–2	5,000	b
Boron trifluoride compound with methyl ether (1:1) [Boron, trifluoro[oxybis[methane]], (T-4)-]	353–42–4	15,000	b
Bromine	7726–95–6	10,000	a, b

Chemical Name	CAS Number	Threshold Quantity (lbs)	Basis for Listing
Carbon disulfide	75–15–0	20,000	b
Chlorine	7782–50–5	2,500	a, b
Chlorine dioxide [Chlorine oxide (ClO_2)]	10049–04–4	1,000	c
Chloroform [Methane, trichloro-]	67–66–3	20,000	b
Chloromethyl ether [Methane, oxybis[chloro-]	542–88–1	1,000	b
Chloromethyl methyl ether [Methane, chloromethoxy-]	107–30–2	5,000	b
Crotonaldehyde [2-Butenal]	4170–30–3	20,000	b
Crotonaldehyde, (E)- [2-Butenal, (E)-]	123–73–9	20,000	b
Cyanogen chloride	506–77–4	10,000	c
Cyclohexylamine [Cyclohexanamine]	108–91–8	15,000	b
Diborane	19287–45–7	2,500	b
Dimethyldichlorosilane [Silane, dichlorodimethyl-]	75–78–5	5,000	b
1,1-Dimethylhydrazine [Hydrazine, 1,1-dimethyl-]	57–14–7	15,000	b
Epichlorohydrin [Oxirane, (chloromethyl)-]	106–89–8	20,000	b
Ethylenediamine [1,2-Ethanediamine]	107–15–3	20,000	b
Ethyleneimine [Aziridine]	151–56–4	10,000	b
Ethylene oxide [Oxirane]	75–21–8	10,000	a, b
Fluorine	7782–41–4	1,000	b
Formaldehyde (solution)	50–00–0	15,000	b
Furan	110–00–9	5,000	b
Hydrazine	302–01–2	15,000	b
Hydrochloric acid (conc. 37% or greater)	7647–01–0	15,000	d
Hydrocyanic acid	74–90–8	2,500	a, b
Hydrogen chloride (anhydrous) [Hydrochloric acid]	7647–01–0	5,000	a
Hydrogen fluoride/ Hydrofluoric acid (conc. 50% or greater) [Hydrofluoric acid]	7664–39–3	1,000	a, b
Hydrogen selenide	7783–07–5	500	b
Hydrogen sulfide	7783–06–4	10,000	a, b
Iron, pentacarbonyl- [Iron carbonyl ($Fe(CO)_5$), (TB-5–11)-]	13463–40–6	2,500	b
Isobutyronitrile [Propanenitrile, 2-methyl-]	78–82–0	20,000	b
Isopropyl chloroformate [Carbonochloridic acid, 1-methylethyl ester]	108–23–6	15,000	b
Methacrylonitrile [2-Propenenitrile, 2-methyl-]	126–98–7	10,000	b
Methyl chloride [Methane, chloro-]	74–87–3	10,000	a
Methyl chloroformate [Carbonochloridic acid, methyl ester]	79–22–1	5,000	b
Methyl hydrazine [Hydrazine, methyl-]	60–34–4	15,000	b
Methyl isocyanate [Methane, isocyanato-]	624–83–9	10,000	a, b
Methyl mercaptan [Methanethiol]	74–93–1	10,000	b
Methyl thiocyanate [Thiocyanic acid, methyl ester]	556–64–9	20,000	b
Methyltrichlorosilane [Silane, trichloromethyl-]	75–79–6	5,000	b
Nickel carbonyl	13463–39–3	1,000	b
Nitric acid (conc. 80% or greater)	7697–37–2	15,000	b
Nitric oxide [Nitrogen oxide (NO)]	10102–43–9	10,000	b
Oleum (Fuming Sulfuric acid) [Sulfuric acid, mixture with sulfur trioxide] [1]	8014–95–7	10,000	e
Peracetic acid [Ethaneperoxoic acid]	79–21–0	10,000	b

Chemical Name	CAS Number	Threshold Quantity (lbs)	Basis for Listing
Perchloromethylmercaptan [Methanesulfenyl chloride, trichloro-]	594–42–3	10,000	b
Phosgene [Carbonic dichloride]	75–44–5	500	a, b
Phosphine	7803–51–2	5,000	b
Phosphorus oxychloride [Phosphoryl chloride]	10025–87–3	5,000	b
Phosphorus trichloride [Phosphorous trichloride]	7719–12–2	15,000	b
Piperidine	110–89–4	15,000	b
Propionitrile [Propanenitrile]	107–12–0	10,000	b
Propyl chloroformate [Carbonochloridic acid, propyl ester]	109–61–5	15,000	b
Propyleneimine [Aziridine, 2-methyl-]	75–55–8	10,000	b
Propylene oxide [Oxirane, methyl-]	75–56–9	10,000	b
Sulfur dioxide (anhydrous)	7446–09–5	5,000	a, b
Sulfur tetrafluoride [Sulfur fluoride (SF_4), (T-4)-]	7783–60–0	2,500	b
Sulfur trioxide	7446–11–9	10,000	a, b
Tetramethyllead [Plumbane, tetramethyl-]	75–74–1	10,000	b
Tetranitromethane [Methane, tetranitro-]	509–14–8	10,000	b
Titanium tetrachloride [Titanium chloride ($TiCl_4$), (T-4)-]	7550–45–0	2,500	b
Toluene 2,4-diisocyanate [Benzene, 2,4-diisocyanato-1-methyl-] [1]	584–84–9	10,000	a
Toluene 2,6-diisocyanate [Benzene, 1,3-diisocyanato-2-methyl-] [1]	91–08–7	10,000	a
Toluene diisocyanate (unspecified isomer) [Benzene, 1,3-diisocyanatomethyl-] [1]	26471–62–5	10,000	a
Trimethylchlorosilane [Silane, chlorotrimethyl-]	75–77–4	10,000	b
Vinyl acetate monomer [Acetic acid ethenyl ester]	108–05–4	15,000	b

[1] The mixture exemption in Section 68.115(b)(1) does not apply to the substance

NOTE: Basis for Listing:

a Mandated for listing by Congress

b On EHS list, vapor pressure 10 mmHg or greater

c Toxic gas

d Toxicity of hydrogen chloride, potential to release hydrogen chloride, and history of accidents

e Toxicity of sulfur trioxide and sulfuric acid, potential to release sulfur trioxide, and history of accidents

TABLE 2 TO 68.130 -

TABLE 2 - LIST OF REGULATED TOXIC SUBSTANCES AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION
[CAS Number Order - 77 Substances]

CAS Number	Chemical Name	Threshold Quantity (lbs)	Basis for Listing
50–00–0	Formaldehyde (solution)	15,000	b
57–14–7	1,1-Dimethylhydrazine [Hydrazine, 1,1-dimethyl-]	15,000	b
60–34–4	Methyl hydrazine [Hydrazine, methyl-]	15,000	b
67–66–3	Chloroform [Methane, trichloro-]	20,000	b
74–87–3	Methyl chloride [Methane, chloro-]	10,000	a
74–90–8	Hydrocyanic acid	2,500	a, b

CAS Number	Chemical Name	Threshold Quantity (lbs)	Basis for Listing
74–93–1	Methyl mercaptan [Methanethiol]	10,000	b
75–15–0	Carbon disulfide	20,000	b
75–21–8	Ethylene oxide [Oxirane]	10,000	a, b
75–44–5	Phosgene [Carbonic dichloride]	500	a, b
75–55–8	Propyleneimine [Aziridine, 2-methyl-]	10,000	b
75–56–9	Propylene oxide [Oxirane, methyl-]	10,000	b
75–74–1	Tetramethyllead [Plumbane, tetramethyl-]	10,000	b
75–77–4	Trimethylchlorosilane [Silane, chlorotrimethyl-]	10,000	b
75–78–5	Dimethyldichlorosilane [Silane, dichlorodimethyl-]	5,000	b
75–79–6	Methyltrichlorosilane [Silane, trichloromethyl-]	5,000	b
78–82–0	Isobutyronitrile [Propanenitrile, 2-methyl-]	20,000	b
79–21–0	Peracetic acid [Ethaneperoxoic acid]	10,000	b
79–22–1	Methyl chloroformate [Carbonochloridic acid, methyl ester]	5,000	b
91–08–7	Toluene 2,6-diisocyanate [Benzene, 1,3-diisocyanato-2-methyl-] [1]	10,000	a
106–89–8	Epichlorohydrin [Oxirane, (chloromethyl)-]	20,000	b
107–02–8	Acrolein [2-Propenal]	5,000	b
107–11–9	Allylamine [2-Propen-1-amine]	10,000	b
107–12–0	Propionitrile [Propanenitrile]	10,000	b
107–13–1	Acrylonitrile [2-Propenenitrile]	20,000	b
107–15–3	Ethylenediamine [1,2-Ethanediamine]	20,000	b
107–18–6	Allyl alcohol [2-Propen-1-ol]	15,000	b
107–30–2	Chloromethyl methyl ether [Methane, chloromethoxy-]	5,000	b
108–05–4	Vinyl acetate monomer [Acetic acid ethenyl ester]	15,000	b
108–23–6	Isopropyl chloroformate [Carbonochloridic acid, 1-methylethyl ester]	15,000	b
108–91–8	Cyclohexylamine [Cyclohexanamine]	15,000	b
109–61–5	Propyl chloroformate [Carbonochloridic acid, propyl ester]	15,000	b
110–00–9	Furan	5,000	b
110–89–4	Piperidine	15,000	b
123–73–9	Crotonaldehyde, (E)- [2-Butenal, (E)-]	20,000	b
126–98–7	Methacrylonitrile [2-Propenenitrile, 2-methyl-]	10,000	b
151–56–4	Ethyleneimine [Aziridine]	10,000	b
302–01–2	Hydrazine	15,000	b
353–42–4	Boron trifluoride compound with methyl ether (1:1) [Boron, trifluoro[oxybis[methane]], (T-4)-]	15,000	b
506–77–4	Cyanogen chloride	10,000	c
509–14–8	Tetranitromethane [Methane, tetranitro-]	10,000	b
542–88–1	Chloromethyl ether [Methane, oxybis[chloro-]	1,000	b
556–64–9	Methyl thiocyanate [Thiocyanic acid, methyl ester]	20,000	b
584–84–9	Toluene 2,4-diisocyanate [Benzene, 2,4-diisocyanato-1-methyl-] [1]	10,000	a
594–42–3	Perchloromethylmercaptan [Methanesulfenyl chloride, trichloro-]	10,000	b
624–83–9	Methyl isocyanate [Methane, isocyanato-]	10,000	a, b
814–68–6	Acrylyl chloride [2-Propenoyl chloride]	5,000	b

CAS Number	Chemical Name	Threshold Quantity (lbs)	Basis for Listing
4170–30–3	Crotonaldehyde [2-Butenal]	20,000	b
7446–09–5	Sulfur dioxide (anhydrous)	5,000	a, b
7446–11–9	Sulfur trioxide	10,000	a, b
7550–45–0	Titanium tetrachloride [Titanium chloride ($TiCl_4$), (T-4)-]	2,500	b
7637–07–2	Boron trifluoride [Borane, trifluoro-]	5,000	b
7647–01–0	Hydrochloric acid (conc. 37% or greater)	15,000	d
7647–01–0	Hydrogen chloride (anhydrous) [Hydrochloric acid]	5,000	a
7664–39–3	Hydrogen fluoride/Hydrofluoric acid (conc. 50% or greater) [Hydrofluoric acid]	1,000	a, b
7664–41–7	Ammonia (anhydrous)	10,000	a, b
7664–41–7	Ammonia (conc. 20% or greater)	20,000	a, b
7697–37–2	Nitric acid (conc. 80% or greater)	15,000	b
7719–12–2	Phosphorus trichloride [Phosphorous trichloride]	15,000	b
7726–95–6	Bromine	10,000	a, b
7782–41–4	Fluorine	1,000	b
7782–50–5	Chlorine	2,500	a, b
7783–06–4	Hydrogen sulfide	10,000	a, b
7783–07–5	Hydrogen selenide	500	b
7783–60–0	Sulfur tetrafluoride [Sulfur fluoride (SF_4), (T-4)-]	2,500	b
7784–34–1	Arsenous trichloride	15,000	b
7784–42–1	Arsine	1,000	b
7803–51–2	Phosphine	5,000	b
8014–95–7	Oleum (Fuming Sulfuric acid) [Sulfuric acid, mixture with sulfur trioxide] [1]	10,000	e
10025–87–3	Phosphorus oxychloride [Phosphoryl chloride]	5,000	b
10049–04–4	Chlorine dioxide [Chlorine oxide (ClO_2)]	1,000	c
10102–43–9	Nitric oxide [Nitrogen oxide (NO)]	10,000	b
10294–34–5	Boron trichloride [Borane, trichloro-]	5,000	b
13463–39–3	Nickel carbonyl	1,000	b
13463–40–6	Iron, pentacarbonyl- [Iron carbonyl ($Fe(CO)_5$), (TB-5–11)-]	2,500	b
19287–45–7	Diborane	2,500	b
26471–62–5	Toluene diisocyanate (unspecified isomer) [Benzene, 1,3-diisocyanatomethyl-] [1]	10,000	a

[1] The mixture exemption in Section 68.115(b)(1) does not apply to the substance

NOTE: Basis for Listing:

a Mandated for listing by Congress

b On EHS list, vapor pressure 10 mmHg or greater

c Toxic gas

d Toxicity of hydrogen chloride, potential to release hydrogen chloride, and history of accidents

e Toxicity of sulfur trioxide and sulfuric acid, potential to release sulfur trioxide, and history of accidents

TABLE 3 TO 68.130 -

TABLE 3 - LIST OF REGULATED FLAMMABLE SUBSTANCES[1] AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION

[Alphabetical Order - 63 Substances]

Chemical Name	CAS Number	Threshold Quantity (lbs)	Basis for Listing
Acetaldehyde	75–07–0	10,000	g

Chemical Name	CAS Number	Threshold Quantity (lbs)	Basis for Listing
Acetylene [Ethyne]	74–86–2	10,000	f
Bromotrifluorethylene [Ethene, bromotrifluoro-]	598–73–2	10,000	f
1,3-Butadiene	106–99–0	10,000	f
Butane	106–97–8	10,000	f
1-Butene	106–98–9	10,000	f
2-Butene	107–01–7	10,000	f
Butene	25167–67–3	10,000	f
2-Butene, cis-	590–18–1	10,000	f
2-Butene, trans- [2-Butene, (E)-]	624–64–6	10,000	f
Carbon oxysulfide [Carbon oxide sulfide (COS)]	463–58–1	10,000	f
Chlorine monoxide [Chlorine oxide]	7791–21–1	10,000	f
2-Chloropropylene [1-Propene, 2-chloro-]	557–98–2	10,000	g
1-Chloropropylene [1-Propene, 1-chloro-]	590–21–6	10,000	g
Cyanogen [Ethanedinitrile]	460–19–5	10,000	f
Cyclopropane	75–19–4	10,000	f
Dichlorosilane [Silane, dichloro-]	4109–96–0	10,000	f
Difluoroethane [Ethane, 1,1-difluoro-]	75–37–6	10,000	f
Dimethylamine [Methanamine, N-methyl-]	124–40–3	10,000	f
2,2-Dimethylpropane [Propane, 2,2-dimethyl-]	463–82–1	10,000	f
Ethane	74–84–0	10,000	f
Ethyl acetylene [1-Butyne]	107–00–6	10,000	f
Ethylamine [Ethanamine]	75–04–7	10,000	f
Ethyl chloride [Ethane, chloro-]	75–00–3	10,000	f
Ethylene [Ethene]	74–85–1	10,000	f
Ethyl ether [Ethane, 1,1′-oxybis-]	60–29–7	10,000	g
Ethyl mercaptan [Ethanethiol]	75–08–1	10,000	g
Ethyl nitrite [Nitrous acid, ethyl ester]	109–95–5	10,000	f
Hydrogen	1333–74–0	10,000	f
Isobutane [Propane, 2-methyl-]	75–28–5	10,000	f
Isopentane [Butane, 2-methyl-]	78–78–4	10,000	g
Isoprene [1,3-Butadiene, 2-methyl-]	78–79–5	10,000	g
Isopropylamine [2-Propanamine]	75–31–0	10,000	g
Isopropyl chloride [Propane, 2-chloro-]	75–29–6	10,000	g
Methane	74–82–8	10,000	f
Methylamine [Methanamine]	74–89–5	10,000	f
3-Methyl-1-butene	563–45–1	10,000	f
2-Methyl-1-butene	563–46–2	10,000	g
Methyl ether [Methane, oxybis-]	115–10–6	10,000	f
Methyl formate [Formic acid, methyl ester]	107–31–3	10,000	g
2-Methylpropene [1-Propene, 2-methyl-]	115–11–7	10,000	f
1,3-Pentadiene	504–60–9	10,000	f
Pentane	109–66–0	10,000	g
1-Pentene	109–67–1	10,000	g
2-Pentene, (E)-	646–04–8	10,000	g
2-Pentene, (Z)-	627–20–3	10,000	g
Propadiene [1,2-Propadiene]	463–49–0	10,000	f
Propane	74–98–6	10,000	f
Propylene [1-Propene]	115–07–1	10,000	f
Propyne [1-Propyne]	74–99–7	10,000	f
Silane	7803–62–5	10,000	f
Tetrafluoroethylene [Ethene, tetrafluoro-]	116–14–3	10,000	f

Chemical Name	CAS Number	Threshold Quantity (lbs)	Basis for Listing
Tetramethylsilane [Silane, tetramethyl-]	75–76–3	10,000	g
Trichlorosilane [Silane, trichloro-]	10025–78–2	10,000	g
Trifluorochloroethylene [Ethene, chlorotrifluo-ro-]	79–38–9	10,000	f
Trimethylamine [Methanamine, N,N-dimethyl-]	75–50–3	10,000	f
Vinyl acetylene [1-Buten-3-yne]	689–97–4	10,000	f
Vinyl chloride [Ethene, chloro-]	75–01–4	10,000	a, f
Vinyl ethyl ether [Ethene, ethoxy-]	109–92–2	10,000	g
Vinyl fluoride [Ethene, fluoro-]	75–02–5	10,000	f
Vinylidene chloride [Ethene, 1,1-dichloro-]	75–35–4	10,000	g
Vinylidene fluoride [Ethene, 1,1-difluoro-]	75–38–7	10,000	f
Vinyl methyl ether [Ethene, methoxy-]	107–25–5	10,000	f

[1] A flammable substance when used as a fuel or held for sale as a fuel at a retail facility is excluded from all provisions of this part (see Section 68.126).

