

**TITLE 45
LEGISLATIVE RULE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY**

**SERIES 18
CONTROL OF AIR POLLUTION FROM COMBUSTION OF SOLID WASTE**

§45-18-1. General.

1.1. Scope. -- This rule adopts standards of performance, and establishes emission guidelines and compliance times pursuant to Sections 111 and 129 of the federal Clean Air Act for the control of certain designated pollutants from the following categories of solid waste combustors, combustion units, incinerators and incineration units in West Virginia:

1.1.a. Large municipal waste combustors subject to the standards of performance promulgated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR Part 60, Subpart Eb;

1.1.b. Small municipal waste combustion units subject to the standards of performance promulgated by the U.S. EPA under 40 CFR Part 60, Subpart AAAA;

1.1.c. Hospital/ medical/ infectious waste incinerators subject to the standards of performance promulgated by the U.S. EPA under 40 CFR Part 60, Subpart Ec, or the emission guidelines and compliance times promulgated by the U.S. EPA under 40 CFR Part 60, Subpart Ce set forth in section 7;

1.1.d. Commercial and industrial solid waste incineration units subject to the standards of performance promulgated by the U.S. EPA under 40 CFR Part 60, Subpart CCCC, or the emission guidelines and compliance times promulgated by the U.S. EPA under 40 CFR Part 60, Subpart DDDD set forth in section 9; and

1.1.e. Other solid waste incineration units subject to the standards of performance promulgated by the U.S. EPA under 40 CFR Part 60, Subpart EEEE.

1.2. This rule codifies general procedures and criteria to implement a program of specific standards of performance, emission guidelines and compliance times for solid waste combustors, combustion units, incinerators and incineration units set forth in the Code of Federal Regulations and as listed in Tables 18-1A, 18-1B, 18-2A, 18-2B and 18-1C.

1.3. Neither compliance with the provisions of this rule nor the absence of specific language to cover particular situations constitutes approval or implies consent or condonement of any emission which is released in any locality in such a manner or amount as to cause or contribute to statutory air pollution. Neither does it exempt nor excuse any person from complying with other applicable laws, ordinances, regulations, or orders of governmental entities having jurisdiction over the combustion of solid waste.

1.4. Authority. -- W.Va. Code §22-5-4.

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1.5. Filing Date. -- June 16, 2011.

1.6. Effective Date. -- June 16, 2011.

1.7. Incorporation by Reference. -- Federal Counterpart Regulation. The Secretary has determined that a federal counterpart rule exists. In accordance with the Secretary's recommendation, and with limited exception, this rule incorporates by reference 40 CFR Part 60, Subparts Eb, Ec, AAAA, CCCC and EEEE, effective June 1, 2010.

1.8. Former Rules. -- This legislative rule amends 45CSR18 - "Control of Air Pollution from Combustion of Solid Waste" which was filed April 23, 2008, and which became effective June 1, 2008.

§45-18-2. Definitions.

2.1. "Administrator" means the Administrator of the United States Environmental Protection Agency (U.S. EPA) or his or her designated representative.

2.2. "Air curtain incinerator" means:

2.2.a. For the purpose of 40 CFR Part 60, Subpart EEEE only, an incineration unit operating by forcefully projecting a curtain of air across an open, integrated combustion chamber (fire box) or open pit or trench (trench burner) in which combustion occurs; or

2.2.b. For the purpose of 40 CFR Part 60, Subparts CCCC and DDDD only, an incinerator that operates by forcefully projecting a curtain of air across an open chamber or pit in which combustion occurs. Incinerators of this type can be constructed above or below ground and with or without refractory walls and floor. (Air curtain incinerators are not to be confused with conventional combustion devices with enclosed fireboxes and controlled air technology such as mass burn, modular, and fluidized bed combustors.)

2.3. "Air Pollutants" means solids, liquids, or gases which, if discharged into the air, may result in statutory air pollution.

2.4. "Air Pollution" or 'statutory air pollution' has the meaning ascribed to it in W.Va. Code §22-5-2.

2.5. "Bag leak detection system" means an instrument that is capable of monitoring PM loadings in the exhaust of a fabric filter in order to detect bag failures. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, light-scattering, light-transmittance, or other effects to monitor relative PM loadings.

