

**SOUTH CAROLINA
DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
AIR POLLUTION CONTROL REGULATIONS AND STANDARDS**

**REGULATION 61-62.1
DEFINITIONS AND GENERAL REQUIREMENTS**

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 (SO₃) 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. PM₁₀ – 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. PM₁₀ 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.
-

* 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.

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.

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 50×10^6 British thermal unit per hour (Btu/hr) rated input capacity or smaller.
- c. Coal-fired boilers of 20×10^6 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 1.5×10^6 Btu/hr rated input capacity which burn only virgin liquid fuels or virgin solid fuels.
- b. Boilers and space heaters of less than 10×10^6 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 10⁶ 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.

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	Potential¹ or Actual²
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	NAA³ Sources: Three-year Cycle	Potential¹ or Actual²
SO _x	≥100	Potential
VOC	≥100 (moderate O ₃ NAA)	Potential
	≥50 (serious O ₃ NAA)	
	≥25 (severe O ₃ NAA)	
	≥10 (extreme O ₃ NAA)	

Table 2 - Minimum Point Source Reporting Thresholds by Pollutant (tons per year)		
Pollutant	NAA³ Sources: Three-year Cycle	Potential¹ or Actual²
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: PM₁₀.

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.

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.

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.

R. 61-62.1 History - *South Carolina State Register*:

- Vol. 7, Issue No. 2, (Doc. No. ?), February 25, 1983;
- Vol. 7, Issue No. 6, (Doc. No. 314), June 24, 1983;
- Vol. 9, Issue No. 5, (Doc. No. 457), May 24, 1985;
- Vol. 10, Issue No. 5, (Doc. No. ?), May 23, 1986;
- Vol. 12, Issue No. 2, (Doc. No. 769), February 26, 1988;
- Vol. 12, Issue No. 4, (Doc. No. 970), April 22, 1988;
- Vol. 13, Issue No. 2, (Doc. No. 868), February 24, 1989;
- Vol. 13, Issue No. 3, (Doc. No. 1053), March 24, 1989;
- Vol. 14, Issue No. 6, (Doc. No. 1067), June 22, 1990;
- Vol. 14, Issue No. 9, (Doc. No. 1267), August 24, 1990;
- Vol. 14, Issue No. 9, (Doc. No. 1310), August 24, 1990;
- Vol. 16, Issue No. 6, (Doc. No. 1507), June 26, 1992;
- Vol. 19, Issue No. 6, (Doc. No. 1798), June 23, 1995;
- Vol. 20, Issue No. 1, (Doc. No. 1913), January 26, 1996;
- Vol. 22, Issue No. 6, (Doc. No. 2244), June 26, 1998;
- Vol. 22, Issue No. 8, (Doc. No. 2328), August 28, 1998;
- Vol. 23, Issue No. 6, (Doc. No. 2352), June 25, 1999;
- Vol. 24, Issue No. 5, (Doc. No. 2444), May 26, 2000;
- Vol. 25, Issue No. 7, (Doc. No. 2622), July 27, 2001;
- Vol. 25, Issue No. 10, (Doc. No. 2648), October 26, 2001;
- Vol. 26, Issue No. 8, (Doc. No. 2736), August 23, 2002;
- Vol. 27, Issue No. 6, (Doc. No. 2840), June 27, 2003;
- Vol. 29, Issue No. 2, (Doc. No. 2840), February 25, 2005;
- Vol. 29, Issue No. 6, (Doc. No. 2943), June 24, 2005;
- Vol. 29, Issue No. 8, (Doc. No. 2980), August 26, 2005;

Vol. 31, Issue No. 5, (Doc. No. 3069), May 25, 2007;
Vol. 32, Issue No. 10, (Doc. No. 3224), October 24, 2008;
Vol. 34, Issue No. 5, (Doc. No. 4085), May 28, 2010;
Vol. 34, Issue No. 11, (Doc. No. 4131), November 26, 2010;
Vol. 35, Issue No. 5, (Doc. No. 4130), May 27, 2011;
Vol. 35, Issue No. 11, (Errata), November 25, 2011;
Vol. 36, Issue No. 1, (Errata), January 27, 2012;
Vol. 36, Issue No. 9, (Errata), September 28, 2012;
Vol. 37, Issue No. 4, (Doc. No. 4330), April 26, 2013;
Vol. 37, Issue No. 12 (Doc. No. 4387), December 27, 2013;
Vol. 38, Issue No. 6, (Doc. No. 4388), June 27, 2014;
Vol. 39, Issue No. 11, (Doc. No. 4577), November 27, 2015;
Vol. 40, Issue No. 6, (Doc. No. 4590), June 24, 2016;
Vol. 40, Issue No. 9, (Doc. No. 4650), September 23, 2016;
Vol. 41, Issue No. 8, (Doc. No. 4750), August 25, 2017.