NOTE: Basis for Listing:

a Mandated for listing by Congress

f Flammable gas

g Volatile flammable liquid

TABLE 4 TO 68.130 -

TABLE 4 - LIST OF REGULATED FLAMMABLE SUBSTANCES[1] AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION
[CAS Number Order - 63 Substances]

CAS No.	Chemical Name	Threshold Quantity (lbs)	Basis for listing
60–29–7	Ethyl ether [Ethane, 1,1′-oxybis-]	10,000	g
74–82–8	Methane	10,000	f
74–84–0	Ethane	10,000	f
74–85–1	Ethylene [Ethene]	10,000	f
74–86–2	Acetylene [Ethyne]	10,000	f
74–89–5	Methylamine [Methanamine]	10,000	f
74–98–6	Propane	10,000	f
74–99–7	Propyne [1-Propyne]	10,000	f
75–00–3	Ethyl chloride [Ethane, chloro-]	10,000	f
75–01–4	Vinyl chloride [Ethene, chloro-]	10,000	a, f
75–02–5	Vinyl fluoride [Ethene, fluoro-]	10,000	f
75–04–7	Ethylamine [Ethanamine]	10,000	f
75–07–0	Acetaldehyde	10,000	g
75–08–1	Ethyl mercaptan [Ethanethiol]	10,000	g
75–19–4	Cyclopropane	10,000	f
75–28–5	Isobutane [Propane, 2-methyl-]	10,000	f
75–29–6	Isopropyl chloride [Propane, 2-chloro-]	10,000	g
75–31–0	Isopropylamine [2-Propanamine]	10,000	g
75–35–4	Vinylidene chloride [Ethene, 1,1-dichloro-]	10,000	g
75–37–6	Difluoroethane [Ethane, 1,1-difluoro-]	10,000	f
75–38–7	Vinylidene fluoride [Ethene, 1,1-difluoro-]	10,000	f
75–50–3	Trimethylamine [Methanamine, N,N-dimethyl-]	10,000	f
75–76–3	Tetramethylsilane [Silane, tetramethyl-]	10,000	g
78–78–4	Isopentane [Butane, 2-methyl-]	10,000	g
78–79–5	Isoprene [1,3-Butadiene, 2-methyl-]	10,000	g
79–38–9	Trifluorochloroethylene [Ethene, chlorotrifluo-ro-]	10,000	f

CAS No.	Chemical Name	Threshold Quantity (lbs)	Basis for listing
106–97–8	Butane	10,000	f
106–98–9	1-Butene	10,000	f
106–99–0	1,3-Butadiene	10,000	f
107–00–6	Ethyl acetylene [1-Butyne]	10,000	f
107–01–7	2-Butene	10,000	f
107–25–5	Vinyl methyl ether [Ethene, methoxy-]	10,000	f
107–31–3	Methyl formate [Formic acid, methyl ester]	10,000	g
109–66–0	Pentane	10,000	g
109–67–1	1-Pentene	10,000	g
109–92–2	Vinyl ethyl ether [Ethene, ethoxy-]	10,000	g
109–95–5	Ethyl nitrite [Nitrous acid, ethyl ester]	10,000	f
115–07–1	Propylene [1-Propene]	10,000	f
115–10–6	Methyl ether [Methane, oxybis-]	10,000	f
115–11–7	2-Methylpropene [1-Propene, 2-methyl-]	10,000	f
116–14–3	Tetrafluoroethylene [Ethene, tetrafluoro-]	10,000	f
124–40–3	Dimethylamine [Methanamine, N-methyl-]	10,000	f
460–19–5	Cyanogen [Ethanedinitrile]	10,000	f
463–49–0	Propadiene [1,2-Propadiene]	10,000	f
463–58–1	Carbon oxysulfide [Carbon oxide sulfide (COS)]	10,000	f
463–82–1	2,2-Dimethylpropane [Propane, 2,2-dimethyl-]	10,000	f
504–60–9	1,3-Pentadiene	10,000	f
557–98–2	2-Chloropropylene [1-Propene, 2-chloro-]	10,000	g
563–45–1	3-Methyl-1-butene	10,000	f
563–46–2	2-Methyl-1-butene	10,000	g
590–18–1	2-Butene, cis-	10,000	f
590–21–6	1-Chloropropylene [1-Propene, 1-chloro-]	10,000	g
598–73–2	Bromotrifluorethylene [Ethene, bromotrifluoro-]	10,000	f
624–64–6	2-Butene, trans- [2-Butene, (E)-]	10,000	f
627–20–3	2-Pentene, (Z)-	10,000	g
646–04–8	2-Pentene, (E)-	10,000	g
689–97–4	Vinyl acetylene [1-Buten-3-yne]	10,000	f
1333–74–0	Hydrogen	10,000	f
4109–96–0	Dichlorosilane [Silane, dichloro-]	10,000	f
7791–21–1	Chlorine monoxide [Chlorine oxide]	10,000	f
7803–62–5	Silane	10,000	f
10025–78–2	Trichlorosilane [Silane,trichloro-]	10,000	g
25167–67–3	Butene	10,000	f

[1] A flammable substance when used as a fuel or held for sale as a fuel at a retail facility is excluded from all provisions of this part (see Section 68.126).

Note: Basis for Listing:
a Mandated for listing by Congress
f Flammable gas
g Volatile flammable liquid

Section 68.131–149. Reserved

SUBPART G RISK MANAGEMENT PLAN

Section 68.150. Submission.

(a) The owner or operator shall submit a single RMP that includes the information required by Secs. 68.155 through 68.185 for all covered processes. The RMP shall be submitted in a method and format to the central point as specified by EPA as of the date of submission.

(b) The owner or operator shall submit the first RMP no later than the latest of the following dates:

(1) June 21, 1999;

(2) Three years after the date on which a regulated substance is first listed under Section 68.130; or

(3) The date on which a regulated substance is first present above a threshold quantity in a process.

(c) The owner or operator of any stationary source for which an RMP was submitted before June 21, 2004, shall revise the RMP to include the information required by Sec. 68.160(b)(6) and (14) by June 21, 2004 in the manner specified by EPA prior to that date. Any such submission shall also include the information required by Sec. 68.160(b)(20) (indicating that the submission is a correction to include the information required by Sec. 68.160(b)(6) and (14) or an update under Sec. 68.190).

(d) RMPs submitted under this section shall be updated and corrected in accordance with Sections 68.190 and 68.195.

(e) Notwithstanding the provisions of Sections 68.155 to 68.190, the RMP shall exclude classified information. Subject to appropriate procedures to protect such information from public disclosure, classified data or information excluded from the RMP may be made available in a classified annex to the RMP for review by Federal and Department representatives who have received the appropriate security clearances.

(f) Procedures for asserting that information submitted in the RMP is entitled to protection as confidential business information are set forth in Sections 68.151 and 68.152.

Section 68.151. Assertion of claims of confidential business information.

(a) Except as provided in paragraph (b) of this section, an owner or operator of a stationary source required to report or otherwise provide information under this part may make a claim of confidential business information for any such information that meets the criteria set forth in 40 CFR 2.301.

(b) Notwithstanding the provisions of 40 CFR Part 2, an owner or operator of a stationary source subject to this part may not claim as confidential business information the following information:

(1) Registration data required by Section 68.160(b)(1) through (b)(6) and (b)(8), (b)(10) through (b)(13) and NAICS code and Program level of the process set forth in Section 68.160(b)(7);

(2) Offsite consequence analysis data required by Section 68.165(b)(4), (b)(9), (b)(10), (b)(11), and (b)(12);

(3) Accident history data required by Section 68.168;

(4) Prevention program data required by Section 68.170(b), (d), (e)(1), (f) through (k);

(5) Prevention program data required by Section 68.175(b), (d), (e)(1), (f) through (p); and

(6) Emergency response program data required by Section 68.180.

(c) Notwithstanding the procedures specified in 40 CFR Part 2, an owner or operator asserting a claim of CBI with respect to information contained in its RMP, shall submit to EPA at the time it submits the RMP the following:

(1) The information claimed confidential, provided in a format to be specified by EPA:

(2) A sanitized (redacted) copy of the RMP, with the notation "CBI" substituted for the information claimed confidential, except that a generic category or class name shall be substituted for any chemical name or identity claimed confidential; and

(3) The document or documents substantiating each claim of confidential business information, as described in Section 68.152.

Section 68.152. Substantiating claims of confidential business information.

(a) An owner or operator claiming that information is confidential business information must substantiate that claim by providing documentation that demonstrates that the claim meets the substantive criteria set forth in 40 CFR 2.301.

(b) Information that is submitted as part of the substantiation may be claimed confidential by marking it as confidential business information. Information not so marked will be treated as public and may be disclosed without notice to the submitter. If information that is submitted as part of the

substantiation is claimed confidential, the owner or operator must provide a sanitized and unsanitized version of the substantiation.

(c) The owner, operator, or senior official with management responsibility of the stationary source shall sign a certification that the signer has personally examined the information submitted and that based on inquiry of the persons who complied the information, the information is true, accurate, and complete, and that those portions of the substantiation claimed as confidential business information would, if disclosed, reveal trade secrets or other confidential business information.

Section 68.153–154. Reserved

Section 68.155. Executive summary.

The owner or operator shall provide in the RMP an executive summary that includes a brief description of the following elements:

(a) The accidental release prevention and emergency response policies at the stationary source;

(b) The stationary source and regulated substances handled;

(c) The general accidental release prevention program and chemical- specific prevention steps;

(d) The five-year accident history;

(e) The emergency response program; and

(f) Planned changes to improve safety.

Section 68.156–159. Reserved

Section 68.160. Registration.

(a) The owner or operator shall complete a single registration form and include it in the RMP. The form shall cover all regulated substances handled in covered processes.

(b) The registration shall include the following data:

(1) Stationary source name, street, city, county, state, zip code, latitude and longitude, method for obtaining latitude and longitude, and description of location that latitude and longitude represent;

(2) The stationary source Dun and Bradstreet number;

(3) Name and Dun and Bradstreet number of the corporate parent company;

(4) The name, telephone number, and mailing address of the owner or operator;

(5) The name and title of the person or position with overall responsibility for RMP elements and implementation, and (optional) the e-mail address for that person or position;

(6) The name, title, telephone number, 24 - hour telephone number, and, as of June 21, 2004, the e-mail address (if an e-mail address exists) of the emergency contact;

(7) For each covered process, the name and CAS number of each regulated substance held above the threshold quantity in the process, the maximum quantity of each regulated substance or mixture in the process (in pounds) to two significant digits, the five- or six-digit NAICS code that most closely corresponds to the process, and the Program level of the process;

(8) The stationary source EPA identifier;

(9) The number of full-time employees at the stationary source;

(10) Whether the stationary source is subject to 29 CFR 1910.119;

(11) Whether the stationary source is subject to 40 CFR part 355;

(12) If the stationary source has a CAA Title V operating permit, the permit number;

(13) The date of the last safety inspection of the stationary source by a Federal, State, or local government agency and the identity of the inspecting entity;

(14) As of June 21, 2004, the name, the mailing address, and the telephone number of the contractor who prepared the RMP (if any);

(15) Source or Parent Company E-mail Address (Optional);

(16) Source Homepage address (Optional);

(17) Phone number at the source for public inquiries (Optional);

(18) Local Emergency Planning Committee (Optional);

(19) OSHA Voluntary Protection Program status (Optional); and

(20) As of June 21, 2004, the type of and reason for any changes being made to a previously submitted RMP; the types of changes to RMP are categorized as follows:

(i) Updates and re-submissions required under Sec. 68.190(b);

(ii) Corrections under Sec. 68.195 or for purposes of correcting minor clerical errors, updating administrative information, providing missing data elements or reflecting facility ownership changes, and which do not require an update and re-submission as specified in Sec. 68.190(b);

(iii) De-registrations required under Sec. 68.190(c); and

(iv) Withdrawals of an RMP for any facility that was erroneously considered subject to this part 68.

Section 68.161–164. Reserved

Section 68.165. Offsite consequence analysis.

(a) The owner or operator shall submit in the RMP information:

(1) One worst-case release scenario for each Program 1 process; and

(2) For Program 2 and 3 processes, one worst-case release scenario to represent all regulated toxic substances held above the threshold quantity and one worst-case release scenario to represent all regulated flammable substances held above the threshold quantity. If additional worst-case scenarios for toxics or flammables are required by Section 68.25(a)(2)(iii), the owner or operator shall submit the same information on the additional scenario(s). The owner or operator of Program 2 and 3 processes shall also submit information on one alternative release scenario for each regulated toxic substance held above the threshold quantity and one alternative release scenario to represent all regulated flammable substances held above the threshold quantity.

(b) The owner or operator shall submit the following data:

(1) Chemical name;

(2) Percentage weight of the chemical in a liquid mixture (toxics only);

(3) Physical state (toxics only);

(4) Basis of results (give model name if used);

(5) Scenario (explosion, fire, toxic gas release, or liquid spill and vaporization);

(6) Quantity released in pounds;

(7) Release rate;

(8) Release duration;

(9) Wind speed and atmospheric stability class (toxics only);

(10) Topography (toxics only);

(11) Distance to endpoint;

(12) Public and environmental receptors within the distance;

(13) Passive mitigation considered; and

(14) Active mitigation considered (alternative releases only);

Section 68.166–167. Reserved

Section 68.168. Five-year accident history.

The owner or operator shall submit in the RMP the information required by Section 68.42(b) on each accident covered by Section 68.42(a).

Section 68.169. Reserved

Section 68.170. Prevention program/Program 2.

(a) For each Program 2 process, the owner or operator shall provide in the RMP the information indicated in paragraphs (b) through (k) of this section. If the same information applies to more than one covered process, the owner or operator may provide the information only once, but shall indicate to which processes the information applies.

(b) The five-or six-digit NAICS code that most closely corresponds to the process.

(c) The name(s) of the chemical(s) covered.

(d) The date of the most recent review or revision of the safety information and a list of Federal or State regulations or industry-specific design codes and standards used to demonstrate compliance with the safety information requirement.

(e) The date of completion of the most recent hazard review or update.

(1) The expected date of completion of any changes resulting from the hazard review;

(2) Major hazards identified;

(3) Process controls in use;

(4) Mitigation systems in use;

(5) Monitoring and detection systems in use; and

(6) Changes since the last hazard review.

(f) The date of the most recent review or revision of operating procedures.

(g) The date of the most recent review or revision of training programs;

(1) The type of training provided--classroom, classroom plus on the job, on the job; and

(2) The type of competency testing used.

(h) The date of the most recent review or revision of maintenance procedures and the date of the most recent equipment inspection or test and the equipment inspected or tested.

(i) The date of the most recent compliance audit and the expected date of completion of any changes resulting from the compliance audit.

(j) The date of the most recent incident investigation and the expected date of completion of any changes resulting from the investigation.

(k) The date of the most recent change that triggered a review or revision of safety information, the hazard review, operating or maintenance procedures, or training.

Section 68.171–174. Reserved

Section 68.175. Prevention program/Program 3.

(a) For each Program 3 process, the owner or operator shall provide the information indicated in paragraphs (b) through (p) of this section. If the same information applies to more than one covered process, the owner or operator may provide the information only once, but shall indicate to which processes the information applies.

(b) The five-or six-digit NAICS code that most closely corresponds to the process.

(c) The name(s) of the substance(s) covered.

(d) The date on which the safety information was last reviewed or revised.

(e) The date of completion of the most recent Process Hazard Analysis (PHA) or update and the technique used.

(1) The expected date of completion of any changes resulting from the PHA;

(2) Major hazards identified;

(3) Process controls in use;

(4) Mitigation systems in use;

(5) Monitoring and detection systems in use; and

(6) Changes since the last PHA.

(f) The date of the most recent review or revision of operating procedures.

(g) The date of the most recent review or revision of training programs;

(1) The type of training provided - classroom, classroom plus on the job, on the job; and

(2) The type of competency testing used.

(h) The date of the most recent review or revision of maintenance procedures and the date of the most recent equipment inspection or test and the equipment inspected or tested.

(i) The date of the most recent change that triggered management of change procedures and the date of the most recent review or revision of management of change procedures.

(j) The date of the most recent pre-startup review.

(k) The date of the most recent compliance audit and the expected date of completion of any changes resulting from the compliance audit;

(*l*) The date of the most recent incident investigation and the expected date of completion of any changes resulting from the investigation;

(m) The date of the most recent review or revision of employee participation plans;

(n) The date of the most recent review or revision of hot work permit procedures;

(*o*) The date of the most recent review or revision of contractor safety procedures; and

(p) The date of the most recent evaluation of contractor safety performance.

Section 68.176–179. Reserved

Section 68.180. Emergency response program.

(a) The owner or operator shall provide in the RMP the following information:

(1) Whether he or she has a written emergency response plan;

(2) Whether the plan includes specific actions to be taken in response to an accidental release of a regulated substance;

(3) Whether the plan includes procedures for informing the public and local agencies responsible for responding to accidental releases;

(4) Whether the plan includes information on emergency health care;

(5) The date of the most recent review or update of the emergency response plan; and

(6) The date of the most recent emergency response training for employees.

(b) The owner or operator shall provide the name and telephone number of the local agency with which emergency response activities and the emergency response plan is coordinated.

(c) The owner or operator shall list other Federal or State emergency plan requirements to which the stationary source is subject.

Section 68.181–184. Reserved

Section 68.185. Certification.

(a) For Program 1 processes, the owner or operator shall submit in the RMP the certification statement provided in Section 68.12(b)(4).

(b) For all other covered processes, the owner or operator shall submit in the RMP a single certification that, to the best of the singer's knowledge, information, and belief formed after reasonable inquiry, the information submitted is true, accurate, and complete.

Section 68.186–189. Reserved

Section 68.190. Updates.

(a) The owner or operator shall review and update the RMP as specified in paragraph (b) of this section and submit it in a method and format to a central point specified by EPA as of the date of submission.

(b) The owner or operator of a stationary source shall revise and update the RMP submitted under Section 68.150 as follows:

(1) At least once every five years from the date of its initial submission or most recent update required by paragraphs (b)(2) through (b)(7) of this section, whichever is later. For purposes of determining the date of initial submissions, RMPs submitted before June 21, 1999 are considered to have been submitted on that date.

(2) No later than three years after a newly regulated substance is first listed by EPA;

(3) No later than the date on which a new regulated substance is first present in an already covered process above a threshold quantity;

(4) No later than the date on which a regulated substance is first present above a threshold quantity in a new process;

(5) Within six months of a change that requires a revised PHA or hazard review;

(6) Within six months of a change that requires a revised offsite consequence analysis as provided in Section 68.36; and

(7) Within six months of a change that alters the Program level that applied to any covered process.

(c) If a stationary source is no longer subject to this part, the owner or operator shall submit a deregistration to EPA within six months indicating that the stationary source is no longer covered.

Section 68.191–194. Reserved

Section 68.195. Required corrections.

The owner or operator of a stationary source for which a RMP was submitted shall correct the RMP as follows:

(a) New accident history information — For any accidental release meeting the five-year accident history reporting criteria of Sec. 68.42 and occurring after April 9, 2004, the owner or operator shall submit the data required under Secs. 68.168, 68.170(j), and 68.175(1) with respect to that accident within six months of release or by the time the RMP is updated under Sec. 68.190, whichever is earlier.

(b) Emergency contact information — Beginning June 21, 2004, within one month of any change in the emergency contact information required under Sec. 68.160(b)(6), the owner or operator shall submit a correction of that information.

Section 68.196–199. Reserved

SUBPART H OTHER REQUIREMENTS

Section 68.200. Recordkeeping.

The owner or operator shall maintain records supporting the implementation of this part for five years unless otherwise provided in subpart D of this part.

Section 68.201–209. Reserved

Section 68.210. Availability of information to the public.

(a) The RMP required under subpart G of this part shall be available to the public under 42 U.S.C. 7414(c).

(b) The disclosure of classified information by the Department of Defense or other Federal agencies or contractors of such agencies shall be controlled by applicable laws, regulations, or executive orders concerning the release of classified information.

Section 68.211–214. Reserved

Section 68.215. Permit content and Department requirements.

(a) These requirements apply to any stationary source subject to 61–62.68 and 61–62.70. The 61–62.70 permit for the stationary source shall contain:

(1) A statement listing this part as an applicable requirement;

(2) Conditions that require the source owner or operator to submit:

(i) A compliance schedule for meeting the requirements of this part by the date provided in Section 68.10(a) or;

(ii) As part of the compliance certification submitted under section 61–62.70.6(c)(5), a certification statement that the source is in compliance with all requirements of this part, including the registration and submission of the RMP.

(b) The owner or operator shall submit any additional relevant information requested by the Department.

(c) For 61–62.70 permits issued prior to the deadline for registering and submitting the RMP and which do not contain permit conditions described in paragraph (a) of this section, the owner or operator or the Department shall initiate permit revision or reopening according to the procedures of section 61–62.70.7 to incorporate the terms and conditions consistent with paragraph (a) of this section.