2.6. "Batch HMIWI" means an HMIWI that is designed such that neither waste charging nor ash removal can occur during combustion.

2.7. "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.

2.8. "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.

2.9. “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.

2.10. “Bypass stack” means a device used for discharging combustion gases to avoid severe damage to the air pollution control device or other equipment.

2.11. “CFR” means the Code of Federal Regulations published by the Office of the Federal Register, National Archives and Records Service, General Services Administration.

2.12. “Chemotherapeutic waste” means waste material resulting from the production or use of anti-neoplastic agents used for the purpose of stopping or reversing the growth of malignant cells.

2.13. “Clean Air Act” or ‘CAA’ means the federal Clean Air Act, as amended, 42 U.S.C. §7401 et seq.

2.14. “Co-fired combustor” means a unit combusting hospital waste and/or medical/infectious waste with other fuels or wastes (e.g., coal, municipal solid waste) and subject to an enforceable requirement limiting the unit to combusting a fuel feed stream, 10 percent or less of the weight of which is comprised, in aggregate, of hospital waste and medical/infectious waste as measured on a calendar quarter basis. For purposes of this definition, pathological waste, chemotherapeutic waste, and low-level radioactive waste are considered “other” wastes when calculating the percentage of hospital waste and medical/infectious waste combusted.

2.15. “Commercial and industrial solid waste incineration unit” or ‘CISWI unit’ means any combustion unit that combusts commercial or industrial waste, that is a distinct operating unit of any commercial or industrial facility (including field erected, modular, and custom built incineration units operating with starved or excess air), and any air curtain incinerator that is a distinct operating unit of any commercial or industrial facility that does not comply with the opacity limit in Table 18-1C applicable to air curtain incinerators burning commercial or industrial waste. While not all CISWI units will include all of the following components, a CISWI unit includes, but is not limited to, the commercial or industrial solid waste feed system, grate system, flue gas system, waste heat recovery equipment, if any, and bottom ash system. The CISWI unit does not include air pollution control equipment or the stack. The CISWI unit boundary starts at the commercial and industrial waste hopper (if applicable) and extends through two areas: the combustion unit flue gas system, which ends immediately after the last combustion chamber or after the waste heat recovery equipment, if any; and the combustion unit bottom ash system, which ends at the truck loading station or similar equipment that transfers the ash to final disposal. The CISWI unit includes all ash handling systems connected to the bottom ash handling system. A CISWI unit does not include any of the fifteen types of units described in 40 CFR §60.2555, nor does it include any combustion turbine or reciprocating internal combustion engine.

2.16. “Commercial HMIWI” means a HMIWI which offers incineration services for hospital/medical/infectious waste generated offsite by firms unrelated to the firm that owns the HMIWI.

2.17. “Commercial or industrial waste” means solid waste that is combusted at any commercial or industrial facility using controlled flame combustion in an enclosed, distinct operating unit: whose design

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does not provide for energy recovery; or operated without energy recovery. Commercial or industrial waste also means solid waste combusted in an air curtain incinerator that is a distinct operating unit of any commercial or industrial facility.

2.18. “Continuous emission monitoring system” or ‘CEMS’ means a monitoring system for continuously measuring and recording the emissions of a pollutant from an affected facility.

2.19. “Dioxins/ furans” means the combined emissions of tetra-through octa-chlorinated dibenzo-para-dioxins and dibenzofurans, as measured by EPA Reference Method 23.

2.20. “Dry scrubber” means an add-on air pollution control system that injects dry alkaline sorbent (dry injection) or sprays an alkaline sorbent (spray dryer) to react with and neutralize acid gases in the HMIWI exhaust stream forming a dry powder material.

2.21. “Energy recovery” means the process of recovering thermal energy from combustion for useful purposes such as steam generation or process heating.

2.22. “Existing CISWI unit” means a CISWI unit that commenced construction on or before November 30, 1999. If an owner or operator of an existing CISWI unit makes changes that meet the definition of modification or reconstruction on or after June 1, 2001, the CISWI unit becomes subject to 40 CFR Part 60 Subpart CCCC, and the requirements of section 9 no longer apply to that unit. If the owner or operator of an existing CISWI unit makes physical or operational changes to the unit primarily to comply with the requirements of section 9, then Subpart CCCC does not apply to that unit. Such changes do not qualify as modifications or reconstructions under Subpart CCCC.