(d) The Department will, at a minimum:

(1) Verify that the source owner or operator has registered and submitted an RMP or a revised plan when required by this part;

(2) Verify that the source owner or operator has submitted a source certification or in its absence has submitted a compliance schedule consistent with paragraph (a)(2) of this section;

(3) For some or all of the sources subject to this section, use one or more mechanisms such as, but not limited to, a completeness check, source audits, record reviews, or facility inspections to ensure that permitted sources are in compliance with the requirements of this part; and

(4) Initiate enforcement action based on paragraphs (d)(1) and (d)(2) of this section as appropriate.

Section 68.216–219. Reserved

Section 68.220. Audits.

(a) The State may partially delegate the authority to implement and enforce the requirements of this section to a State agency or agencies other than the Department. An up-to-date copy of any delegation instrument will be maintained by the Department. The Department may enter a written agreement with the Administrator under which EPA will implement and enforce the requirements of this section.

(b) In addition to inspections for the purpose of regulatory development and enforcement of the Act, the Department, or the agency designated by delegation or agreement under paragraph (a) of this section, will periodically audit RMP's submitted under subpart G of this part to review the adequacy of such RMP's and require revisions of RMP's when necessary to ensure compliance with subpart G of this part.

(c) The Department, or the agency designated by delegation or agreement, will select stationary sources for audits based on any of the following criteria:

(1) Accident history of the stationary source;

(2) Accident history of other stationary sources in the same industry;

(3) Quantity of regulated substances present at the stationary source;

(4) Location of the stationary source and its proximity to the public and environmental receptors;

(5) The presence of specific regulated substances;

(6) The hazards identified in the RMP; and

(7) A plan providing for neutral, random oversight.

(d) Exemption from audits. A stationary source with a Star or Merit ranking under OSHA's voluntary protection program shall be exempt from audits under paragraph (c)(2) and (c)(7) of this section.

(e) The owner or operator of a stationary source subject to this part shall provide the Department, or the agency designated by delegation or agreement, access to the stationary source, supporting documentation, and any area where an accidental release could occur.

(f) Based on the audit, the Department, or the agency designated by delegation or agreement, may issue the owner or operator of a stationary source a written preliminary determination of necessary revisions to the stationary source's RMP to ensure that the RMP meets the criteria of subpart G of this part. The preliminary determination will include an explanation for the basis for the revisions, reflecting industry standards and guidelines (such as AIChE/CCPS guidelines and ASME and API standards) to the extent that such standards and guidelines are applicable, and will include a timetable for their implementation.

(g) Written response to a preliminary determination.

(1) The owner or operator shall respond in writing to a preliminary determination made in accordance with paragraph (f) of this section. The response shall state the owner or operator will implement the revisions contained in the preliminary determination in accordance with the timetable included in the preliminary determination or shall state that the owner or operator rejects the revisions in whole or in part. For each rejected revision, the owner or operator shall explain the basis for rejecting such revision. Such explanation may include substitute revisions.

(2) The owner or operator shall provide written response in accordance with paragraph (g)(1) to the Department, or the agency designated by delegation or agreement, within ninety (90) days of issuance of the preliminary determination or a shorter period of time as the Department, or the agency designated by delegation or agreement, specifies in the preliminary determination as necessary to protect public health and the environment. Prior to the written response being due and upon written request from the owner or operator, the Department, or the agency designated by delegation or agreement, may provide in writing additional time for the response to be received.

(h) After providing the owner or operator an opportunity to respond under paragraph (g) of this section, the Department, or the agency designated by delegation or agreement, may issue the owner or operator a written final determination of necessary revisions to the stationary source's RMP. The final determination may adopt or modify the revisions contained in the preliminary determination under paragraph (f) of this section or may adopt or modify the substitute revisions provided in the response under paragraph (g) of this section. A final determination that adopts a revision rejected by the owner or operator shall include an explanation of the basis for the revision. A final determination that fails to adopt a substitute revision provided under paragraph (g) of this section shall include an explanation of the basis for finding such substitute revision unreasonable.

(i) Thirty (30) days after completion of the actions detailed in the implementation schedule set in the final determination under paragraph (h) of this section, the owner or operator shall be in violation of subpart G of this part and this section unless the owner or operator revises the RMP prepared under subpart G of this part as required by the final determination, and submits the revised RMP as required under Section 68.150.

(j) The public shall have access to the preliminary determinations, responses, and final determinations under this section in a manner consistent with Section 68.210.

(k) Nothing in this section shall preclude, limit, or interfere in any way with the authority of EPA, the Department, or the agency designated by delegation or agreement, to exercise its enforcement, investigatory, and information gathering authorities concerning this part under other State or Federal Statutes.

Appendix A to part 68

Appendix A - Table of Toxic Endpoints
[As defined in Section 68.22 of this part]

CAS Number	Chemical Name Chemical Name	Toxic endpoint (mg/L)
107–02–8	Acrolein [2-Propenal]	0.0011
107–13–1	Acrylonitrile [2-Propenenitrile]	0.076
814–68–6	Acrylyl chloride [2-Propenoyl chloride]	0.00090
107–18–6	Allyl alcohol [2-Propen-1-ol]	0.036
107–11–9	Allylamine [2-Propen-1-amine]	0.0032
7664–41–7	Ammonia (anhydrous)	0.14
7664–41–7	Ammonia (conc. 20% or greater)	0.14
7784–34–1	Arsenous trichloride	0.010
7784–42–1	Arsine	0.0019
10294–34–5	Boron trichloride [Borane, trichloro-]	0.010
7637–07–2	Boron trifluoride [Borane, trifluoro-]	0.028
353–42–4	Boron trifluoride compound with methyl ether (1:1) [Boron, trifluoro[oxybis[methane]], (T-4)-]	0.023
7726–95–6	Bromine	0.0065
75–15–0	Carbon disulfide	0.16
7782–50–5	Chlorine	0.0087
10049–04–4	Chlorine dioxide [Chlorine oxide (ClO_2)]	0.0028
67–66–3	Chloroform [Methane, trichloro-]	0.49
542–88–1	Chloromethyl ether [Methane, oxybis[chloro-]	0.00025
107–30–2	Chloromethyl methyl ether [Methane, chloromethoxy-]	0.0018

CAS Number	Chemical Name Chemical Name	Toxic endpoint (mg/L)
4170–30–3	Crotonaldehyde [2-Butenal]	0.029
123–73–9	Crotonaldehyde, (E)-, [2-Butenal, (E)-]	0.029
506–77–4	Cyanogen chloride	0.030
108–91–8	Cyclohexylamine [Cyclohexanamine]	0.16
19287–45–7	Diborane	0.0011
75–78–5	Dimethyldichlorosilane [Silane, dichlorodimethyl-]	0.026
57–14–7	1,1-Dimethylhydrazine [Hydrazine, 1,1-dimethyl-]	0.012
106–89–8	Epichlorohydrin [Oxirane, (chloromethyl)-]	0.076
107–15–3	Ethylenediamine [1,2-Ethanediamine]	0.49
151–56–4	Ethyleneimine [Aziridine]	0.018
75–21–8	Ethylene oxide [Oxirane]	0.090
7782–41–4	Fluorine	0.0039
50–00–0	Formaldehyde (solution)	0.012
110–00–9	Furan	0.0012
302–01–2	Hydrazine	0.011
7647–01–0	Hydrochloric acid (conc. 37% or greater)	0.030
74–90–8	Hydrocyanic acid	0.011
7647–01–0	Hydrogen chloride (anhydrous) [Hydrochloric acid]	0.030
7664–39–3	Hydrogen fluoride/Hydrofluoric acid (conc. 50% or greater) [Hydrofluoric acid]	0.016
7783–07–5	Hydrogen selenide	0.00066
7783–06–4	Hydrogen sulfide	0.042
13463–40–6	Iron, pentacarbonyl- [Iron carbonyl ($Fe(CO)_5$), (TB-5–11)-]	0.00044
78–82–0	Isobutyronitrile [Propanenitrile, 2-methyl-]	0.14
108–23–6	Isopropyl chloroformate [Carbonochloridic acid, 1-methylethyl ester]	0.10
126–98–7	Methacrylonitrile [2-Propenenitrile, 2-methyl-]	0.0027
74–87–3	Methyl chloride [Methane, chloro-]	0.82
79–22–1	Methyl chloroformate [Carbonochloridic acid, methyl ester]	0.0019
60–34–4	Methyl hydrazine [Hydrazine, methyl-]	0.0094
624–83–9	Methyl isocyanate [Methane, isocyanato-]	0.0012
74–93–1	Methyl mercaptan [Methanethiol]	0.049
556–64–9	Methyl thiocyanate [Thiocyanic acid, methyl ester]	0.085
75–79–6	Methyltrichlorosilane [Silane, trichloromethyl-]	0.018
13463–39–3	Nickel carbonyl	0.00067
7697–37–2	Nitric acid (conc. 80% or greater)	0.026
10102–43–9	Nitric oxide [Nitrogen oxide (NO)]	0.031
8014–95–7	Oleum (Fuming Sulfuric acid) [Sulfuric acid, mixture with sulfur trioxide]	0.010
79–21–0	Peracetic acid [Ethaneperoxoic acid]	0.0045
594–42–3	Perchloromethylmercaptan [Methanesulfenyl chloride, trichloro-]	0.0076
75–44–5	Phosgene [Carbonic dichloride]	0.00081
7803–51–2	Phosphine	0.0035
10025–87–3	Phosphorus oxychloride [Phosphoryl chloride]	0.0030
7719–12–2	Phosphorus trichloride [Phosphorous trichloride]	0.028
110–89–4	Piperidine	0.022
107–12–0	Propionitrile [Propanenitrile]	0.0037
109–61–5	Propyl chloroformate [Carbonochloridic acid, propyl ester]	0.010
75–55–8	Propyleneimine [Aziridine, 2-methyl-]	0.12
75–56–9	Propylene oxide [Oxirane, methyl-]	0.59
7446–09–5	Sulfur dioxide (anhydrous)	0.0078

CAS Number	Chemical Name Chemical Name	Toxic endpoint (mg/L)
7783–60–0	Sulfur tetrafluoride [Sulfur fluoride (SF_4), (T-4)-]	0.0092
7446–11–9	Sulfur trioxide	0.010
75–74–1	Tetramethyllead [Plumbane, tetramethyl-]	0.0040
509–14–8	Tetranitromethane [Methane, tetranitro-]	0.0040
7750–45–0	Titanium tetrachloride [Titanium chloride ($TiCl_4$), (T-4)-]	0.020
584–84–9	Toluene 2,4-diisocyanate [Benzene, 2,4-diisocyanato-1-methyl-]	0.0070
91–08–7	Toluene 2,6-diisocyanate [Benzene, 1,3-diisocyanato-2-methyl-]	0.0070
26471–62–5	Toluene diisocyanate (unspecified isomer) [Benzene,1,3-diisocyanatomethyl-]	0.0070
75–77–4	Trimethylchlorosilane [Silane, chlorotrimethyl-]	0.050
108–05–4	Vinyl acetate monomer [Acetic acid ethenyl ester]	0.26

HISTORY: Added by State Register Volume 22, Issue No. 8, eff August 28, 1998; Amended by State Register Volume 23, Issue 11, eff November 26, 1999; State Register Volume 25, Issue No. 10, eff October 26, 2001; State Register Volume 28, Issue No. 9, eff September 24, 2004; SCSR43–1 Doc. No. 4870, eff January 25, 2019.

61–62.70. Title V Operating Permit Program.

Editor's Note

Unless noted otherwise, the following constitutes the history for 61–62.70, 70.1 through 70.9.

HISTORY: Added by State Register Volume 17, Issue No. 9, eff September 24, 1993; Amended by State Register Volume 18, Issue No. 5, eff May 27, 1994; State Register Volume 19, Issue No. 2, eff February 24, 1995; State Register Volume 22, Issue No. 8, eff August 28, 1998; State Register Volume 25, Issue No. 10, eff October 26, 2001; State Register Volume 26, Issue No. 8, eff August 23, 2002; State Register Volume 27, Issue No. 6, Part 1, eff June 27, 2003; State Register Volume 28, Issue No. 9, eff September 24, 2004; State Register Volume 32, Issue No. 10, eff October 24, 2008.

70.1. Program overview.

(a) The regulations in this part provide for the establishment of comprehensive State air quality permitting systems consistent with the requirements of Title V of the Clean Air Act (Act) (42 U.S.C. 7401, et seq.). These regulations define the minimum elements required for South Carolina's Part 70 operating permit program and the corresponding standards.

(b) All sources subject to these regulations shall have a permit to operate that assures compliance by the source with all applicable requirements. While Title V of the Clean Air Act does not impose substantive new requirements, it does require that fees be imposed on sources and that certain procedural measures be adopted especially with respect to compliance.

(c) Nothing in this part shall prevent the Department from establishing additional or more stringent requirements not inconsistent with this Act. The U.S. Environmental Protection Agency will approve South Carolina's program submittal to the extent that it is not inconsistent with the Act and the federal Part 70 regulations. No permit, however, can be less stringent than necessary to meet all applicable requirements. In the case of federal intervention in the permit process, the Administrator reserves the right to implement the State operating permit program, in whole or in part, or the federal program contained in regulations promulgated under Title V of the Act.

(d) The requirements of Part 70, including provisions regarding schedules for submission and approval or disapproval of permit applications, shall apply to the permitting of affected sources under the acid rain program, except as provided herein or modified in regulations promulgated under Title IV of the Act (acid rain program).

(e) Issuance of state permits under this part may be coordinated with issuance of permits under other applicable laws, whether issued by state or federal agencies.

(f) [Reserved]

(g) Severability. If any section, subsection, phrase, clause, or portion of this regulation, or the applicability to any person, is adjudged to be unconstitutional or invalid for any reason by a court of competent jurisdiction, the remaining portions of this regulation shall not be affected.

HISTORY: Amended by State Register Volume 36, Issue No. 3, eff March 23, 2012 (errata); State Register Volume 40, Issue No. 6, Doc. No. 4590, eff. June 24, 2016.

70.2. Definitions.

(a) "Act" means the Clean Air Act, as amended, 42 U.S.C. 7401, et seq.

(b) "Administrator" means the Administrator of the United States Environmental Protection Agency (EPA) or his designee.

(c) "Affected source" means a source that includes one or more affected units that are subject to the acid rain provisions under Title IV of the Act.

(d) "Affected States" are:

(1) The States of Georgia and/or North Carolina if, as determined by the Department, their air quality may be directly affected by emissions from the facility seeking a Part 70 permit, permit modification or permit renewal being proposed; or

(2) That are within 50 miles of the permitted source.

(e) "Affected unit" means a unit that is subject to the acid rain emission reduction requirements or limitations and regulations promulgated under Title IV of the Act.

(f) "Applicable requirement" means all of the following as they apply to emissions units in a Part 70 source subject to these regulations (including requirements that have been promulgated or approved by EPA through rulemaking at the time of issuance but have future-effective compliance dates):

(1) Any standard or other requirement provided for in the South Carolina State Implementation Plan approved or promulgated by EPA through rulemaking under Title I of the Act that implements the pertinent requirements of the Act, including any revisions to that plan promulgated in 40 Code of Federal Regulations (CFR) Part 52;

(2) Any term or condition of any preconstruction permits issued pursuant to regulations approved or promulgated through rulemaking under Title I, including Parts C or D, of the Act;

(3) Any standard or other requirement under Section 111 of the Act, including Section 111(d);

(4) Any standard or other requirement under Section 112 of the Act, including any requirement concerning accident prevention under Section 112(r)(7) of the Act;

(5) Any standard or other requirement of the acid rain program under Title IV of the Act or the regulations promulgated thereunder;

(6) Any requirements established pursuant to Section 504(b) or Section 114(a)(3) of the Act;

(7) Any standard or other requirement governing solid waste incineration, under Section 129 of the Act;

(8) Any standard or other requirement for consumer and commercial products, under Section 183(e) of the Act;

(9) Any standard or other requirement for tank vessels, under Section 183(f) of the Act;

(10) Any standard or other requirement of the program to control air pollution from outer continental shelf sources, under Section 328 of the Act;

(11) Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the Act, unless the Administrator has determined that such requirements need not be contained in a Title V permit; and

(12) Any national ambient air quality standard or increment or visibility requirement under Part C of Title I of the Act, but only as it would apply to temporary sources permitted pursuant to Section 504(e) of the Act.

(g) "Area source" means any stationary source of hazardous air pollutants that is not a major source.

(h) "Department" means the Department of Health and Environmental Control.

(i) "Designated representative" means a responsible person or official authorized by the owner or operator of a unit to represent the owner or operator in matters pertaining to the holding, transfer, or disposition of allowances allocated to a unit, and the submission of and compliance with permits, permit applications, and compliance plans for the unit under acid rain requirements of Title IV of the Act and regulations promulgated thereunder.

(j) "Draft permit" means the version of a permit for which the Department offers public participation under Section 70.7(h) or affected State review under Section 70.8.

(k) "Effective date" of this Part 70 regulation, including any partial or interim program approved under this Part, shall be the effective date of approval by the Administrator as published in the Federal Register.

(*l*) "Emissions allowable under the permit" means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

(m) "Emissions unit" means any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant or any pollutant listed under Section 112(b) of the Act. This term is not meant to alter or affect the definition of the term "unit" for purposes of the Title IV acid rain requirements of the Act.

(n) The "EPA" means the Administrator of the U.S. Environmental Protection Agency or his designee.

(*o*) "Final permit" means the version of a Part 70 permit issued by the Department that has completed all review procedures required by Sections 70.7 and 70.8.

(p) "Fugitive emissions" are those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally-equivalent opening.

(q) "General permit" means a Part 70 permit that meets the requirements of Section 70.6(d).

(r) "Major source" means any stationary source (or any group of stationary sources that are located on one or more contiguous or adjacent properties, and are under common control of the same person (or persons under common control)) belonging to a single major industrial grouping and that are described in paragraphs (1), (2), or (3) of this definition. For the purposes of defining "major source," a stationary source or group of stationary sources shall be considered part of a single industrial grouping if all of the pollutant emitting activities at such source or group of sources on contiguous or adjacent properties belong to the same Major Group (that is, all have the same two-digit code) as described in the Standard Industrial Classification Manual, latest revision.

(1) A major source under Section 112 of the Act, which is defined as:

(i) For pollutants other than radionuclides, any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit, in the aggregate, 10 tons per year (tpy) or more of any hazardous air pollutant which has been listed pursuant to Section 112(b) of the Act, 25 tpy or more of any combination of such hazardous air pollutants, or such lesser quantity as the Administrator may establish by rule. Notwithstanding the preceding sentence, emissions from any oil or gas exploration or production well (with its associated equipment) and emissions from any pipeline compressor or pump station shall not be aggregated with emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are major sources; or

(ii) For radionuclides, "major source" shall have the meaning specified by the Administrator by rule.

(2) A major stationary source of air pollutants, as defined in Section 302 of the Act, that directly emits or has the potential to emit, 100 tpy or more of any air pollutant (including any major source of fugitive emissions of any such pollutant, as determined by rule by the Administrator). The fugitive emissions of a stationary source shall not be considered in determining whether it is a major stationary source for the purposes of Section 302(j) of the Act, unless the source belongs to one of the following categories of stationary source:

(i) Coal cleaning plants (with thermal dryers);

(ii) Kraft pulp mills;

(iii) Portland cement plants;

(iv) Primary zinc smelters;

(v) Iron and steel mills;

(vi) Primary aluminum ore reduction plants;

(vii) Primary copper smelters;

(viii) Municipal incinerators capable of charging more than 250 tons of refuse per day;

(ix) Hydrofluoric, sulfuric, or nitric acid plants;

(x) Petroleum refineries;

(xi) Lime plants;

(xii) Phosphate rock processing plants;

(xiii) Coke oven batteries;

(xiv) Sulfur recovery plants;

(xv) Carbon black plants (furnace process);

(xvi) Primary lead smelters;

(xvii) Fuel conversion plant;

(xviii) Sintering plants;

(xix) Secondary metal production plants;

(xx) Chemical process plants - The term chemical processing plant shall not include ethanol production facilities that produce ethanol by natural fermentation included in North American Industrial Classification System (NAICS) codes 325193 or 312140;

(xxi) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;

(xxii) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;

(xxiii) Taconite ore processing plants;

(xxiv) Glass fiber processing plants;

(xxv) Charcoal production plants;

(xxvi) Fossil-fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input; or

(xxvii) Any other stationary source category, which as of August 7, 1980, is being regulated under Section 111 or 112 of the Act;

(3) A major stationary source as defined in Part D of Title I of the Act, including:

(i) For ozone nonattainment areas, sources with the potential to emit 100 tpy or more of volatile organic compounds or oxides of nitrogen in areas classified as "marginal" or "moderate," 50 tpy or more in areas classified as "serious," 25 tpy or more in areas classified as "severe," and 10 tpy or more in areas classified as "extreme"; except that the references in this paragraph to 100, 50, 25, and 10 tpy of nitrogen oxides shall not apply with respect to any source for which the Administrator has made a finding, under Section 182(f)(1) or (2) of the Act, that requirements under Section 182(f) of the Act do not apply;

(ii) For ozone transport regions established pursuant to Section 184 of the Act, sources with the potential to emit 50 tpy or more of volatile organic compounds;

(iii) For carbon monoxide nonattainment areas (1) that are classified as "serious," and (2) in which stationary sources contribute significantly to carbon monoxide levels as determined under rules issued by the Administrator, sources with the potential to emit 50 tpy or more of carbon monoxide; and

(iv) For particulate matter (PM_{10}) nonattainment areas classified as "serious," sources with the potential to emit 70 tpy or more of PM_{10}.

(s) "Non-major source" means a source that is not major under this Part.

(t) "Part 70 permit" or "permit" (unless the context suggests otherwise) means any permit or group of permits covering a Part 70 source that is issued, renewed, amended, or revised pursuant to this Part.

(u) "Part 70 program" or "State program" means a program approved by the Administrator under this Part.

(v) "Part 70 source" means any source subject to the permitting requirements of this Part, as provided in Sections 70.3(a) and 70.3(b).

(w) "Permit modification" means a revision to a Part 70 permit that meets the requirements of Section 70.7(e).

(x) "Permit revision" means any permit modification or administrative permit amendment.

(y) "Potential to emit" means the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation is federally enforceable by the Administrator. This term does not alter or affect the use of this term for any other purposes under the Act, or the term "capacity factor" as used in the Title IV acid rain requirements of the Act or the regulations promulgated thereunder.

(z) "Proposed permit" means the version of a permit that the Department proposes to issue and forwards to the Administrator for review in compliance with Section 70.8.

(aa) "Regulated air pollutant" means the following:

(1) Nitrogen oxides or any volatile organic compounds;

(2) Any pollutant for which a national ambient air quality standard has been promulgated;

(3) Any pollutant that is subject to any standard promulgated under Section 111 of the Act;

(4) Any Class I or II substance subject to a standard promulgated under or established by Title VI of the Act; or

(5) Any pollutant subject to a standard promulgated under Section 112 or other requirements established under Section 112 of the Act, including Sections 112(g), (j), and (r) of the Act, including the following:

(i) Any pollutant subject to requirements under Section 112(j) of the Act. If the Administrator fails to promulgate a standard by the date established pursuant to Section 112(e) of the Act, any pollutant for which a subject source would be major shall be considered to be regulated on the date 18 months after the applicable date established pursuant to Section 112(e) of the Act; and

(ii) Any pollutant for which the requirements of Section 112(g)(2) of the Act have been met, but only with respect to the individual source subject to Section 112(g)(2) requirement.

(bb) "Renewal" means the process by which a permit is reissued at the end of its term.

(cc) "Responsible official" means one of the following:

(1) For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

(i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars); or

(ii) The delegation of authority to such representative is approved in advance by the Department;

(2) For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

(3) For a municipality, state, federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this Part, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (for example, a Regional Administrator of EPA); or

(4) For affected sources:

(i) The designated representative in so far as actions, standards, requirements, or prohibitions under the Title IV acid rain requirements of the Act or the regulations promulgated thereunder are concerned; and

(ii) The designated representative for any other purposes under Part 70.

(dd) "Section 111" means that portion of the Clean Air Act that addresses New Source Performance Standards (NSPS).

(ee) "Section 112" means that portion of the Clean Air Act that addresses standards for hazardous air pollutants.

(ff) "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

(gg) "Stationary source" means any building, structure, facility, or installation that emits or may emit any regulated air pollutant or any pollutant listed under Section 112(b) of the Act.

(hh) "Title I modification or modification under any provision of Title I of the Act" means any modification under Sections 111 or 112 of the Act and any physical change or change in method of operations that is subject to the preconstruction regulations promulgated under Part C and D of the Act.

(ii) "Title III" means that portion of the Clean Air Act that addresses requirements for the administration and control of emissions of toxic air pollutants.

(jj) "Title IV" means that portion of the Clean Air Act that addresses requirements for the administration and control of air emissions contributing to acid deposition (acid rain).

(kk) "Title V" means that portion of the Clean Air Act that established the requirements for federal operating permits, permit fees, and approval of comparable State programs.

(ll) "Title VI" means that portion of the Clean Air Act that provides for Stratospheric Ozone and Global Climate Protection, primarily through the control and reduction of emissions of chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs).

(mm) "Title VII" means that portion of the Clean Air Act that addresses enforcement of the Act, including the provisions for civil, administrative, and criminal penalties (as codified in Section 113 of the Act).

HISTORY: Amended by State Register Volume 36, Issue No. 3, eff March 23, 2012 (errata); State Register Volume 36, Issue No. 9, eff September 28, 2012 (errata); State Register Volume 37, Issue No. 4, eff April 26, 2013; State Register Volume 37, Issue No. 12, eff December 27, 2013.

70.3. Applicability.

(a) Part 70 sources. The following sources are subject to the permitting requirements of this Part:

(1) Any major source;

(2) Any source, including an area source, subject to a standard, limitation, or other requirement under Section 111 of the Act;

(3) Any source, including an area source, subject to a standard or other requirement under Section 112 of the Act, except that a source is not required to obtain a permit solely because it is subject to regulations or requirements under Section 112(r) of this Act;

(4) Any affected source under the Title IV Acid Rain Program;

(5) Any source in a source category designated by the Administrator pursuant to this Section; and

(b) Source category exemptions.

(1) All sources listed in Section 70.3(a) that are not major sources, affected sources, or solid waste incineration units required to obtain a permit pursuant to Section 129(e) of the Act, shall be exempted by the State from the obligation to obtain a Part 70 permit for 4 years after the effective date of the program or until such time as the Administrator completes a rulemaking to determine how the program should be structured for non-major sources and the appropriateness of any permanent exemptions in addition to those provided for in Section 70.3(b)(4).

(2) In the case of non-major sources subject to a standard or other requirement under either Section 111 or Section 112 of the Act after July 21, 1992, publication, the Administrator will determine whether to exempt any or all such applicable sources from the requirement to obtain a Part 70 permit at the time that the new standard is promulgated.

(3) [Reserved]

(4) The following source categories are exempted from the obligation to obtain a Part 70 permit, but are not exempted from other Department and EPA requirements:

(i) All sources and source categories that would be required to obtain a permit solely because they are subject to Part 60, Subpart AAA – Standards of Performance for New Residential Wood Heaters; and

(ii) All sources and source categories that would be required to obtain a permit solely because they are subject to Part 61, Subpart M - National Emission Standard for Hazardous Air Pollutants for Asbestos, Section 61.145, Standard for Demolition and Renovation.

(c) Emissions units and Part 70 sources.

(1) For major sources, the permitting authority shall include in the permit all applicable requirements for all relevant emissions units in the major source.

(2) For any non-major source subject to the Part 70 program under Sections 70.3(a) or (b), the Department shall include in the permit all applicable requirements that apply to emissions units that cause the source to be subject to the Part 70 program.

(d) Fugitive emissions. Fugitive emissions from a Part 70 source shall be included in the permit application and the Part 70 permit in the same manner as stack emissions, regardless of whether the source category in question is included in the list of sources contained in the definition of major source.

(e) Applicability Determinations. Any person that operates or proposes to operate a particular source or installation may submit a request in writing that the Department make a determination as to whether a particular source or installation is subject to the permit requirements of this regulation. The request must contain such information as is believed sufficient for the Department to make the requested determination. The Department may request any additional information that it needs for purposes of making the determination.

HISTORY: Amended by State Register Volume 36, Issue No. 3, eff March 23, 2012 (errata); State Register Volume 37, Issue No. 12, eff December 27, 2013; SCSR43–1 Doc. No. 4870, eff January 25, 2019.

70.5. Permit applications.

(a) Duty to apply. For each Part 70 source, the owner or operator shall submit a timely and complete permit application in accordance with this Section.

(1) Timely application.

(i) A timely application for a source applying for a Part 70 permit for the first time is one that is submitted within 12 months after the source becomes subject to the permit program or on or before such earlier date as the Department may establish.

(ii) Part 70 sources required to meet the requirements under Section 112(g) of the Act, or to have a permit under the preconstruction review program approved into the South Carolina Implementation Plan under Part C or D of Title I of the Act, shall file a complete application to obtain the Part 70 permit or permit revision within 12 months after commencing operation or on or before such earlier date as the permitting authority may establish. Where an existing Part 70 permit would prohibit such construction or change in operation, the source must obtain a permit revision before commencing operation.

(iii) For purposes of permit renewal, a timely application is one that is submitted at least 6 months prior to the date of permit expiration.

(iv) Applications for initial phase II acid rain permits shall be submitted to the Department by January 1, 1996, for sulfur dioxide, and by January 1, 1998, for nitrogen oxides.

(v) The applicant is encouraged to consult with Department personnel before submitting an application or, at any other time, concerning the operation, construction, expansion, or modification of any installation, or concerning the required pollution control devices or systems, the efficiency of such devices or systems, or the level of emissions related to the installation. In addition, a source that is required to obtain a preconstruction permit may submit an application for an operating permit or permit modification for concurrent processing. An operating permit application submitted for concurrent processing shall be submitted with the source's preconstruction review application or at such later time as the Department may allow.

(2) Complete application. To be deemed complete, an application must provide all information required pursuant to Section 70.5(c), except that applications for permit revision need supply such

information only if it is related to the proposed change. Information required under Section 70.5(c) must be sufficient to evaluate the subject source and its application and to determine all applicable requirements. A responsible official shall certify that the submitted information is consistent with Section 70.5(d).

(i) Unless the Department determines that an application is not complete within 60 days of receipt of the application, such application shall be deemed to be complete, except as otherwise provided in Section 70.7(a)(4).

(ii) If, while processing an application that has been determined or deemed to be complete, the Department determines that additional information is necessary to evaluate or take final action on that application, it may request such information in writing and set a reasonable deadline for a response.

(iii) The source's ability to operate without a permit, as set forth in Section 70.7(b), shall be in effect from the date the application is determined or deemed to be complete until the final permit is issued, provided that the applicant submits any requested additional information by the deadline specified by the Department.

(iv) In submitting an application for renewal of an operating permit issued under these regulations, a source may identify terms and conditions in its previous permit that should remain unchanged and incorporate by reference those portions of its existing permit and previous permit application(s) and any subsequently issued permit amendment(s) or modification(s) that describe products, processes, operations, and emissions to which those terms and conditions apply. The source must identify specifically and list which portions of its previous permit and/or applications are incorporated by reference. In addition, a renewal application must contain:

(A) Information specified in Section 70.5(c) for those products, processes, operations, and emissions that:

(1) Are not addressed in the existing permit;

(2) Are subject to applicable requirements that are not addressed in the existing permit; or

(3) As to which the source seeks permit terms and conditions that differ from those in the existing permit; and

(B) A compliance plan and certification as required in Section 70.5(c)(8).

(3) Confidential information. Where a source has submitted information to the Department under a claim of confidentiality, the Department may also require the source to submit a copy of such information directly to the Administrator.

(b) Duty to supplement or correct application. Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, an applicant shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a draft permit.

(c) Standard application form and required information. Information as described below for each emissions unit at a Part 70 source shall be included in a Department approved application. Air emissions or air emission units that are insignificant are exempted. However, for these emission units which are exempted, a list of the emission units must be included in the application. "Insignificant Activity" generally means any air emissions or air emissions unit at a plant that has the potential to emit less than 5 tpy of any criteria pollutant or less than 1000 pounds per month of any compound listed in Regulation 61–62.5, Standard No. 8, Toxic Air Pollutants. The Department may determine that certain types or classes of units may be considered insignificant at higher emission levels, or that, due to the nature of the pollutant(s) emitted, a unit may be considered significant at a lower emission rate. The Department shall maintain a list subject to EPA approval of air emissions or air emission units which are considered to be insignificant. No emission or activity can be excluded from a Title V operating permit to the extent it is needed to determine compliance with an applicable requirement, as defined under Section 70.2(f) An application may not omit information needed to determine the applicability of, or to impose, any applicable requirement, or to evaluate the fee amount required

under the schedule approved pursuant to Section 70.9. The Department approved forms and attachments shall include the elements specified below:

(1) Identifying information, including company name and address (or plant name and address if different from the company name), owner's name and agent, and telephone number and names of plant site manager/contact.

(2) A description of the source's processes and products (by Standard Industrial Classification Code) including any associated with each alternate scenario identified by the source.

(3) The following emissions-related information:

(i) A permit application shall describe all emissions of regulated air pollutants emitted from any emissions unit, except where such units are exempted under Section 70.5(c). The Department shall require additional information related to the emissions of air pollutants sufficient to verify which requirements are applicable to the source, and other information necessary to collect any permit fees owed under the fee schedule approved pursuant to Section 70.9(b).

(ii) Identification and description of all points of emissions described in Section 70.5(c)(3)(i) in sufficient detail to establish the basis for fees and applicability of requirements of the Act.

(iii) Emissions rates in tons per year (tpy) and in such terms as are necessary to establish compliance consistent with the applicable standard reference test method(s).

(iv) The following information to the extent it is needed to determine or regulate emissions: fuels, fuel use, raw materials, production rates, and operating schedules.

(v) Identification and description of air pollution control equipment and compliance monitoring devices or activities.

(vi) Limitations on source operation affecting emissions or any work practice standards, where applicable, for all regulated pollutants at the Part 70 source.

(vii) Other information required by any applicable requirement (including information related to stack height limitations in Regulation 61–62.7).

(viii) Calculations on which the information in items (i) through (vii) above is based.

(4) The following air pollution control requirements:

(i) Citation and description of all applicable requirements, and

(ii) Description of or reference to any applicable test method for determining compliance with each applicable requirement.

(5) Other specific information that may be necessary for proper evaluation of the source as determined by the Department.

(6) An explanation of any proposed exemptions from otherwise applicable requirements.

(7) Additional information as determined to be necessary by the Department to define alternative operating scenarios identified by the source pursuant to Section 70.6(a)(9) or to define permit terms and conditions implementing Section 70.7(e)(5) or Section 70.6(a)(10).

(8) A compliance plan for all Part 70 sources that contains all the following:

(i) A description of the source's compliance status and where appropriate a compliance schedule with respect to all applicable requirements as follows:

(A) For applicable requirements with which the source is in compliance, a statement that during the permit term the source will continue to comply with such requirements.

(B) For applicable requirements that will become effective during the permit term, a statement that the source will meet such requirements on a timely basis, unless a more detailed schedule is expressly required by the applicable requirement.

(C) A schedule of compliance for sources that are not in compliance with all applicable requirements at the time of permit issuance. Such a schedule shall include a narrative description of how the source will achieve compliance with such requirements, a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with any applicable requirements for which the source will be in noncompliance at the time of permit issuance. This compliance schedule shall be at least as stringent as that contained in any judicial consent decree or administrative order to which the source is subject.

Any such schedule of compliance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based.

(ii) [Reserved]

(iii) [Reserved]

(iv) A schedule for submission of certified progress reports no less frequently than every 6 months for sources required to have a schedule of compliance to remedy a violation.

(v) The compliance plan content requirements specified in this paragraph shall apply and be included in the acid rain portion of a compliance plan for an affected source, except as specifically superseded by regulations promulgated under Title IV of the Act with regard to the schedule and method(s) the source will use to achieve compliance with the acid rain emissions limitations.

(9) Compliance certification requirements as follows:

(i) A certification of compliance with all applicable requirements by a responsible official consistent with Section 70.5(d) and Section 114(a)(3) of the Act;

(ii) A statement of methods used for determining compliance, including a description of monitoring, recordkeeping, and reporting requirements and test methods;

(iii) A schedule for annual submission of compliance certifications during the permit term, unless a more frequent schedule is specified by the underlying applicable requirement or by the Department; and

(iv) A statement indicating the source's compliance status with any applicable enhanced monitoring and compliance certification requirements of the Act.

(10) The use of nationally-standardized forms for acid rain portions of permit applications and compliance plans, as required by regulations promulgated under Title IV of the Act.

(d) Any application form, report, or compliance certification submitted pursuant to these regulations shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this part shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

HISTORY: Amended by State Register Volume 36, Issue No. 3, eff March 23, 2012 (errata); State Register Volume 36, Issue No. 9, eff September 28, 2012 (errata); State Register Volume 39, Issue No. 6, Doc. No. 4481, eff June 26, 2015.

70.6. Permit content.

(a) Standard permit requirements. Each permit issued under this Part shall include the following elements:

(1) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of permit issuance.

(i) The permit shall specify and reference the origin of and authority for each term or condition, and identify any difference in form as compared to the applicable requirement upon which the term or condition is based.

(ii) The permit shall state that, where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be incorporated into the permit and shall be enforceable by the Administrator.

(iii) If the Department allows the use of alternative emission limit(s) at a Part 70 source in the South Carolina State Implementation Plan, alternative emission limit(s), that are made in the permit issuance, renewal, or significant modification process, shall contain provisions to ensure that any resulting emissions limit has been demonstrated to be quantifiable, accountable, enforceable, and based on replicable procedures.

(2) The Department shall issue permits for a fixed term not to exceed 5 years. Sources subject to Title IV of the Act shall be issued permits with a fixed term of 5 years. Notwithstanding this requirement, the Department shall issue permits for solid waste incineration units combusting municipal waste subject to standards under Section 129(e) of the Act for a period not to exceed 12 years and shall review such permits at least every 5 years.

(3) Monitoring and related recordkeeping and reporting requirements.

(i) Each permit shall contain the following requirements with respect to monitoring:

(A) All monitoring and analysis procedures or test methods required under applicable monitoring and testing requirements, including 40 CFR 64, Compliance Assurance Monitoring (October 22, 1997, [64 FR 54900]), and any other procedures and methods that may be promulgated pursuant to Sections 114(a)(3) or 504(b) of the Clean Air Act Amendments of 1990. If more than one monitoring or testing requirement applies, the permit may specify a streamlined set of monitoring or testing provisions provided the specified monitoring or testing is adequate to assure compliance at least to the same extent as the monitoring or testing applicable requirements that are not included in the permit as a result of such streamlining;

(B) Where the applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring (which may consist of recordkeeping designed to serve as monitoring), periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit, as reported pursuant to Section 70.6(a)(3)(iii) below. Such monitoring requirements shall assure use of terms, test methods, units, averaging periods, and other statistical conventions consistent with the applicable requirement. Recordkeeping provisions may be sufficient to meet the requirements of Section 70.6(a)(3)(i)(B); and

(C) As necessary, requirements concerning the use, maintenance, and, where appropriate, installation of monitoring equipment or methods.