2.23. “Existing HMIWI unit” means and has the following designations as set forth in subsection 7.2:

2.23.a. A HMIWI unit that commenced construction on or before June 20, 1996, or for which modification was commenced on or before March 16, 1998; and

2.23.b. A HMIWI unit for which construction was commenced after June 20, 1996 but no later than December 1, 2008, or for which modification is commenced after March 16, 1998 but no later than April 6, 2010.

2.24. “Fabric filter” or ‘baghouse’ means an add-on air pollution control system that removes particulate matter (PM) and nonvaporous metals emissions by passing flue gas through filter bags.

2.25. “Facilities manager” means the individual in charge of purchasing, maintaining, and operating the HMIWI or the owner’s or operator’s representative responsible for the management of the HMIWI. Alternative titles may include director of facilities or vice president of support services.

2.26. “High-air phase” means the stage of the batch operating cycle when the primary chamber reaches and maintains maximum operating temperatures.

2.27. “Hospital/ medical/ infectious waste incinerator operator” or ‘HMIWI operator’ means any person who operates, controls or supervises the day-to-day operation of an HMIWI.

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2.28. “Hospital” means any facility which has an organized medical staff, maintains at least six 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 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.

2.29. “Hospital/ medical/ infectious waste incinerator”, ‘HMIWI’ or ‘HMIWI unit’ means any device that combusts any amount of hospital waste or medical/ infectious waste as defined in 40 CFR §60.51c.

2.30. “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.

2.31. “Infectious agent” means any organism (such as a virus or bacteria) that is capable of being communicated by invasion and multiplication in body tissues and capable of causing disease or adverse health impacts in humans.

2.32. “Institutional waste” means solid waste that is combusted at any institutional facility using controlled flame combustion in an enclosed, distinct operating unit: whose design does not provide for energy recovery; operated without energy recovery; or operated with only waste heat recovery. Institutional waste also means solid waste combusted on site in an air curtain incinerator that is a distinct operating unit of any institutional facility.

2.33. “Institutional waste incineration unit” means any combustion unit that combusts institutional waste and is a distinct operating unit of the institutional facility that generated the waste. Institutional waste incineration units include field- erected, modular, cyclonic burn barrel, and custom built incineration units operating with starved or excess air, and any air curtain incinerator that is a distinct operating unit of the institutional facility that generated the institutional waste (except those air curtain incinerators listed in 40 CFR §60.2994(b)).

2.34. “Intermittent HMIWI” means an HMIWI that is designed to allow waste charging, but not ash removal, during combustion.

2.35. “Intermittent OSWI unit” means an OSWI unit that is designed to allow waste charging but not ash removal, during combustion.

2.36. “Large HMIWI” means:

2.36.a. Except as provided in subsection 2.33.b;

2.36.a.1. An HMIWI whose maximum design waste burning capacity is more than 500 pounds per hour; or

2.36.a.2. A continuous or intermittent HMIWI whose maximum charge rate is more than 500 pounds per hour; or

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2.36.a.3. A batch HMIWI whose maximum charge rate is more than 4,000 pounds per day.

2.36.b. The following are not large HMIWI:

2.36.b.1. A continuous or intermittent HMIWI whose maximum charge rate is less than or equal to 500 pounds per hour; or

2.36.b.2. A batch HMIWI whose maximum charge rate is less than or equal to 4,000 pounds per day.

2.37. "Large municipal waste combustor unit" or "LMWC unit" means a municipal waste combustor with a combustion capacity greater than 250 tons per day of municipal solid waste.

2.38. "Low-level radioactive waste" means waste material that contains radioactive nuclides emitting primarily beta or gamma radiation, or both, in concentrations or quantities that exceed applicable Federal or State standards for unrestricted release. Low-level radioactive waste is not high-level radioactive waste, spent nuclear fuel, or byproduct material as defined by the Atomic Energy Act of 1954 (42 U.S.C. 2014(e)(2)).

2.39. "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.

2.40. "Maximum charge rate" means:

2.40.a. For continuous and intermittent HMIWI, 110 percent of the lowest 3-hour average charge rate measured during the most recent performance test demonstrating compliance with all applicable emission limits.

2.40.b. For batch HMIWI, 110 percent of the lowest daily charge rate measured during the most recent performance test demonstrating compliance with all applicable emission limits.

2.41. "Maximum design waste burning capacity" means:

2.41.a. For intermittent and continuous HMIWI,

$$C = PV \times 15,000 / 8,500$$

Where:

C = HMIWI capacity, lb/hr

PV = primary chamber volume, ft³

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15,000 = primary chamber heat release rate factor, Btu/ft³/hr

8,500 = standard waste heating value, Btu/lb;

2.41.b. For batch HMIWI,

$$C = PV \times 4.5 / 8$$

Where:

C = HMIWI capacity, lb/hr

PV = primary chamber volume, ft³

4.5 = waste density, lb/ft³

8 = typical hours of operation of a batch HMIWI, hours.

2.42. "Maximum fabric filter inlet temperature" means 110 percent of the lowest 3-hour average temperature at the inlet to the fabric filter (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the dioxin/furan emission limit.

2.43. "Maximum flue gas temperature" means 110 percent of the lowest 3-hour average temperature at the outlet from the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the mercury (Hg) emission limit.

2.44. "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 that is listed below:

2.44.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;

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

2.44.c. Human blood and blood products including:

2.44.c.1. Liquid waste human blood;

2.44.c.2. Products of blood;

2.44.c.3. Items saturated or dripping with human blood; or

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2.44.c.4. Items that were saturated 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;

2.44.d. Sharps that have been 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;

2.44.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;

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

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

2.44.h. The definition of medical/ infectious waste does not include hazardous waste identified or listed under the regulations in 40 CFR Part 261; household waste, as defined in 40 CFR §261.4(b)(1); ash from incinerators 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 as identified in 40 CFR §261.4(a)(1).

2.45. "Medium HMIWI" means:

2.45.a. Except as provided in subdivision 2.45.b;

2.45.a.1. An HMIWI whose maximum design waste burning capacity is more than 200 pounds per hour but less than or equal to 500 pounds per hour; or

2.45.a.2. A continuous or intermittent HMIWI whose maximum charge rate is more than 200 pounds per hour but less than or equal to 500 pounds per hour; or

2.45.a.3. A batch HMIWI whose maximum charge rate is more than 1,600 pounds per day but less than or equal to 4,000 pounds per day.

2.45.b. The following are not medium HMIWI:

2.45.b.1. A continuous or intermittent HMIWI whose maximum charge rate is less than or equal to 200 pounds per hour or more than 500 pounds per hour; or

2.45.b.2. A batch HMIWI whose maximum charge rate is more than 4,000 pounds per day or less

than or equal to 1,600 pounds per day.

2.46. “Minimum dioxin/ furan sorbent flow rate” means 90 percent of the highest 3-hour average dioxin/ furan sorbent flow rate (taken, at a minimum, once every hour) measured during the most recent performance test demonstrating compliance with the dioxin/ furan emission limit.

2.47. “Minimum Hg sorbent flow rate” means 90 percent of the highest 3-hour average Hg sorbent flow rate (taken, at a minimum, once every hour) measured during the most recent performance test demonstrating compliance with the Hg emission limit.

2.48. “Minimum hydrogen chloride (HCl) sorbent flow rate” means 90 percent of the highest 3-hour average HCl sorbent flow rate (taken, at a minimum, once every hour) measured during the most recent performance test demonstrating compliance with the HCl emission limit.

2.49. “Minimum horsepower or amperage” means 90 percent of the highest 3-hour average horsepower or amperage to the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the applicable emission limits.

2.50. “Minimum pressure drop across the wet scrubber” means 90 percent of the highest 3-hour average pressure drop across the wet scrubber PM control device (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the PM emission limit.

2.51. “Minimum reagent flow rate” means 90 percent of the highest 3-hour average reagent flow rate at the inlet to the selective noncatalytic reduction technology (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the NO_x emissions limit.

2.52. “Minimum scrubber liquor flow rate” means 90 percent of the highest 3-hour average liquor flow rate at the inlet to the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with all applicable emission limits.