(ii) With respect to recordkeeping, the permit shall incorporate all applicable recordkeeping requirements and require, where applicable, the following:

(A) Records of required monitoring information that include the following:

(1) The date, place as defined in the permit, and time of sampling or measurements;

(2) The date(s) analyses were performed;

(3) The company or entity that performed the analyses;

(4) The analytical techniques or methods used;

(5) The results of such analyses; and

(6) The operating conditions as existing at the time of sampling or measurement;

(B) Retention of records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

(iii) With respect to reporting, the permit shall incorporate all applicable reporting requirements and require the following:

(A) Submittal of reports of any required monitoring at least every 6 months. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with Section 70.5(d).

(B) Prompt reporting of deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. The Department shall define "prompt" in relation to the degree and type of deviation likely to occur and the applicable requirements.

(4) A permit condition prohibiting emissions exceeding any allowances that the source lawfully holds under Title IV of the Act or the regulations promulgated thereunder.

(i) No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit revision under any other applicable requirement.

(ii) No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.

(iii) Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Act.

(5) A severability clause to ensure the continued validity of the various permit requirements in the event of a challenge to any portions of the permit.

(6) Provisions stating the following:

(i) The permittee must comply with all conditions of the Part 70 permit. Any permit noncompliance constitutes a violation of the South Carolina Pollution Control Act and/or the Clean Air Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

(ii) It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(iii) The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

(iv) The permit does not convey any property rights of any sort, or any exclusive privilege.

(v) The permittee shall furnish to the Department, within a reasonable time, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Department copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality. The Department may also request that the permittee furnish such records directly to the Administrator along with a claim of confidentiality.

(7) A provision to ensure that a Part 70 source pays fees to the Department consistent with the fee schedule approved pursuant to Section 70.9. Failure to pay applicable fee can be considered grounds for permit revocation.

(8) A provision stating that no permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit.

(9) Terms and conditions for reasonably anticipated operating scenarios identified by the source in its application as approved by the Department. Such terms and conditions:

(i) Shall require the source, contemporaneously with making a change from one operating scenario to another, to record in a log at the permitted facility a record of the scenario under which it is operating;

(ii) May extend the permit shield described in Section 70.6(f) to all terms and conditions under each such operating scenario; and

(iii) Must ensure that the terms and conditions of each such alternative scenario meet all applicable requirements and the requirements of this Part.

(10) Terms and conditions, if requested by the permit applicant and approved by the Department, for the trading of emissions increases and decreases in the permitted facility, to the extent that the applicable requirements provide for trading such increases and decreases without a case-by-case approval of each emissions trade. Such terms and conditions:

(i) Shall include all terms required under Sections 70.6(a) and (c) to determine compliance;

(ii) May extend the permit shield described in Section 70.6(f) to all terms and conditions that allow such increases and decreases in emissions; and

(iii) Must meet all applicable requirements and requirements of this Part.

(11) Risk Management Plans. If the source is required to develop and register a risk management plan pursuant to Section 112(r) of the Act, the permit need only specify that it will comply with the requirement to register such a plan. The content of the risk management plan need not itself be incorporated as a permit term.

(b) Federally-enforceable requirements.

(1) All terms and conditions in a Part 70 permit, including any provisions designed to limit a source's potential to emit, are enforceable by the Administrator and citizens under the Act.

(2) Notwithstanding Section 70.6(b)(1), the Department shall specifically designate as not being federally enforceable under the Act any terms and conditions included in the permit that are not required under the Act or under any of its applicable requirements. Terms and conditions so designated are not subject to the requirements of Sections 70.7, 70.8, or of this Section, other than those contained in Section 70.6(b).

(c) Compliance requirements. All Part 70 permits shall contain the following elements with respect to compliance:

(1) Consistent with Section 70.6(a)(3), compliance certification, testing, monitoring, reporting, and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit. Any document (including reports) required by a Part 70 permit shall contain a certification by a responsible official that meets the requirements of Section 70.5(d).

(2) Inspection and entry requirements that require that, upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Department or an authorized representative to perform the following:

(i) Enter upon the permittee's premises where a Part 70 source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;

(ii) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;

(iii) Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and

(iv) As authorized by the Clean Air Act and/or the South Carolina Pollution Control Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(3) A schedule of compliance consistent with Section 70.5(c)(8).

(4) Progress reports consistent with an applicable schedule of compliance and Section 70.5(c)(8) to be submitted at least semi-annually, or at a more frequent period if specified in the applicable requirement or by the Department. Such progress reports shall contain the following:

(i) Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

(ii) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

(5) Requirements for compliance certification with terms and conditions contained in the permit, including emission limitations, standards, or work practices. Permits shall include each of the following:

(i) A schedule for annual submission of compliance certifications during the permit term, unless a more frequent schedule is specified in the applicable requirement or by the Department;

(ii) In accordance with Section 70.6(a)(3), a means for monitoring the compliance of the source with its emissions limitations, standards, and work practices;

(iii) A requirement that the compliance certification include all of the following (provided that the identification of applicable information may cross-reference the permit or previous reports, as applicable):

(A) The identification of each term or condition of the permit that is the basis of the certification;

(B) The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period. Such methods and other means shall include, at a minimum, the methods and means required under paragraph (a)(3) of this section. If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section

113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information;

(C) The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the method or means designated in paragraph (c)(5)(iii)(B) of this section. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under Part 64 of this chapter occurred; and

(D) Such other facts as the permitting authority may require to determine the compliance status of the source.

(iv) A requirement that all compliance certifications be submitted to the Administrator as well as to the permitting authority.

(6) Such other provisions as the Department may require.

(d) General permits.

(1) The Department may, after notice and opportunity for public participation provided under Section 70.7(h), issue a general permit covering numerous similar sources. Any general permit shall comply with all requirements applicable to other Part 70 permits and shall identify criteria by which sources may qualify for the general permit. To sources that qualify, the Department shall grant the conditions and terms of the general permit. Notwithstanding the shield provisions of Section 70.6(f), the source shall be subject to enforcement action for operation without a Part 70 permit if the source is later determined not to qualify for the conditions and terms of the general permit. General permits shall not be authorized for affected sources under the acid rain program unless otherwise provided in regulations promulgated under Title IV of the Act.

(2) Part 70 sources that would qualify for a general permit must apply to the Department for coverage under the terms of the general permit or must apply for a Part 70 permit consistent with Section 70.5. The Department may, in the general permit, provide for applications which deviate from the requirements of Section 70.5, provided that such applications meet the requirements of Title V of the Act, and include all information necessary to determine qualification for, and to assure compliance with, the general permit. Without repeating the public participation procedures required under Section 70.7(h), the Department may grant a source's request for authorization to operate under a general permit, but such a grant shall not be a final permit action for purposes of judicial review.

(e) Temporary sources. The Department may issue a single permit authorizing emissions from similar operations by the same source owner or operator at multiple temporary locations. The operation must be temporary and involve at least one change of location during the term of the permit. No sources subject to Title IV of the Clean Air Act shall be permitted as a temporary source. Permits for temporary sources shall include the following:

(1) Conditions that will assure compliance with all applicable requirements at all authorized locations;

(2) Requirements that the owner or operator notify the Department at least 10 days in advance of each change in location; and

(3) Conditions that assure compliance with all other provisions of this Section.

(4) Such other conditions as the Department may require.

(f) Permit shield.

(1) The Department may expressly include in a Part 70 permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:

(i) Such applicable requirements are included and are specifically identified in the permit; or

(ii) The Department, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.

(2) A Part 70 permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.

(3) Nothing in Section 70.6(f) or in any Part 70 permit shall alter or affect the following:

(i) The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that Section;

(ii) The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

(iii) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act; or

(iv) The ability of EPA to obtain information from a source pursuant to Section 114 of the Act.

(4) The permit shield shall not apply to sources subject to Sections 70.7(e)(5) and 70.7(e)(2) and (3).

(g) Emergency provision.

(1) Definition. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

(2) Effect of an emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of Section 70.6(g)(3) are met.

(3) The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

(i) An emergency occurred and that the permittee can identify the cause(s) of the emergency;

(ii) The permitted facility was at the time being properly operated;

(iii) During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

(iv) The permittee shall submit verbal notification of the emergency to the Department within 24 hours of the time when emission limitations were exceeded, followed by written notification within 30 days. This notice fulfills the requirement of Section 70.6(a)(3)(iii)(B). This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

(4) In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

(5) This provision is in addition to any emergency or upset provision contained in any applicable requirement.

HISTORY: Amended by State Register Volume 36, Issue No. 3, eff March 23, 2012 (errata); State Register Volume 36, Issue No. 9, eff September 28, 2012 (errata); State Register Volume 39, Issue No. 6, Doc. No. 4481, eff June 26, 2015; State Register Volume 39, Issue No. 11, Doc. No. 4577, eff November 27, 2015.

70.7. Permit issuance, renewal, reopenings, and revisions.

(a) Action on application.

(1) A permit, permit modification, or renewal may be issued only if all of the following conditions have been met:

(i) The Department has received a complete application for a permit, permit modification, or permit renewal, except that a complete application need not be received before issuance of a general permit under Section 70.6(d);

(ii) Except for modifications qualifying for minor permit modification procedures under Sections 70.7(e)(2) and (3), the Department has complied with the requirements for public participation under Section 70.7(h);

(iii) The Department has complied with the requirements for notifying and responding to affected States under Section 70.8(b);

(iv) The conditions of the permit provide for compliance with all applicable requirements and the requirements of Part 70; and

(v) The Administrator has received a copy of the proposed permit and any notices required under Sections 70.8(a) and 70.8(b), and has not objected to issuance of the permit under Sections 70.8(c) within the time period specified therein.

(2) The Department shall take final action on each permit application (including a request for permit modification or renewal) within 18 months, after receiving a complete application. Exceptions to this schedule are provided in the initial transition plan required under 40 CFR 70.4(b)(11) or under regulations promulgated under Title IV or Title V of the Clean Air Act for the permitting of affected sources under the acid rain program.

(3) [Reserved]

(4) The Department shall promptly provide notice to the applicant of whether the application is complete. Unless the Department requests additional information or otherwise notifies the applicant of incompleteness within 60 days of receipt of an application, the application shall be deemed complete. For modifications processed through minor permit modification procedures, such as those in Section 70.7(e)(2) and (3), the Department will not require a completeness determination.

(5) The Department shall provide a statement that sets forth the legal and factual basis for the draft permit conditions (including references to the applicable statutory or regulatory provisions). The Department shall send this statement to EPA and to any other person who requests it.

(6) The submittal of a complete application shall not affect the requirement that any source have a preconstruction permit under Title I of the Act.

(b) Requirement for a permit. No Part 70 source may operate after the time that it is required to submit a timely and complete application, except in compliance with a permit issued under a Part 70 program. If a Part 70 source submits a timely and complete application for permit issuance (including for renewal), the source's failure to have a Part 70 permit is not a violation of this Part until the Department takes final action on the permit application, except as noted in this section. This protection shall cease to apply if, subsequent to the completeness determination made pursuant to paragraph Section 70.7(a)(4), and as required by Section 70.5(a)(2), the applicant fails to submit by the deadline specified in writing by the Department any additional information identified as being needed to process the application. Exceptions to this section are provided in Section 70.7(e)(5)(i) and Section 70.7(e)(2)(v) and (3)(v).

(c) Permit renewal and expiration.

(1) Renewal and expiration of permits

(i) Permits being renewed are subject to the same procedural requirements, including those for public participation, affected State and EPA review, that apply to initial permit issuance; and

(ii) Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with Section 70.5(a)(1)(iii), Section 70.5(a)(2)(iv), and Section 70.7(b). In this case, the permit shall not expire until the renewal permit has been issued or denied. All the terms and conditions of the permit including any permit shield that may be granted pursuant to Section 70.6(f) shall remain in effect until the renewal permit has been issued or denied.

(2) [Reserved]

(d) Administrative permit amendments.

(1) An "administrative permit amendment" is a permit revision that:

(i) Corrects typographical errors;

(ii) Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;

(iii) Requires more frequent monitoring or reporting by the permittee;

(iv) Allows for a change in ownership or operational control of a source where the Department determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the Department;

(v) Incorporates into the Part 70 permit the requirements from preconstruction review permits authorized under an EPA-approved program, provided that such a program meets procedural requirements substantially equivalent to the requirements of Sections 70.7 and 70.8 that would be applicable to the change if it were subject to review as a permit modification, and compliance requirements substantially equivalent to those contained in Section 70.6; or

(vi) Incorporates any other type of change which the Administrator has determined as part of the approved Part 70 program to be similar to those in Section 70.7(d)(1)(i) through (iv).

(2) Administrative permit amendments for purposes of the acid rain portion of the permit shall be governed by regulations promulgated under Title IV of the Act.

(3) An administrative permit amendment may be made by the Department consistent with the following:

(i) The Department shall take no more than 60 days from receipt of a request for an administrative permit amendment to take final action on such request, and may incorporate such changes without providing notice to the public or affected States provided that it designates any such permit revisions as having been made pursuant to this paragraph.

(ii) The Department shall submit a copy of the revised permit to the Administrator.

(iii) The source may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request, except transfer/ownership which must comply with Regulation 61–62.1 Section II.M.

(4) The Department may, upon taking final action granting a request for an administrative permit amendment, allow coverage by the permit shield in Section 70.6(f) for administrative permit amendments made pursuant to Section 70.7(d)(1)(v) which meet the relevant requirements of Sections 70.6, 70.7, and 70.8 for significant permit modifications.

(e) Permit modification. A permit modification is any revision to a Part 70 permit that cannot be accomplished under the program's provisions for administrative permit amendments under Section 70.7(d). A permit modification for purposes of the acid rain portion of the permit shall be governed by regulations promulgated under Title IV of the Act.

(1) Program description.

[Reserved]

(2) Minor permit modification procedures.

(i) Criteria.

(A) Minor permit modification procedures may be used only for those permit modifications that:

(1) Do not violate any applicable requirement;

(2) Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;

(3) Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;

(4) Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:

(A) A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the Act; and

(B) An alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the Act;

(5) Are not modifications under any provision of title I of the Act; and

(6) Are not required by the Department to be processed as a significant modification.

(B) Notwithstanding Sections 70.7(e)(2)(i)(A) and (e)(3)(i), minor permit modification procedures may be used for permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, to the extent that such minor permit modification procedures are explicitly provided for in the South Carolina State Implementation Plan or in applicable requirements promulgated by EPA.

(ii) Application. An application requesting the use of minor permit modification procedures shall meet the requirements of Section 70.5(c) and shall include the following:

(A) A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;

(B) The source's suggested draft permit;

(C) Certification by a responsible official, consistent with Section 70.5(d), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and

(D) Completed forms for the Department to use to notify the Administrator and affected States as required under Section 70.8.

(iii) Within five working days of receipt of a complete permit modification application, the Department shall meet its obligation under Sections 70.8(a)(1) and (b)(1) to notify the Administrator and affected States of the requested permit modification. The Department promptly shall send any notice required under Section 70.8(b)(2) to the Administrator.

(iv) Within 90 days of the Department's receipt of an application under minor permit modification procedures or 15 days after the end of the Administrator's 45-day review period under Section 70.8(c), whichever is later, the Department shall:

(A) Issue the permit modification as proposed;

(B) Deny the permit modification application;

(C) Determine that the requested modification does not meet the minor permit modification criteria and should be reviewed under the significant modification procedures; or

(D) Revise the draft permit modification and transmit to the Administrator the new proposed permit modification as required by Section 70.8(a).

(v) The Department may allow the source to make the change proposed in its minor permit modification application immediately after it files such application. After the source makes the change allowed by the preceding sentence, and until the Department takes any of the actions specified in Section 70.7(e)(2)(iv) (A) through (C) above, the source must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time period, the source need not comply with the existing permit terms and conditions it seeks to modify. However, if the source fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against it.

(vi) The permit shield under Section 70.6(f) may not extend to minor permit modifications.

(3) Group processing of minor permit modifications. Consistent with this paragraph, the Department may modify the procedure outlined in Section 70.7(e)(2) to process groups of a source's applications for certain modifications eligible for minor permit modification processing.

(i) Criteria. Group processing of modifications may be used only for those permit modifications:

(A) That meet the criteria for minor permit modification procedures under Section 70.7(e)(2)(i)(A); and

(B) That collectively are below the threshold level approved by the Administrator as part of the Department's approved program. This threshold shall be 10 percent of the emissions

allowed by the permit for the emissions unit for which the change is requested, 20 percent of the applicable definition of major source in Section 70.2, or 5 tpy, whichever is least.

(ii) Application. An application requesting the use of group processing procedures shall meet the requirements of Section 70.5(c) and shall include the following:

(A) A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs.

(B) The source's suggested draft permit.

(C) Certification by a responsible official, consistent with Section 70.5(d), that the proposed modification meets the criteria for use of group processing procedures and a request that such procedures be used.

(D) A list of the source's other pending applications awaiting group processing, and a determination of whether the requested modification, aggregated with these other applications, equals or exceeds the threshold set under Section 70.7(e)(3)(i)(B).

(E) Certification, consistent with Section 70.5(d), that the source has notified EPA of the proposed modification. Such notification need only contain a brief description of the requested modification.

(F) Completed forms for the Department to use to notify the Administrator and affected States as required under Section 70.8.

(iii) On a quarterly basis or within 5 business days of receipt of an application demonstrating that the aggregate of a source's pending applications equals or exceeds the threshold level set under Section 70.7(e)(3)(i)(B) of this Section, whichever is earlier, the Department promptly shall meet its obligation under paragraphs (a)(1) and (b)(1) of Section 70.8 to notify the Administrator and affected States of the requested permit modifications. The Department shall send any notice required under Section 70.8(b)(2) to the Administrator.

(iv) The provisions of Section 70.7(e)(2)(iv) shall apply to modifications eligible for group processing, except that the Department shall take one of the actions specified in Section 70.7(e)(2)(iv)(A) through (D) within 180 days of receipt of the application or 15 days after the end of the Administrator's 45-day review period under Section 70.8(c), whichever is later.

(v) The Department may allow the source to make the changes proposed for group processing in its minor permit modification application immediately after it files such application. After the source makes the changes allowed by the preceding sentence, and until the Department takes any of the actions specified in Section 70.7(e)(2)(iv)(A) through (C), the source must comply with both the applicable requirements governing the changes and the proposed permit terms and conditions. During this time period, the source need not comply with the existing permit terms and conditions it seeks to modify. However, if the source fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against it.

(vi) The permit shield under Section 70.6(f) may not extend to minor permit modifications eligible for group processing.

(4) Significant modification procedures.

(i) Criteria. Significant modification procedures shall be used for applications requesting permit modifications that:

(A) Involve a significant change in existing monitoring permit terms or conditions, or constitute a relaxation of reporting or recordkeeping permit terms or conditions;

(B) Require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or visibility or increment analysis;

(C) Seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:

(1) A Federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I;

(2) An alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the Act; and

(D) Are modifications under any provision of Title I of the Act, except those that qualify for processing as administrative permit amendments under Section 70.7(d).

Nothing herein shall be construed to preclude the permittee, upon appropriate approval by the Department, from making changes consistent with this part that would render existing permit compliance terms and conditions irrelevant.

(ii) Significant permit modifications shall meet all requirements of this part, including those for applications, public participation, review by affected States, and review by EPA, as they apply to permit issuance and permit renewal. The Department shall complete review on the majority of significant permit modifications within 9 months after receipt of a complete application.

(5) Operational Flexibility. A permitted facility is authorized to make changes within their facility without requiring a permit revision, if the changes are not modifications under any provision of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions): Provided that the facility provides the Administrator and the Department with written notification as required below in advance of the proposed changes, which shall be a minimum of 7 days, unless the Department provides in its regulations a different time frame for emergencies. The source, Department, and EPA shall attach each such notice to their copy of the relevant permit. The following provisions implement this authorization:

(i) The permitted sources are allowed to make Section 502(b)(10) changes without requiring a permit revision, if the changes are not modifications under any provision of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions).

(A) For each such change, the written notification required above shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

(B) The permit shield described in Section 70.6(f) of this part shall not apply to any change made pursuant to Section 70.7(e)(5)(i).

(ii) The Department may provide for permitted sources to trade increases and decreases in emissions in the permitted facility, where the South Carolina State Implementation Plan provides for such emissions trades without requiring a permit revision and based on the 7-day notice prescribed in Section 70.7(e)(5). This provision is available in those cases where the permit does not already provide for such emissions trading.

(A) Under Section 70.7(e)(5)(ii), the written notification required above shall include such information as may be required by the provision in the South Carolina State Implementation Plan authorizing the emissions trade, including at a minimum, when the proposed change will occur, a description of each such change, any change in emissions, the permit requirements with which the source will comply using the emissions trading provisions of the South Carolina State Implementation Plan, and the pollutants emitted subject to the emissions trade. The notice shall also refer to the provisions with which the source will comply in the South Carolina State Implementation Plan and that provide for the emissions trade.

(B) The permit shield described in Section 70.6(f) of this part shall not extend to any change made under Section 70.7(e)(5)(ii). Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the South Carolina State Implementation Plan authorizing the emissions trade.

(iii) The Department shall, if a permit applicant requests it, issue permits that contain terms and conditions, including all terms required under Sections 70.6(a) and (c) to determine compliance, allowing for the trading of emissions increases and decreases in the permitted facility solely for the purpose of complying with a federally-enforceable emissions cap that is established in the permit independent of otherwise applicable requirements. The permit applicant shall include in its application proposed replicable procedures and permit terms that ensure the emissions trades are quantifiable and enforceable. The Department shall not be required to include in the emissions

trading provisions any emissions units for which emissions are not quantifiable or for which there are no replicable procedures to enforce the emissions trades. The permit shall also require compliance with all applicable requirements.

(A) Under Section 70.7(e)(5)(iii), the written notification required above shall state when the change will occur and shall describe the changes in emissions that will result and how these increases and decreases in emissions will comply with the terms and conditions of the permit.

(B) The permit shield described in Section 70.6(f) of this part may extend to terms and conditions that allow such increases and decreases in emissions.

(6) Off-Permit Changes. Except as provided in Section 70.7(e)(6)(v) below, a facility is allowed to make changes that are not addressed or prohibited by the permit without a permit revision. The provisions under this Section do not excuse any facility from the preconstruction permitting requirements under South Carolina Regulation No. 61–62.1. Any such change shall be subject to the following requirements and restrictions:

(i) Each such change shall meet all applicable requirements and shall not violate any existing permit term or condition.

(ii) Sources must provide contemporaneous written notice to the Department and EPA of each such change, except for changes that qualify as insignificant under Section 70.5(c). Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.

(iii) The change shall not qualify for the shield under Section 70.6(f).

(iv) The permittee shall keep a record describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

(v) No permittee shall make, without a permit revision, a change that is not addressed or prohibited by the facility's Part 70 permit, if such a change is subject to any requirements under Title IV of the Act or is a modification under any provision of Title I of the Act.

(f) Reopening for cause.

(1) Each issued permit shall include provisions specifying the conditions under which the permit will be reopened prior to the expiration of the permit. A permit shall be reopened and revised under any of the following circumstances:

(i) Additional applicable requirements under the Act become applicable to a major Part 70 source with a remaining permit term of 3 or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to Section 70.7(c)(1)(ii).

(ii) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

(iii) The Department or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

(iv) The Administrator or the Department determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

(2) Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.

(3) Reopenings under Section 70.7(f)(1) shall not be initiated before a notice of such intent is provided to the Part 70 source by the Department at least 30 days in advance of the date that the permit is to be reopened, except that the Department may provide a shorter time period in the case of an emergency.

(g) Reopenings for cause by EPA.

(1) If the Administrator finds that cause exists to terminate, modify, or revoke and reissue a permit pursuant to Section 70.7(f), the Administrator will notify the Department and the permittee of such finding in writing.

(2) The Department shall, within 90 days after receipt of such notification, forward to EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate. The Administrator may extend this 90-day period for an additional 90 days if he finds that a new or revised permit application is necessary or that the Department must require the permittee to submit additional information.

(3) The Administrator will review the proposed determination from the Department within 90 days of receipt.

(4) The Department shall have 90 days from receipt of an EPA objection to resolve any objection that EPA makes and to terminate, modify, or revoke and reissue the permit in accordance with the Administrator's objection.

(5) If the Department fails to submit a proposed determination pursuant to Section 70.7(g)(2) or fails to resolve any objection pursuant to Section 70.7(g)(4), the Administrator will terminate, modify, or revoke and reissue the permit after taking the following actions:

(i) Providing at least 30 days' notice to the permittee in writing of the reasons for any such action. This notice may be given during the procedures in Section 70.7(g)(1) through (4).

(ii) Providing the permittee an opportunity for comment on the Administrator's proposed action and an opportunity for a hearing.

(h) Public participation. Except for modifications qualifying for minor permit modification procedures, all permit proceedings, including initial permit issuance, significant modifications, and renewals, shall provide adequate procedures for public notice including offering an opportunity for public comment and a hearing on the draft permit. These procedures shall include the following:

(1) Notice shall be given by one of the following methods: By publishing the notice in a newspaper of general circulation in the area where the source is located (or in a State publication designed to give general public notice) or by posting the notice, for the duration of the public comment period, on a public website identified by the Department, if the Department has selected website noticing as its "consistent noticing method." The consistent noticing method shall be used for all draft permits subject to notice under this paragraph. If website noticing is selected as the consistent noticing method, the draft permit shall also be posted, for the duration of the public comment period, on a public website identified by the Department. In addition, notice shall be given to persons on a mailing list developed by the Department using generally accepted methods (e.g., hyperlink sign-up function or radio button on an agency website, sign-up sheet at a public hearing, etc.) that enable interested parties to subscribe to the mailing list. The Department may update the mailing list from time to time by requesting written indication of continued interest from those listed. The Department may delete from the list the name of any person who fails to respond to such a request within a reasonable timeframe. The Department may use other means to provide adequate notice to the affected public;

(2) The notice shall identify the affected facility; the name and address of the permittee; the name and address of the Department; the activity or activities involved in the permit action; the emissions change involved in any permit modification; the name, address, and telephone number of a person (or an email or website address) from whom interested persons may obtain additional information, including copies of the permit draft, the application, all relevant supporting materials, including any permit application, compliance plan, permit, and monitoring and compliance certification report pursuant to Section 503(e) of the Act, except for information entitled to confidential treatment pursuant to Section 114(c) of the Act (the contents of a Part 70 permit shall not be entitled to protection under Section 114(c) of the Act), and all other materials available to the Department (except for publicly-available materials and publications) that are relevant to the permit decision; a brief description of the comment procedures required by this part; and the time and place of any hearing that may be held, including a statement of procedures to request a hearing (unless a hearing has already been scheduled);

(3) The Department shall provide such notice and opportunity for participation by affected States as is provided for by Section 70.8; and

(4) The Department shall provide at least 30 days for public comment and shall give notice of any public hearing at least 30 days in advance of the hearing.

(5) The Department shall keep a record of the commenters and also of the issues raised during the public participation process so that the Administrator may fulfill his obligation under Section 505(b)(2) of the Act to determine whether a citizen petition may be granted, and such records shall be available to the public.

HISTORY: Amended by State Register Volume 36, Issue No. 3, eff March 23, 2012 (errata); State Register Volume 36, Issue No. 9, eff September 28, 2012 (errata); State Register Volume 37, Issue No. 4, eff April 26, 2013; State Register Volume 41, Issue No. 8, Doc. No. 4750, eff August 25, 2017.

70.8. Permit review by EPA and affected States.

(a) Transmission of information to the Administrator.

(1) Unless otherwise agreed to between the Department and the Administrator, the Department shall provide to the Administrator a copy of each permit application (including any application for permit modification), each proposed permit, and each final Part 70 permit. The applicant may be required by the Department to provide a copy of the permit application (including the compliance plan) directly to the Administrator. Upon agreement with the Administrator, the Department may submit to the Administrator a permit application summary form and any relevant portion of the permit application and compliance plan, in place of the complete permit application and compliance plan.

(2) [Reserved]

(3) The Department shall keep for at least 5 years such records and submit to the Administrator such information as the Administrator may reasonably require to ascertain whether the Department complies with the requirements of the Act or of this Part.

(b) Review by affected States.

(1) Unless otherwise agreed to between the Department and the Administrator, the Department shall give notice of each draft permit to any affected State on or before the time that the Department provides this notice to the public under Section 70.7(h), except to the extent Section 70.7(e)(2) or (3) requires the timing of the notice to be different.

(2) The Department, as part of the submittal of the proposed permit to the Administrator (or as soon as possible after the submittal for minor permit modification procedures allowed under Section 70.7(e)(2) or (3)), shall notify the Administrator and any affected State in writing of any refusal by the Department to accept all recommendations for the proposed permit that any affected State submitted during the public or affected State review period. The notice shall include the Department's reasons for not accepting any such recommendation. The Department is not required to accept recommendations that are not based on applicable requirements or the requirements of this Part.

(c) EPA objection.

(1) No permit for which an application must be transmitted to the Administrator under Section 70.8(a) shall be issued if the Administrator objects to its issuance in writing within 45 days of receipt of the proposed permit and all necessary supporting information.

(2) [Reserved]

(3) Failure of the Department to do any of the following shall constitute grounds for an EPA objection:

(i) Failure to comply with Sections 70.8(a) or (b);

(ii) Failure to submit any information necessary to review adequately the proposed permit;

(iii) Failure to process any permit under the procedures approved to meet Section 70.7(h) except for minor permit modifications; or

(iv) Failure of any proposed permit to be in compliance with applicable requirements or requirements under this part.

(4) If the Department fails, within 90 days after the date of an EPA objection under Section 70.8(c)(1), to revise and submit a proposed permit in response to the objection, the Administrator

will issue or deny the permit in accordance with the requirements of the federal program promulgated under Title V of this Act.

(d) If the Administrator does not object in writing under Section 70.8(c), any person may petition the Administrator within 60 days after the expiration of the Administrator's 45-day review period to make such objection. Any such petition shall be based only on objections to the permit that were raised with reasonable specificity during the public comment period provided for in Section 70.7(h), unless the petitioner demonstrates that it was impracticable to raise such objections within such period, or unless the grounds for such objection arose after such period. If the Administrator objects to the permit as a result of a petition filed under this paragraph, the Department shall not issue the permit until EPA's objection has been resolved, except that a petition for review does not stay the effectiveness of a permit or its requirements if the permit was issued after the end of the 45-day review period and prior to an EPA objection. If the Department has issued a permit prior to receipt of an EPA objection under this paragraph, the Administrator will modify, terminate, or revoke such permit, and shall do so consistent with the procedures in Sections 70.7(g)(4) or (5)(i) and (ii) except in unusual circumstances, and the Department may thereafter issue only a revised permit that satisfies EPA's objection. In any case, the source will not be in violation of the requirement to have submitted a timely and complete application.

(e) Prohibition on default issuance.

[Reserved]

HISTORY: Amended by State Register Volume 36, Issue No. 3, eff March 23, 2012 (errata).

70.9. Fee determination and certification.

(a) The Department shall require that the owners or operators of Part 70 sources pay annual fees, or the equivalent over some other period, that are sufficient to cover the permit program costs and shall ensure that any fee required by this Section will be used solely for permit program costs. "Permit program costs" means all reasonable (direct and indirect) costs required to develop and administer a permit program, as set forth in Section 70.9(b).

(b) Fee schedule adequacy.

(1) The Department shall establish a fee schedule that results in the collection and retention of revenues sufficient to cover the permit program costs. These costs include, but are not limited to, the costs of the following activities as they relate to the operating permit program for stationary sources:

(i) Preparing generally applicable regulations or guidance regarding the permit program or its implementation or enforcement;

(ii) Reviewing and acting on any application for a permit, permit revision, or permit renewal, including the development of an applicable requirement as part of the processing of a permit, or permit revision or renewal;

(iii) General administrative costs of running the permit program, including the supporting and tracking of permit applications, compliance certification, and related data entry;

(iv) Implementing and enforcing the terms of any Part 70 permit (not including any court costs or other costs associated with an enforcement action), including adequate resources to determine which sources are subject to the program;

(v) Emissions and ambient monitoring;

(vi) Modeling, analyses, or demonstrations;

(vii) Preparing inventories and tracking emissions; and

(viii) Providing direct and indirect support to sources under the Small Business Stationary Source Technical and Environmental Compliance Assistance Program contained in Section 507 of the Act in determining and meeting their obligations under this part.

(2)(i) [Reserved]

(ii) The Department may exclude from such calculation:

(A) The actual emissions of sources for which no fee is required under Section 70.9(b)(4);

(B) The amount of a Part 70 source's actual emissions of each regulated pollutant that the source emits in excess of four thousand (4,000) tpy;

(C) A Part 70 source's actual emissions of any regulated pollutant, the emissions of which are already included in the minimum fees calculation; or

(D) The insignificant quantities of actual emissions not required in a permit application pursuant to Section 70.5(c).

(iii) "Actual emissions" means the actual rate of emissions in tons per year of any regulated pollutant emitted from a Part 70 source over the preceding calendar year or any other period determined by the Department to be representative of normal source operation and consistent with the fee schedule approved pursuant to this section. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and in-place control equipment, types of materials processed, stored, or combusted during the preceding calendar year or such other time period established by the Department pursuant to the preceding sentence.

(iv) The program shall provide that the $25 per ton per year to be collected by the fee schedule shall be increased each year by the percentage, if any, by which the Consumer Price Index for the most recent calendar year ending before the beginning of such year exceeds the Consumer Price Index for the calendar year 1989.

(A) The Consumer Price Index for any calendar year is the average of the Consumer Price Index for all-urban consumers published by the Department of Labor, as of the close of the 12-month period ending on August 31 of each calendar year.

(B) The revision of the Consumer Price Index which is most consistent with the Consumer Price Index for the calendar year 1989 shall be used.

(v) "Regulated pollutant," which is used only for purposes of Section 70.9(b)(2), means any "regulated air pollutant" except the following:

(A) Carbon monoxide;

(B) Any pollutant that is a regulated air pollutant solely because it is a Class I or II substance subject to a standard promulgated under or established by Title VI of the Act; or

(C) Any pollutant that is a regulated air pollutant solely because it is subject to a standard or regulation under Section 112(r) of the Act.

(3) The Department's fee schedule may include emissions fees, application fees, service-based fees or other types of fees, or any combination thereof, to meet the requirements of Section 70.9(b)(1) or (b)(2). Nothing in the provisions of this section shall require a Department to calculate fees on any particular basis or in the same manner for all Part 70 sources, all classes or categories of Part 70 sources, or all regulated air pollutants, provided that the Department collects a total amount of fees sufficient to meet the program support requirements of Section 70.9(b)(1).

(4) Notwithstanding any other provision of this Section, during the years 1995 through 1999 inclusive, no fee for purposes of Title V shall be required to be paid with respect to emissions from any affected unit under Section 404 of the Act.

(5) [Reserved]

(c) [Reserved]

(d) [Reserved]

HISTORY: Amended by State Register Volume 36, Issue No. 3, eff March 23, 2012 (errata); State Register Volume 41, Issue No. 8, Doc. No. 4750, eff August 25, 2017.

61–62.72. Acid Rain.

(Statutory Authority: S.C. Code §§ 48–1–30 through 48–1–60)

Subpart A—"General Provisions"

The provisions of 40 Code of Federal Regulations (CFR) Part 72 Subpart A, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 72 Subpart A			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 58	January 11, 1993	[58 FR 3650]
Revision	Vol. 58	March 23, 1993	[58 FR 15634]
Revision	Vol. 58	June 21, 1993	[58 FR 33769]
Revision	Vol. 58	July 30, 1993	[58 FR 40746]
Revision	Vol. 59	November 22, 1994	[59 FR 60218]
Revision	Vol. 60	April 4, 1995	[60 FR 17100]
Revision	Vol. 60	April 11, 1995	[60 FR 18462]
Revision	Vol. 60	May 17, 1995	[60 FR 26510]
Revision	Vol. 62	October 24, 1997	[62 FR 55460]
Revision	Vol. 62	December 18, 1997	[62 FR 66278]
Revision	Vol. 63	October 27, 1998	[63 FR 57356]
Revision	Vol. 63	December 11, 1998	[63 FR 68400]
Revision	Vol. 64	May 13, 1999	[64 FR 25834]
Revision	Vol. 64	May 26, 1999	[64 FR 28564]
Revision	Vol. 66	March 1, 2001	[66 FR 12974]
Revision	Vol. 67	June 12, 2002	[67 FR 40394]
Revision	Vol. 67	August 16, 2002	[67 FR 53503]
Revision	Vol. 69	April 9, 2004	[69 FR 18801]
Revision	Vol. 70	May 12, 2005	[70 FR 25162]
Revision	Vol. 71	April 28, 2006	[71 FR 25328]
Revision	Vol. 73	January 24, 2008	[73 FR 4312]
Revision	Vol. 74	June 12, 2009	[74 FR 27940]
Revision	Vol. 76	March 28, 2011	[76 FR 17288]

Subpart B—"Designated Representative"

The provisions of 40 CFR Part 72 Subpart B, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 72 Subpart B			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 58	January 11, 1993	[58 FR 3650]
Revision	Vol. 60	April 4, 1995	[60 FR 17100]
Revision	Vol. 62	October 24, 1997	[62 FR 55460]
Revision	Vol. 70	May 12, 2005	[70 FR 25162]
Revision	Vol. 71	April 28, 2006	[71 FR 25328]
Revision	Vol. 72	October 19, 2007	[72 FR 59190]

Subpart C—"Acid Rain Permit Applications"

The provisions of 40 CFR Part 72 Subpart C, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 72 Subpart C			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 58	January 11, 1993	[58 FR 3650]
Revision	Vol. 58	March 23, 1993	[58 FR 15634]
Revision	Vol. 60	April 4, 1995	[60 FR 17100]
Revision	Vol. 62	October 24, 1997	[62 FR 55460]
Revision	Vol. 70	May 12, 2005	[70 FR 25162]

Subpart D—"Acid Rain Compliance Plan And Compliance Options"

The provisions of 40 CFR Part 72 Subpart D, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 72 Subpart D			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 58	January 11, 1993	[58 FR 3650]
Revision	Vol. 58	March 23, 1993	[58 FR 15634]
Revision	Vol. 58	July 30, 1993	[58 FR 40746]
Revision	Vol. 59	November 22, 1994	[59 FR 60218, 60234]
Revision	Vol. 60	April 4, 1995	[60 FR 17100]
Revision	Vol. 60	April 11, 1995	[60 FR 18462]
Revision	Vol. 62	October 24, 1997	[62 FR 55460]
Revision	Vol. 64	May 13, 1999	[64 FR 25834]
Revision	Vol. 70	May 12, 2005	[70 FR 25162]

Subpart E—"Acid Rain Permit Contents"

The provisions of 40 CFR Part 72 Subpart E, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 72 Subpart E			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 58	January 11, 1993	[58 FR 3650]
Revision	Vol. 62	October 24, 1997	[62 FR 55460]

Subpart F—"Federal Acid Rain Permit Issuance Procedures"

The provisions of 40 CFR Part 72 Subpart F, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 72 Subpart F			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 58	January 11, 1993	[58 FR 3650]
Revision	Vol. 62	October 24, 1997	[62 FR 55460]

Subpart G—"Acid Rain Phase II Implementation"

The provisions of 40 CFR Part 72 Subpart G, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 72 Subpart G			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 58	January 11, 1993	[58 FR 3650]
Revision	Vol. 58	July 30, 1993	[58 FR 40746]
Revision	Vol. 60	April 4, 1995	[60 FR 17100]
Revision	Vol. 62	October 24, 1997	[62 FR 55460]
Revision	Vol. 66	March 1, 2001	[66 FR 12974]
Revision	Vol. 70	May 12, 2005	[70 FR 25162]

Subpart H—"Permit Revisions"

The provisions of 40 CFR Part 72 Subpart H, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 72 Subpart H			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 58	January 11, 1993	[58 FR 3650]
Revision	Vol. 60	April 4, 1995	[60 FR 17100]
Revision	Vol. 62	October 24, 1997	[62 FR 55460]
Revision	Vol. 66	March 1, 2001	[66 FR 12974]

Subpart I—"Compliance Certification"

The provisions of 40 CFR Part 72 Subpart I, as originally published in the Federal Register and as subsequently amended upon publication in the Federal Register as listed below, are incorporated by reference as if fully repeated herein.