2.53. “Minimum scrubber liquor pH” means 90 percent of the highest 3-hour average liquor pH at the inlet to the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the HCl emission limit.

2.54. “Minimum secondary chamber temperature” means 90 percent of the highest 3-hour average secondary chamber temperature (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the PM, CO, dioxin/furan, and NO_x emissions limits.

2.55. “Modification” or ‘Modified HMIWI’ means any change to an HMIWI unit after the effective date of these standards such that:

2.55.a. The cumulative costs of the modifications, over the life of the unit, exceed 50 per centum of the original cost of the construction and installation of the unit (not including the cost of any land purchased in connection with such construction or installation) updated to current costs, or

2.55.b. The change involves a physical change in or change in the method of operation of the unit which increases the amount of any air pollutant emitted by the unit for which standards have been established

under Sections 129 or 111 of the CAA.

2.56. “Municipal waste” means refuse (and refuse-derived fuel) collected from the general public and from residential, commercial, institutional, and industrial sources consisting of paper, wood, yard wastes, food wastes, plastics, leather, rubber, and other combustible materials and non-combustible materials such as metal, glass and rock, provided: that the term does not include industrial process wastes or medical wastes that are segregated from such other wastes; and an incineration unit shall not be considered to be combusting municipal waste for purposes of this rule if it combusts a fuel feed stream, 30 percent or less of the weight of which is comprised, in aggregate, of municipal waste.

2.57. Municipal waste combustion unit means any setting or equipment that combusts solid, liquid, or gasified municipal solid waste including, but not limited to, field-erected combustion units (with or without heat recovery), modular combustion units (starved-air or excess-air), boilers (for example, steam generating units), furnaces (whether suspension-fired, grate-fired, mass-fired, air curtain incinerators, or fluidized bed-fired), and pyrolysis/ combustion units. Two criteria further define municipal waste combustion units:

2.57.a. Municipal waste combustion units do not include pyrolysis or combustion units located at a plastics or rubber recycling unit as specified under 40 CFR §§60.1020(h) and (i). Municipal waste combustion units also do not include cement kilns that combust municipal solid waste as specified under 40 CFR §60.1020(j). Municipal waste combustion units also do not include internal combustion engines, gas turbines, or other combustion devices that combust landfill gases collected by landfill gas collection systems.

2.57.b. The boundaries of a municipal waste combustion unit are defined as follows. The municipal waste combustion unit includes, but is not limited to, the municipal solid waste fuel feed system, grate system, flue gas system, bottom ash system, and the combustion unit water system. The municipal waste combustion unit does not include air pollution control equipment, the stack, water treatment equipment, or the turbine-generator set. The municipal waste combustion unit boundary starts at the municipal solid waste pit or hopper and extends through three areas:

2.57.b.1. The combustion unit flue gas system, which ends immediately after the heat recovery equipment or, if there is no heat recovery equipment, immediately after the combustion chamber;

2.57.b.2. The combustion unit bottom ash system, which ends at the truck loading station or similar equipment that transfers the ash to final disposal. It includes all ash handling systems connected to the bottom ash handling system; and

2.57.b.3. The combustion unit water system, which starts at the feed water pump and ends at the piping that exits the steam drum or superheater.

2.58. “Municipal waste combustor unit” or ‘municipal waste combustor’ 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 (i.e., steam generating units), furnaces (whether suspension-fired, grate-fired, mass-fired, air curtain incinerators, or fluidized bed-fired), and pyrolysis/ combustion units.

2.58.a. Municipal waste combustors do not include pyrolysis/ combustion units located at a plastics/ rubber recycling unit as specified in 40 CFR §60.50b(m). Municipal waste combustors do not include

cement kilns firing municipal solid waste as specified in 40 CFR §60.50b(p). 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.

2.58.b. The boundaries of a municipal 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:

2.58.b.1. 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;

2.58.b.2. The combustor bottom ash system, which ends at the truck loading station or similar ash handling equipment that transfer the ash to final disposal, including all ash handling systems that are connected to the bottom ash handling system; and

2.58.b.3. The combustor water system, which starts at the feed water pump and ends at the piping exiting the steam drum or superheater.

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

2.59. “New CISWI unit” means a CISWI unit that commenced construction after November 30, 1999 or for which modification or reconstruction is commenced on or after June 1, 2001. A CISWI unit shall not be defined as ‘new’ if physical or operational changes to the unit are primarily to comply with the emission guidelines for existing CISWI units, as referenced in 40 CFR Part 60 Subpart DDDD and set forth in section 9. Such changes do not qualify as reconstruction or modification under 40 CFR Part 60, Subpart CCCC.

2.60. “New HMIWI unit” means a HMIWI unit that commenced construction after December 1, 2008 or for which modification is commenced after May 6, 2010. A HMIWI unit shall not be defined as ‘new’ if physical or operational changes made to an existing HMIWI unit solely for the purpose of complying with emission guidelines for existing HMIWI units, as referenced in 40 CFR Part 60 Subpart Ce and set forth in section 7. Such changes are not considered a modification and do not result in an existing HMIWI unit becoming subject to the provisions of 40 CFR Part 60, Subpart Ec.

2.61. “New LMWC unit” means a LMWC unit for which construction is commenced after September 20, 1994, or for which modification or reconstruction is commenced after June 19, 1996.

2.62. “New SMWC unit” means a SMWC unit which commenced construction after August 30, 1999, or commenced reconstruction or modification after June 6, 2001.

2.63. “New OSWI unit” means an OSWI unit that commenced construction after December 9, 2004 or for which modification or reconstruction is commenced on or after June 16, 2006.

2.64. “Operating day” means a 24-hour period between 12:00 midnight and the following midnight during which any amount of hospital waste or medical/infectious waste is combusted at any time in the HMIWI.

2.65. "Operation" means the period during which waste is combusted in the incinerator excluding periods of startup or shutdown.

2.66. "Other solid waste incineration unit" or "OSWI unit" means either a very small municipal waste combustion unit or an institutional waste incineration unit. Unit types listed in 40 CFR §60.2887 are not OSWI units. While not all OSWI units will include all of the following components, an OSWI unit includes, but is not limited to, the municipal or institutional solid waste feed system, grate system, flue gas system, waste heat recovery equipment, if any, and bottom ash system. The OSWI unit does not include air pollution control equipment or the stack. The OSWI unit boundary starts at the municipal or institutional waste hopper (if applicable) and extends through two areas:

2.66.a. The combustion unit flue gas system, which ends immediately after the last combustion chamber or after the waste heat recovery equipment, if any; and

2.66.b. The combustion unit bottom ash system, which ends at the truck loading station or similar equipment that transfers the ash to final disposal. The OSWI unit includes all ash handling systems connected to the bottom ash handling system.

2.67. "Particulate matter" or "PM" means the total particulate matter emitted from an HMIWI as measured by EPA Reference Method 5 or EPA Reference Method 29.

2.68. "Pathological waste" means waste material consisting of only human or animal remains, anatomical parts or tissue, the bags or containers used to collect and transport the waste material, and animal bedding (if applicable).

2.69. "Person" means any and all persons, natural or artificial, including the state of West Virginia or any other state, the United States of America, any municipal, statutory, public or private corporation organized or existing under the laws of this or any other state or country, and any firm, partnership or association of whatever nature.

2.70. "Primary chamber" means the chamber in an HMIWI that receives waste material, in which the waste is ignited, and from which ash is removed.

2.71. "Pyrolysis" means the endothermic gasification of hospital waste and/or medical/infectious waste using external energy.

2.72. "Secondary chamber" means a component of the HMIWI that receives combustion gases from the primary chamber and in which the combustion process is completed.

2.73. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§22-1-6 or 22-1-8.

2.74. "Shutdown" means the period of time after all waste has been combusted in the primary chamber. For continuous HMIWI, shutdown shall commence no less than 2 hours after the last charge to the incinerator. For intermittent HMIWI, shutdown shall commence no less than 4 hours after the last charge to the incinerator. For batch HMIWI, shutdown shall commence no less than 5 hours after the high-air phase of combustion has been completed.

2.75. “Small HMIWI means:

2.75.a. Except as provided in subdivision 2.62.b;

2.75.a.1. An HMIWI whose maximum design waste burning capacity is less than or equal to 200 pounds per hour; or

2.75.a.2. A continuous or intermittent HMIWI whose maximum charge rate is less than or equal to 200 pounds per hour; or

2.75.a.3. A batch HMIWI whose maximum charge rate is less than or equal to 1,600 pounds per day.