40 CFR Part 72 Subpart I			
Federal Register Citation	**Volume**	**Date**	**Notice**
Original Promulgation	Vol. 58	January 11, 1993	[58 FR 3650]
Revision	Vol. 58	July 30, 1993	[58 FR 40746]
Revision	Vol. 59	November 22, 1994	[59 FR 60218]
Revision	Vol. 60	April 4, 1995	[60 FR 17100]
Revision	Vol. 60	April 11, 1995	[60 FR 18462]
Revision	Vol. 62	October 24, 1997	[62 FR 55460]
Revision	Vol. 64	May 26, 1999	[64 FR 28564]
Revision	Vol. 70	May 12, 2005	[70 FR 25162]

HISTORY: Added by State Register Volume 18, Issue No. 11, eff November 25, 1994; Amended by State Register Volume 20, Issue No. 4, eff April 26, 1996; State Register Volume 21, Issue No. 11, eff November 28, 1997; State Register Volume 22, Issue No. 11, eff November 27, 1998; State Register Volume 31, Issue No. 6, eff June 22, 2007; State Register Volume 32, Issue No. 10, eff October 24, 2008; State Register Volume 33, Issue No. 10, eff October 23, 2009; State Register Volume 34, Issue No. 5, eff May 28, 2010; State Register Volume 34, Issue No. 11, eff November 26, 2010; State Register Volume 36, Issue No. 3, eff March 23, 2012 (errata); State Register Volume 36, Issue No. 9, eff September 28, 2012 (errata); State Register Volume 37, Issue No. 4, eff April 26, 2013.

Editor's Note

Scrivener errors corrected in 2012.

61–62.96. Nitrogen Oxides (NO_X) Budget Program.

Subpart A - NO_X Budget Program General Provisions

Section 96.1 Purpose.

In accordance with 40 CFR 51.121, this regulation establishes general provisions and the applicability and monitoring provisions for the NO_X Budget Program as a means of mitigating the interstate transport of ozone and nitrogen oxides, an ozone precursor. The owner or operator of a unit, or any other person, shall comply with requirements of this regulation as a matter of state and federal law. The state of South Carolina authorizes the EPA to assist the state in implementing the NO_X Budget Program by carrying out the functions set forth for the EPA in such requirements.

Section 96.2 Definitions.

The terms used in this regulation shall have the meanings set forth in this section as follows:

(a) Account certificate of representation means the completed and signed submission required by Subpart B of this regulation for certifying the designation of a NO_X authorized account representative for a NO_X Budget source or a group of identified NO_X Budget sources who is authorized to represent the owners and operators of such source or sources and of the NO_X Budget units at such source or sources with regard to matters under the NO_X Budget Program.

(b) [Reserved]

(c) [Reserved]

(d) [Reserved]

(e) Automated data acquisition and handling system or DAHS means that component of the CEMS, or other emissions monitoring system approved for use under Subpart H of this regulation, 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 Subpart H of this regulation.

(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.

(g) CAA means the Clean Air Act, 42 U.S.C. 7401, *et seq*., as amended by Pub. L. No. 101–549 (November 15, 1990).

(h) 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.

(i) 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.

(j) 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 Section 96.5, for a unit that is a NO_X Budget unit under Section 96.4 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 Section 96.5, for a unit that is not a NO_X Budget unit under Section 96.4 on the date the unit commences commercial operation, the date the unit becomes a NO_X Budget unit under Section 96.4 shall be the unit's date of commencement of commercial operation.

(k) 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 Section 96.5, for a unit that is a NO_X Budget unit under Section 96.4 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 Section 96.5, for a unit that is not a NO_X Budget unit under Section 96.4 on the date of commencement of operation, the date the unit becomes a NO_X Budget unit under Section 96.4 shall be the unit's date of commencement of operation.

(*l*) Common stack means a single flue through which emissions from two or more units are exhausted.

(m) [Reserved]

(n) [Reserved]

(*o*) Continuous emission monitoring system or CEMS means the equipment required under Subpart H of 40 CFR Part 75 to sample, analyze, measure, and provide, by readings taken at least once every 15 minutes of the measured parameters, a permanent record of nitrogen oxides emissions, expressed in tons per hour for nitrogen oxides. The following systems are component parts included, consistent with 40 CFR Part 75, in a continuous emission monitoring system:

(1) Flow monitor;

(2) Nitrogen oxides pollutant concentration monitors;

(3) Diluent gas monitor (oxygen or carbon dioxide) when such monitoring is required by Subpart H of this regulation;

(4) A continuous moisture monitor when such monitoring is required by Subpart H of this regulation; and

(5) An automated data acquisition and handling system.

(p) Control period means for the year 2004, the period beginning on May 31 and ending on September 30 of the same year, inclusive. Thereafter, control period shall mean the period beginning May 1 of a year and ending on September 30 of the same year, inclusive.

(q) Department means the South Carolina Department of Health and Environmental Control.

(r) Emissions means air pollutants exhausted from a unit or source into the atmosphere, as measured, recorded, and reported to the EPA by the NO_X authorized account representative and as determined by the EPA in accordance with Subpart H of this regulation.

(s) [Reserved]

(t) EPA means the United States Environmental Protection Agency.

(u) [Reserved]

(v) [Reserved]

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

(x) Fossil fuel-fired means, with regard to a unit:

(1) For units that commenced operation before January 1, 1996, the combination of fossil fuel, alone or in combination with any other fuel, where fossil fuel actually combusted comprises more than fifty (50) percent of the annual heat input on a Btu basis during 1995, or if a unit had not heat input in 1995, during the last year of operation of the unit prior to 1995;

(2) For units that commenced operation on or after January 1, 1996, the combination of fossil fuel, alone or in combination with any other fuel, where fossil fuel actually combusted comprises more than fifty (50) percent of the annual heat input on a Btu basis during any year.

(3) Notwithstanding the definition set forth in 96.2(x)(1) above, a unit shall be deemed fossil fuel-fired if on any year after January 1, 2001, the fossil fuel actually combusted comprises more than fifty (50) percent of the annual heat input on a Btu basis.

(y) [Reserved]

(z) Generator means a device that produces electricity.

(aa) Heat input means the product (in mmBtu/time) of the gross calorific value of the fuel (in Btu/lb) and the fuel feed rate into a combustion device (in mass of fuel/time), as measured, recorded, and reported to the EPA by the NO_X authorized account representative and as determined by the EPA in accordance with Subpart H of this regulation, and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust from other sources.

(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:

(1) For the life of the unit;

(2) For a cumulative term of no less than thirty (30) years, including contracts that permit an election for early termination; or

(3) For a period equal to or greater than twenty-five (25) years or seventy (70) percent 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.

(cc) [Reserved]

(dd) 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) [Reserved]

(ff) [Reserved]

(gg) 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.

(hh) Monitoring system means any monitoring system that meets the requirements of Subpart H of this regulation.

(ii) [Reserved]

(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.

(kk) [Reserved]

(ll) [Reserved]

(mm) [Reserved]

(nn) [Reserved]

(oo) [Reserved]

(pp) [Reserved]

(qq) [Reserved]

(rr) NO_X authorized account representative means, for a NO_X Budget source or NO_X Budget unit at the source, the natural person who is authorized by the owners and operators of the source and all NO_X Budget units at the source, in accordance with Subpart B of this regulation, to represent and legally bind each owner and operator in matters pertaining to the NO_X Budget Program.

(ss) [Reserved]

(tt) [Reserved]

(uu) [Reserved]

(vv) [Reserved]

(ww) NO_X Budget source means a source that includes one or more NO_X Budget units.

(xx) NO_X Budget Program means a multi-state nitrogen oxides air pollution control and emission reduction program established in accordance with this regulation and pursuant to 40 CFR Part 51 Section 51.121, as a means of mitigating the interstate transport of ozone and nitrogen oxides, an ozone precursor.

(yy) NO_X Budget unit means a unit that is subject to the NO_X Budget Program emissions limitation under Section 96.4.

(zz) [Reserved]

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

(bbb) [Reserved]

(ccc) [Reserved]

(ddd) Owner means any of the following persons:

(1) Any holder of any portion of the legal or equitable Title in a NO_X Budget unit; or

(2) Any holder of a leasehold interest in a NO_X Budget unit; or

(3) Any purchaser of power from a NO_X 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 NO_X Budget unit; or

(4) [Reserved]

(eee) Ozone season means the period of time beginning May 1 of a year and ending on September 30 of the same year, inclusive.

(fff) [Reserved]

(ggg) Receive or receipt of means, when referring to the Department or the EPA, 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 Department or the EPA in the regular course of business.

(hhh) [Reserved]

(iii) [Reserved]

(jjj) [Reserved]

(kkk) 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 CAA. For purposes of Section 502(c) of the CAA, a source, including a source with multiple units, shall be considered a single facility.

(lll) State means the state of South Carolina.

(mmm) [Reserved]

(nnn) Submit or serve means to send or transmit a document, information, or correspondence to the person specified in accordance with the applicable regulation:

(1) In person;

(2) By United States Postal Service; or

(3) 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.

(ooo) [Reserved]

(ppp) [Reserved]

(qqq) [Reserved]

(rrr) Unit means a fossil fuel-fired stationary boiler, combustion turbine, or combined cycle system.

(sss) [Reserved]

(ttt) Unit operating day means a calendar day in which a unit combusts any fuel.

(uuu) Unit operating hour or hour of unit operation means any hour (or fraction of an hour) during which a unit combusts any fuel.

(vvv) [Reserved]

Section 96.3 Measurements, abbreviations, and acronyms.

Measurements, abbreviations, and acronyms used in this regulation are defined as follows:

Btu-British thermal unit.

hr-hour.

lb-pounds.

mmBtu-million Btu.

MWe-megawatt electrical.

ton-2000 pounds.

CO_2-carbon dioxide.

NO_X -nitrogen oxides.

O_2-oxygen.

Section 96.4 Applicability.

(a) The following units shall be NO_X Budget units, and any source that includes one or more such units shall be a NO_X Budget source, subject to the requirements of this regulation:

(1)(i) For units that commenced operation before January 1, 1999, a unit serving a generator that has a nameplate capacity greater than 25 MWe and, except for a unit that has a SIC code of 4911 or 4931, produces an annual average of more than one-third of its potential electrical output capacity for sale to the electric grid during any three calendar year period.

(ii) For units that commenced operation on or after January 1, 1999, a unit serving at any time a generator that has a nameplate capacity greater than 25 MWe and produces electricity for sale.

(2)(i) For units that commenced operation before January 1, 1999, a unit that has a maximum design heat input greater than 250 mmBtu/hr and does not serve a generator that has a nameplate capacity greater than 25 MWe if any such generator produces an annual average of more than one-third of its potential electrical output capacity for sale to the electric grid during any three calendar year period.

(ii) For units that commenced operation on or after January 1, 1999, a unit that has a maximum design heat input greater than 250 mmBtu/hr that:

(A) At no time served a generator producing electricity for sale; or

(B) At any time served a generator producing electricity for sale, if any such generator has a nameplate capacity of 25 MWe or less and has the potential to use no more than fifty (50) percent of the potential electrical output capacity of the unit.

(b)(1) Notwithstanding paragraph (a) of this section, a unit under paragraph (a)(1) or (a)(2) of this section that has a federally enforceable permit restricting the unit to the combustion of only natural gas or fuel oil and includes a NO_X emission limitation restricting NO_X emissions during a control period to 25 tons or less and that includes the special provisions in paragraph (b)(4) of this section shall be exempt from the requirements of the NO_X Budget Program, except for the provisions of this paragraph, Section 96.2, Section 96.3, Section 96.4(a), and Section 96.7. The NO_X emission limitation under this paragraph (b)(1) shall restrict NO_X emissions during the control period by limiting unit operating hours. The restriction on unit operating hours shall be calculated by dividing 25 tons by the unit's maximum potential hourly NO_X mass emissions, which shall equal the unit's maximum rated hourly heat input multiplied by the highest default NO_X emission rate otherwise applicable to the unit under 40 CFR Part 75 Section 75.19.

(2) The exemption under paragraph (b)(1) of this section shall become effective as follows:

(i) The exemption shall become effective on the date on which the NO_X emission limitation and the special provisions in the permit under paragraph (b)(1) of this section become final; or

(ii) If the NO_X emission limitation and the special provisions in the permit under paragraph (b)(1) of this section 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 1 of such control period, provided that such NO_X emission limitation and the special provisions apply to the unit as of such first date of operation. If such NO_X emission limitation and special provisions do not apply to the unit as of such first date of operation, then the exemption under paragraph (b)(1) of this section shall become effective on October 1 of the year during which such NO_X emission limitation and the special provisions become final.

(3) The Department will provide the EPA written notice of the issuance of such permit under paragraph (b)(1) of this section for a unit under paragraph (a)(1) or (a)(2) of this section, and, upon request, a copy of the permit.

(4) Special provisions.

(i) A unit exempt under paragraph (b)(1) of this section shall comply with the restriction on unit operating hours described in paragraph (b)(1) of this section during the control period in each year.

(ii) [Reserved]

(iii) A unit exempt under this paragraph (b) shall report hours of unit operation during the control period in each year to the Department by November 1 of that year.

(iv) For a period of five (5) years from the date the records are created, the owners and operators of a unit exempt under paragraph (b)(1) of this section shall retain, at the source that includes the unit, records demonstrating that the conditions of the federally enforceable permit under paragraph (b)(1) of this section were met, including the restriction on fuel use and unit operating hours. The 5-year period for keeping records may be extended for cause, at any time prior to the end of the period, in writing by the Department or the EPA. The owners and operators bear the burden of proof that the unit met the restriction on unit operating hours.

(v) The owners and operators and, to the extent applicable, the NO_X authorized account representative of a unit exempt under paragraph (b)(1) of this section shall comply with the requirements of the NO_X Budget Program concerning all periods for which the exemption is

not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.

(vi) On the earlier of the following dates, a unit exempt under paragraph (b)(1) of this section shall lose its exemption:

(A) The date on which the restriction on fuel use and unit operating hours described in paragraph (b)(1) of this section is removed from the unit's federally enforceable permit or otherwise becomes no longer applicable to any control period starting in 2004; or

(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 fuel use and unit operating hours described in paragraph (b)(1) of this section during any control period starting in 2004.

(vii) A unit that loses its exemption in accordance with paragraph (b)(4)(vi) of this section shall be subject to the requirements of this Part. For the purpose of applying monitoring requirements under Subpart H of this regulation, the unit shall be treated as commencing operation and, if the unit is covered by paragraph (a)(1) of this section, commencing commercial operation on the date the unit loses its exemption.

(viii) [Reserved]

Section 96.5 Retired unit exemption.

(a) This section applies to any NO_X Budget unit that is permanently retired.

(b)(1) Any NO_X Budget unit that is permanently retired shall be exempt from the NO_X Budget Program, except for the provisions of this section, and Sections 96.2, 96.3, 96.4, and 96.7.

(2) The exemption under paragraph (b)(1) of this section shall become effective the day on which the unit is permanently retired. Within thirty (30) days of permanent retirement, the NO_X authorized account representative (authorized in accordance with Subpart B of this regulation) shall submit a statement to the Department otherwise responsible for administering any permit for the unit. A copy of the statement shall be submitted to the EPA. The statement shall state (in a format prescribed by the Department) that the unit is permanently retired and will comply with the requirements of paragraph (c) of this section.

(3) After receipt of the notice under paragraph (b)(2) of this section, the Department will amend any permit covering the source at which the unit is located to add the provisions and requirements of the exemption under paragraphs (b)(1) and (c) of this section.

(c) Special provisions.

(1) A unit exempt under this section shall not emit any nitrogen oxides, starting on the date that the exemption takes effect.

(2) [Reserved]

(3) The owners and operators and, to the extent applicable, the NO_X authorized account representative of a unit exempt under this section shall comply with the requirements of the NO_X Budget Program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.

(4) [Reserved]

(5) For a period of five (5) years from the date the records are created, the owners and operators of a unit exempt under this section shall retain at the source that includes the unit, records demonstrating that the unit is permanently retired. The 5-year period for keeping records may be extended for cause, at any time prior to the end of the period, in writing by the Department or the EPA. The owners and operators bear the burden of proof that the unit is permanently retired.

(6) Loss of exemption.

(i) [Reserved]

(ii) For the purpose of applying monitoring requirements under Subpart H of this regulation, a unit that loses its exemption under this section shall be treated as a unit that commences operation or commercial operation on the first date on which the unit resumes operation.

Section 96.6 Standard requirements.

(a) [Reserved]

(b) Monitoring requirements.

(1) The owners and operators and, to the extent applicable, the NO_X authorized account representative of each NO_X Budget source and each NO_X Budget unit at the source shall comply with the monitoring requirements of Subpart H of this regulation.

(2) [Reserved]

(c) [Reserved]

(d) [Reserved]

(e) Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the NO_X Budget source and each NO_X Budget unit at the source shall keep on site at the source each of the following documents for a period of five (5) years from the date the document is created. This period may be extended for cause, at any time prior to the end of five (5) years, in writing by the Department or the EPA.

(i) The account certificate of representation for the NO_X authorized account representative for the source and each NO_X Budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with Section 96.13; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new account certificate of representation changing the NO_X authorized account representative.

(ii) All emissions monitoring information, in accordance with Subpart H of this regulation; provided that to the extent that Subpart H of this regulation provides for a 3-year period for recordkeeping, the 3-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the NO_X Budget Program.

(iv) Copies of all documents used to complete any submission under the NO_X Budget Program or to demonstrate compliance with the requirements of the NO_X Budget Program.

(2) The NO_X authorized account representative of a NO_X Budget source and each NO_X Budget unit at the source shall submit the reports and compliance certifications required under the NO_X Budget Program, including those under Subpart H of this regulation.

(f) Liability.

(1) Any person who knowingly violates any requirement or prohibition of the NO_X Budget Program or an exemption under Section 96.5 shall be subject to enforcement pursuant to applicable state or federal law.

(2) Any person who knowingly makes a false material statement in any record, submission, or report under the NO_X Budget Program shall be subject to criminal enforcement pursuant to the applicable state or federal law.

(3) No permit revision shall excuse any violation of the requirements of the NO_X Budget Program that occurs prior to the date that the revision takes effect.

(4) Each NO_X Budget source and each NO_X Budget unit shall meet the requirements of the NO_X Budget Program.