2.75.b. The following are not small HMIWI:

2.75.b.1. A continuous or intermittent HMIWI whose maximum charge rate is more than 200 pounds per hour;

2.75.b.2. A batch HMIWI whose maximum charge rate is more than 1,600 pounds per day.

2.76. “Small municipal waste combustion unit” or ‘SMWC unit’ means a municipal waste combustion unit with the capacity to combust at least 35 tons per day but no more than 250 tons per day of municipal solid waste or refuse-derived fuel.

2.77. “Solid waste” means any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under Section 402 of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1342), or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended (42 U.S.C. 2014).

2.78. “Solid Waste Disposal Act” means the federal Solid Waste Disposal Act, as amended, 42 U.S.C. §6901 et seq.

2.79. “Solid waste incineration unit” means a distinct operating unit of any facility which combusts any solid waste material from commercial or industrial establishments or the general public (including single and multiple residences, hotels, and motels). Such term does not include incinerators or other units required to have a permit under Section 3005 of the Solid Waste Disposal Act. The term “solid waste incineration unit” does not include materials recovery facilities (including primary or secondary smelters) which combust waste for the primary purpose of recovering metals, qualifying small power production facilities, as defined in Section 3(17)(C) of the Federal Power Act (16 U.S.C. 769(17)(C)), or qualifying cogeneration facilities, as defined in Section 3(18)(B) of the Federal Power Act (16 U.S.C. 796(18)(B)), which burn homogeneous waste (such as units which burn tires or used oil, but not including refuse-derived fuel) for the production of electric energy or in the case of qualifying cogeneration facilities which burn homogeneous waste for the production of electric energy and steam or forms of useful energy (such as heat) which are used for

industrial, commercial, heating or cooling purposes, or air curtain incinerators provided that such incinerators only burn wood wastes, yard wastes and clean lumber and that such air curtain incinerators comply with established opacity limitations.

2.80. “Standard Metropolitan Statistical Area” means any areas listed in OMB Bulletin No. 93-17 entitled “Revised Statistical Definitions for Metropolitan Areas” dated June 30, 1993.

2.81. “Standard conditions” means a temperature of 20°C and a pressure of 101.3 kilopascals.

2.82. “Startup” means the period of time between the activation of the system and the first charge to the unit. For batch HMIWI, startup means the period of time between activation of the system and ignition of the waste.

2.83. “Very small municipal waste combustion unit” means any municipal waste combustion unit that has the capacity to combust less than 35 tons per day of municipal solid waste or refuse-derived fuel, as determined by the calculations in 40 CFR §60.2975.

2.84. “Waste heat recovery” means the process of recovering heat from the combustion flue gases outside of the combustion firebox by convective heat transfer only.

2.85. “Wet scrubber” means an add-on air pollution control device that utilizes an alkaline scrubbing liquor to collect particulate matter (including nonvaporous metals and condensed organics) and/or to absorb and neutralize acid gases.

2.86. “You”, as used in 40 CFR Part 60 Subparts CCCC and DDDD, means the owner or operator of a CISWI unit.

2.87. Other words and phrases used in this rule, unless otherwise indicated, shall have the meaning ascribed to them in 40 CFR Part 60 Subparts A, B, Ce, Eb, Ec, AAAA, CCCC, DDDD and EEEE, as applicable. Words and phrases not defined therein shall have the meaning given to them in the Clean Air Act and the Solid Waste Disposal Act.

§45-18-3. Adoption of Standards.

3.1. The Secretary hereby adopts and incorporates by reference the provisions of 40 CFR Part 60, Subparts Eb, Ec, AAAA, CCCC and EEEE, including any applicable reference methods, performance specifications and other test methods which are appended to these standards and contained in these subparts, effective June 1, 2010.

§45-18-4. Requirements for New Large Municipal Waste Combustors.

4.1. No person shall construct or operate, or cause to be constructed or operated a new LMWC unit which results in a violation of 40 CFR Part 60, Subpart Eb or this rule.