(5) Any provision of the NO_X Budget Program that applies to a NO_X Budget source (including a provision applicable to the NO_X authorized account representative of a NO_X Budget source) shall also apply to the owners and operators of such source and of the NO_X Budget units at the source.

(6) Any provision of the NO_X Budget Program that applies to a NO_X Budget unit (including a provision applicable to the NO_X authorized account representative of a NO_X 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, the owners and operators and the NO_X authorized account representative of one NO_X Budget unit shall not be liable for any violation by any other NO_X Budget unit of which they are not owners or operators or the NO_X authorized account

representative and that is located at a source of which they are not owners or operators or the NO_X authorized account representative.

(g) Effect on Other Authorities. No provision of the NO_X Budget Program or an exemption under Section 96.5 shall be construed as exempting or excluding the owners and operators and, to the extent applicable, the NO_X authorized account representative of a NO_X Budget source or NO_X Budget unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the CAA.

Section 96.7 Computation of time.

(a) Unless otherwise stated, any time period scheduled, under the NO_X Budget Program, to begin on the occurrence of an act or event shall begin on the day the act or event occurs.

(b) Unless otherwise stated, any time period scheduled, under the NO_X 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.

(c) Unless otherwise stated, if the final day of any time period, under the NO_X Budget Program, falls on a weekend or a state or federal holiday, the time period shall be extended to the next business day.

Subpart B - NO_X Authorized Account Representative for NO_X Budget Sources

Section 96.10 Authorization and responsibilities of the NO_X authorized account representative.

(a) Except as provided under Section 96.11, each NO_X Budget source, including all NO_X Budget units at the source, shall have one and only one NO_X authorized account representative, with regard to all matters under the NO_X Budget Program concerning the source or any NO_X Budget unit at the source.

(b) The NO_x authorized account representative of the NO_X Budget source shall be selected by an agreement binding on the owners and operators of the source and all NO_X Budget units at the source.

(c) Upon receipt by the EPA of a complete account certificate of representation under Section 96.13, the NO_X authorized account representative of the source shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each owner and operator of the NO_X Budget source represented and each NO_X Budget unit at the source in all matters pertaining to the NO_X Budget Program, not withstanding any agreement between the NO_X authorized account representative and such owners and operators. The owners and operators shall be bound by any decision or order issued to the NO_X authorized account representative by the Department, the EPA, or a court regarding the source or unit.

(d) [Reserved]

(e)(1) Each submission under the NO_X Budget Program shall be submitted, signed, and certified by the NO_X authorized account representative for each NO_X Budget source on behalf of which the submission is made. Each such submission shall include the following certification statement by the NO_X authorized account representative: "I am authorized to make this submission on behalf of the owners and operators of the NO_X Budget sources or NO_X Budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

(2) The Department and the EPA will accept or act on a submission made on behalf of owner or operators of a NO_X Budget source or a NO_X Budget unit only if the submission has been made, signed, and certified in accordance with paragraph (e)(1) of this section.

Section 96.11 Alternate NO_X authorized account representative.

(a) An account certificate of representation may designate one and only one alternate NO_X authorized account representative who may act on behalf of the NO_X authorized account representative. The agreement by which the alternate NO_X authorized account representative is selected shall

include a procedure for authorizing the alternate NO_X authorized account representative to act in lieu of the NO_X authorized account representative.

(b) Upon receipt by the EPA of a complete account certificate of representation under Section 96.13, any representation, action, inaction, or submission by the alternate NO_X authorized account representative shall be deemed to be a representation, action, inaction, or submission by the NO_X authorized account representative.

(c) Except in this section and Sections 96.10(a), 96.12, and 96.13, whenever the term "NO_X authorized account representative" is used in this regulation, the term shall be construed to include the alternate NO_X authorized account representative.

Section 96.12 Changing the NO_X authorized account representative and the alternate NO_X authorized account representative; changes in the owners and operators.

(a) Changing the NO_X authorized account representative. The NO_X authorized account representative may be changed at any time upon receipt by the EPA of a superseding complete account certificate of representation under Section 96.13. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous NO_X authorized account representative prior to the time and date when the EPA receives the superseding account certificate of representation shall be binding on the new NO_X authorized account representative and the owners and operators of the NO_X Budget source and the NO_X Budget units at the source.

(b) Changing the alternate NO_X authorized account representative. The alternate NO_X authorized account representative may be changed at any time upon receipt by the EPA of a superseding complete account certificate of representation under Section 96.13. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous alternate NO_X authorized account representative prior to the time and date when the EPA receives the superseding account certificate of representation shall be binding on the new alternate NO_X authorized account representative and the owners and operators of the NO_X Budget source and the NO_X Budget units at the source.

(c) Changes in the owners and operators.

(1) In the event a new owner or operator of a NO_X Budget source or a NO_X Budget unit is not included in the list of owners and operators submitted in the account certificate of representation, such new owner or operator shall be deemed to be subject to and bound by the account certificate of representation, the representations, actions, inactions, and submissions of the NO_X authorized account representative and any alternate NO_X authorized account representative of the source or unit, and the decisions, orders, actions, and inactions of the Department or the EPA, as if the new owner or operator were included in such list.

(2) Within thirty (30) days following any change in the owners and operators of a NO_X Budget source or a NO_X Budget unit, including the addition of a new owner or operator, the NO_X authorized account representative or alternate NO_X authorized account representative shall submit a revision to the account certificate of representation amending the list of owners and operators to include the change.

Section 96.13 Account certificate of representation.

(a) A complete account certificate of representation for a NO_X authorized account representative or an alternate NO_X authorized account representative shall include the following elements in a format prescribed by the EPA:

(1) Identification of the NO_X Budget source and each NO_X Budget unit at the source for which the account certificate of representation is submitted.

(2) The name, address, e-mail address (if any), telephone number, and facsimile transmission number (if any) of the NO_X authorized account representative and any alternate NO_X authorized account representative.

(3) A list of the owners and operators of the NO_X Budget source and of each NO_X Budget unit at the source.

(4) The following certification statement by the NO_X authorized account representative and any alternate NO_X authorized account representative: I certify that I was selected as the NO_X authorized account representative or alternate NO_X authorized account representative, as applica-

ble, by an agreement binding on the owners and operators of the NO_X Budget source and each NO_X Budget unit at the source. I certify that I have all the necessary authority to carry out my duties and responsibilities under the NO_X Budget Program on behalf of the owners and operators of the NO_X Budget source and of each NO_X Budget unit at the source and that each such owner and operator shall be fully bound by my representations, actions, inactions, or submissions and by any decision or order issued to me by the Department, the EPA, or a court regarding the source or unit.

(5) The signature of the NO_X authorized account representative and any alternate NO_X authorized account representative and the dates signed.

(b) Unless otherwise required by the Department or the EPA, documents of agreement referred to in the account certificate of representation shall not be submitted to the Department or the EPA. Neither the Department nor the EPA shall be under any obligation to review or evaluate the sufficiency of such documents, if submitted.

Section 96.14 Objections concerning the NO_X authorized account representative

(a) Once a complete account certificate of representation under Section 96.13 has been submitted and received, the Department and the EPA will rely on the account certificate of representation unless and until a superseding complete account certificate of representation under Section 96.13 is received by the EPA.

(b) Except as provided in Section 96.12(a) or (b), no objection or other communication submitted to the Department or the EPA concerning the authorization, or any representation, action, inaction, or submission of the NO_X authorized account representative shall affect any representation, action, inaction, or submission of the NO_X authorized account representative or the finality of any decision or order by the Department or the EPA under the NO_X Budget Program.

(c) Neither the Department nor the EPA will adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of any NO_X authorized account representative.

Subpart C - [Reserved]

Subpart D - [Reserved]

Subpart E - South Carolina NO_X Ozone Season Budget

Section 96.40 State NO_X Budget.

For purposes of this regulation, for any control period, the South Carolina NO_X budgets are as follows:

(a) The NO_X budget for units specified in Section 96.4(a)(1) is 16,199 tons as approved at 67 FR 43546. The sum of the tons of NO_X emitted from all such units in each control period beginning after the effective date of this rule may not exceed this budget amount.

(b) The NO_X budget for units specified in Section 96.4(a)(2) is 3,479 tons as approved at 67 FR 43546. The sum of the tons of NO_X emitted from all such units in each control period beginning after the effective date of this rule may not exceed this budget amount.

Subpart F - [Reserved]

Subpart G - [Reserved]

Subpart H - Monitoring and Reporting

Section 96.70 General Requirements.

The owners and operators, and to the extent applicable, the NO_X authorized account representative of a NO_X Budget unit, shall implement a monitoring and reporting system necessary to attribute ozone season NO_X mass emissions to each unit in accordance with 40 CFR part 75, Subpart H (''Part 75''), except that a NO_X budget unit that (i) is not required by 40 CFR 51.121, Regulation 61–62.97, or other regulation to comply with Part 75 and (ii) is subject to Subpart D or Subpart Db of 40 CFR Part 60, may instead monitor and report NO_X mass emissions in accordance with 40 CFR Part 60, Subpart D or Subpart Db, as applicable. NO_X mass emissions measurements recorded and reported in accordance with the above shall be used to determine compliance with the NO_X budgets set forth in Section 96.40 of this regulation. For purposes of a source subject to the monitoring and reporting provisions of Part 75, the definitions in Section 96.2 and in 40 CFR Part 72 Section 72.2 shall apply,

and the terms affected unit, designated representative, and continuous emission monitoring system (or CEMS) in 40 CFR Part 75 shall be replaced by the terms NO_X Budget unit, NO_X authorized account representative, and continuous emission monitoring system (or CEMS), respectively, as defined in Section 96.2.

Section 96.76 [Reserved]

Subpart I - [Reserved]

HISTORY: Added by State Register Volume 26, Issue No. 5, Part 1, eff May 24, 2002. Amended by State Register Volume 28, Issue No. 9, eff September 24, 2004; State Register Volume 31, Issue No. 6, eff June 22, 2007; State Register Volume 32, Issue No. 10, eff October 24, 2008; State Register Volume 34, Issue No. 5, eff May 28, 2010; State Register Volume 36, Issue No. 6, eff June 22, 2012 (errata); State Register Volume 36, Issue No. 9, eff September 28, 2012 (errata); State Register Volume 37, Issue No. 4, eff April 26, 2013; SCSR43–1 Doc. No. 4870, eff January 25, 2019.

61–62.97. Cross-State Air Pollution Rule (CSAPR) Trading Program.

Subpart A—South Carolina CSAPR NO_X Annual Trading Program

1. Except as provided in paragraphs 2. and 3. of this subpart, the provisions of the July 1, 2016 edition of 40 CFR 97.402 through 97.408, 97.411 through 97.418, 97.420 through 97.428, and 97.430 through 97.435 as amended at 81 FR 74604–07 (October 26, 2016) are adopted and incorporated by reference.

2. The provisions of 40 CFR 97.411(b)(2) and (c)(5)(iii), 97.412(b), and 97.421(h) and (j) are not adopted or incorporated by reference.

3. For purposes of this subpart, the provisions of 40 CFR 97.404(a)(1) and (b)(1) that are otherwise adopted and incorporated by reference are modified by removing the phrase "The following units in a State (and Indian country within the borders of such State)" and adding in its place the phrase "The following units in South Carolina (but not in Indian country within South Carolina's borders)".

4. For purposes of this subpart, for the control periods in 2017 and thereafter, the South Carolina NO_X Annual trading budget, new unit set-aside, and Indian country new unit-set aside for allocations of CSAPR NO_X Annual allowances, and the variability limit for the South Carolina NO_X Annual trading budget, are as follows:

a. The NO_X Annual trading budget is 32,498 tons.

b. The new unit set-aside is 620 tons.

c. The Indian country new unit set-aside is 33 tons.

d. The variability limit is 5,850 tons.

e. The South Carolina NO_X Annual trading budget in this subpart includes any tons in the new unit set-aside or Indian country new unit set-aside but does not include any tons in the variability limit.

Subpart B—South Carolina CSAPR SO_2 Group 2 Trading Program

1. Except as provided in paragraphs 2. and 3. of this subpart, the provisions of the July 1, 2016 edition of 40 CFR 97.702 through 97.708, 97.711 through 97.718, 97.720 through 97.728, and 97.730 through 97.735 as amended at 81 FR 74618-21 (October 26, 2016) are adopted and incorporated by reference.

2. The provisions of 40 CFR 97.711(b)(2) and (c)(5)(iii), 97.712(b), and 97.721(h) and (j) are not adopted or incorporated by reference.

3. For purposes of this subpart, the provisions of 40 CFR 97.704(a)(1) and (b)(1) that are otherwise adopted and incorporated by reference are modified by removing the phrase "The following units in a State (and Indian country within the borders of such State)" and adding in its place the phrase "The following units in South Carolina (but not in Indian country within South Carolina's borders)".

4. For purposes of this subpart, for the control periods in 2017 and thereafter, the South Carolina SO_2 Group 2 trading budget, new unit set-aside, and Indian country new unit-set aside for allocations of CSAPR SO_2 Group 2 allowances, and the variability limit for the South Carolina SO_2 Group 2 trading budget, are as follows:

a. The SO_2 Group 2 trading budget is 96,633 tons.

b. The new unit set-aside is 1,836 tons.

c. The Indian country new unit set-aside is 97 tons.

d. The variability limit is 17,394 tons.

e. The South Carolina SO_2 Group 2 trading budget in this subpart includes any tons in the new unit set-aside or Indian country new unit set-aside but does not include any tons in the variability limit.

HISTORY: Added by State Register Volume 41, Issue No. 8, Doc. No. 4750, eff August 25, 2017.

61–62.99. Nitrogen Oxides (NOx) Budget Program Requirements for Stationary Sources Not in the Trading Program.

Editor's Note

HISTORY: Added by State Register Volume 26, Issue No. 5, Part 1, eff May 24, 2002.

SUBPART B

Emissions of Nitrogen Oxides from Cement Manufacturing

Section 99.41. Applicability.

The requirements of this subpart apply only to kilns with process rates of at least the following: long dry kilns—12 tons per hour (TPH); long wet kilns—10 TPH; preheater kilns—16 TPH; precalciner and preheater/precalciner kilns—22 TPH and/or have NO_x emissions greater than 1 ton per day.

HISTORY: Added by State Register Volume 26, Issue No. 5, Part 1, eff May 24, 2002.

Section 99.42. Definitions.

(a) "Alternative control technique" means a control technique that may include but not be limited to the following:

(1) an add-on control device that achieves the same reductions as low-NO_x burners or mid-kiln firing, or

(2) an operational control technique such as NO_x emission rates (which may be seasonal limitations and may be facility-wide or unit specific), operational limits, or other means of compliance as approved by the Department and EPA. Any owner or operator of a unit subject to this rule that chooses to comply with this regulation through the use of an operational control technique shall submit a compliance monitoring plan for review and approval by the Department and EPA. Unless otherwise authorized by the Department and EPA, this monitoring plan must demonstrate that the operational control technique achieves at least a thirty percent reduction in NO_x emissions from uncontrolled levels. The owner or operator may request that the Department and EPA approve a rate of NO_x emission reductions less than thirty percent. If the Department and EPA concur that the proposed reduction rate is appropriate, the Department and EPA may authorize a reduction rate lower than thirty percent.

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

(c) "Long dry kiln" means a kiln which employs no preheating of the feed. The inlet feed to the kiln is dry.

(d) "Long wet kiln" means a kiln which employs no preheating of the feed. The inlet feed to the kiln is a slurry.

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

(f) "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.

(g) "Mid-kiln firing" means the secondary firing in kilns by injecting solid fuel at an intermediate point in the kiln using a specially designed feed injection mechanism for the purpose of decreasing NO_x emissions through (1) burning part of the fuel at a lower temperature and (2) reducing conditions

at the solid waste injection point that may destroy some of the NO_x formed upstream in the kiln burning zone.

(h) "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.

(i) "Portland cement kiln" means a system, including any solid, gaseous or liquid fuel combustion equipment, used to calcine and fuse raw materials, including limestone and clay, to produce Portland cement clinker.

(j) "Precalciner kiln" means a kiln where the feed to the kiln system is preheated in cyclone chambers and utilizes 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.

(k) "Preheater kiln" means a kiln where the feed to the kiln system is preheated in cyclone chambers prior to the final fusion in a kiln which forms clinker.

(*l*) "Shutdown" means the cessation of operation of a Portland cement kiln for any purpose.

(m) "Startup" means the setting in operation of a Portland cement kiln for any purpose.

HISTORY: Added by State Register Volume 26, Issue No. 5, Part 1, eff May 24, 2002. Amended by State Register Volume 36, Issue No. 6, eff June 22, 2012 (errata).

Section 99.43. Standard requirements.

(a) For the control period that begins on May 31, 2004, an owner or operator of any Portland cement kiln subject to this rule shall not operate the kiln during May 31 through September 30 unless the kiln has installed and operates during May 31 to September 30 with low-NO_x burners, mid-kiln firing, or alternative control techniques, as defined under Section 99.42(a). In all subsequent control periods, an owner or operator of any Portland cement kiln subject to this rule shall not operate the kiln during May 1 through September 30 unless the kiln has installed and operates during May 1 to September 30 with low- NO_x burners, mid-kiln firing, or alternative control techniques, as defined under Section 99.42(a).

HISTORY: Added by State Register Volume 26, Issue No. 5, Part 1, eff May 24, 2002. Amended by State Register Volume 36, Issue No. 6, eff June 22, 2012 (errata).

Section 99.44. Reporting, monitoring and recordkeeping.

(a) Reporting requirements. Any owner or operator subject to the requirements of Section 99.43 shall comply with the following requirements:

(1) By May 31, 2004, submit to the Department the identification number and type of each unit subject to the section, the name and address of the plant where the unit is located, and the name and telephone number of the person responsible for demonstrating compliance with the section.

(2) Submit a report to the Department by October 31 of each year documenting for that unit the total NO_x emissions. For the control period that starts on May 31, 2004, the report shall document the total emissions from May 31 through September 30. For all subsequent control periods, the report shall document the total NO_x emissions from May 1 through September 30.

(b) Monitoring Requirements.

(1) Any owner or operator of a unit subject to this rule shall complete an initial performance test and subsequent annual testing consistent with the requirements of 40 CFR 60, Appendix A, Method 7, 7A, 7C, 7D, or 7E.

(2) Alternatively, the owner or operator can also comply with this subsection by the continuous monitoring of a process parameter that the owner/operator has demonstrated to the Department and EPA is related to NO_x emissions.

(3) Any owner or operator of a unit subject to this rule that chooses to comply with this regulation through the use of an operational control technique shall submit a compliance monitoring plan pursuant to Section 99.42(a).

(c) Recordkeeping Requirements. Any owner or operator of a unit subject to this rule shall produce and maintain records which shall include, but are not limited to:

(1) The emissions, in pounds of NO_x per ton of clinker produced from each affected Portland cement kiln.

(2) The date, time and duration of any startup, shutdown or malfunction in the operation of any of the cement kilns or the emissions monitoring equipment.

(3) The results of any performance testing.

(4) Daily cement kiln production records.

(5) All records required to be produced or maintained shall be retained on site for a minimum of 2 years and be made available to the EPA or State or local agency upon request.

HISTORY: Added by State Register Volume 26, Issue No. 5, Part 1, eff May 24, 2002. Amended by State Register Volume 36, Issue No. 6, eff June 22, 2012 (errata).

Section 99.45. Exemptions.

The requirements of Section 99.43, Section 99.44, and Section 99.45 shall not apply to the following periods of operation:

(a) Start-up and shut-down periods and periods of malfunction, not to exceed 36 consecutive hours;

(b) Regularly scheduled maintenance activities.

HISTORY: Added by State Register Volume 26, Issue No. 5, Part 1, eff May 24, 2002.