4.2. Requirements for New LMWC Units. -- The owner or operator of a new LMWC unit shall comply with all applicable standards of performance, requirements and provisions of 40 CFR Part 60 Subpart Eb, including any reference methods, performance specifications and other test methods associated with Subpart

Eb.

§45-18-5. Requirements for New Small Municipal Waste Combustion Units.

5.1. No person shall construct or operate, or cause to be constructed or operated a new SMWC unit which results in a violation of 40 CFR Part 60, Subpart AAAA or this rule.

5.2. Requirements for New SMWC Units. -- The owner or operator of a new SMWC unit shall comply with all applicable standards of performance, requirements and provisions of 40 CFR Part 60 Subpart AAAA, including any reference methods, performance specifications and other test methods associated with Subpart AAAA.

§45-18-6. Requirements for New Hospital/ Medical/ Infectious Waste Incinerators.

6.1. No person shall construct, reconstruct, modify, or operate, or cause to be constructed, reconstructed, modified, or operated a new HMIWI unit which results in a violation of 40 CFR Part 60 Subpart Ec, or this rule.

6.2. Requirements for New HMIWI Units. -- The owner or operator of a new HMIWI unit shall comply with all applicable standards of performance, requirements and provisions of 40 CFR Part 60 Subpart Ec, including any reference methods, performance specifications and other test methods associated with Subpart Ec.

§45-18-7. Requirements for Existing Hospital/ Medical/ Infectious Waste Incinerators.

7.1. The owner or operator of an existing HMIWI unit shall comply with the applicable emission guidelines, compliance times, requirements and provisions of 40 CFR Part 60 Subpart Ce contained in this section, including any reference methods, performance specifications and other test methods associated with Subpart Ce.

7.2. Designated Facilities.

7.2.a. Except as provided in subdivisions 7.2.b through 7.2.h, the designated facility to which the emissions guidelines apply is each individual HMIWI unit:

7.2.a.1. For which construction was commenced on or before June 20, 1996, or for which modification was commenced on or before March 16, 1998.

7.2.a.2. For which construction was commenced after June 20, 1996 but no later than December 1, 2008, or for which modification is commenced after March 16, 1998 but no later than April 6, 2010.

7.2.b. A combustor is not subject to this section during periods when only pathological waste, low-level radioactive waste, and/or chemotherapeutic waste is burned, provided the owner or operator of the combustor:

7.2.b.1. Notifies the Administrator of an exemption claim; and

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7.2.b.2. Keeps records on a calendar quarter basis of the periods of time when only pathological waste, low-level radioactive waste, and/or chemotherapeutic waste is burned.

7.2.c. Any co-fired combustor is not subject to this section if the owner or operator of the co-fired combustor:

7.2.c.1. Notifies the Administrator of an exemption claim;

7.2.c.2. Provides an estimate of the relative weight of hospital waste, medical/infectious waste, and other fuels and/or wastes to be combusted; and

7.2.c.3. Keeps records on a calendar quarter basis of the weight of hospital waste and medical/infectious waste combusted, and the weight of all other fuels and wastes combusted at the co-fired combustor.

7.2.d. Any combustor required to have a permit under Section 3005 of the Solid Waste Disposal Act is not subject to this section.

7.2.e. Any combustor which meets the applicability requirements under 40 CFR Part 60, Subparts Cb, Ea, or Eb (standards or guidelines for certain municipal waste combustors) is not subject to this section.

7.2.f. Any pyrolysis unit is not subject to this section.

7.2.g. Cement kilns firing hospital waste and/or medical/ infectious waste are not subject to this section.

7.2.h. Physical or operational changes made to an existing HMIWI unit solely for the purpose of complying with emission guidelines under this section are not considered a modification and do not result in an existing HMIWI unit becoming subject to the provisions of 40 CFR Part 60, Subpart Ec.

7.2.i. On or before September 15, 2000, the owner or operator of an existing HMIWI unit shall operate pursuant to a Title V permit in accordance with the requirements of 45CSR30.

7.2.j The requirements of 40 CFR §§62.12150-12152, as amended and approved on August 3, 2009, and the related provisions of 40 CFR Part 60, Subpart Ce as promulgated on September 15, 1997, shall apply to the designated facilities under paragraph 7.2.a.1 until one year after the effective date of U.S. EPA's approval of the 111(d)/129 State Plan revision for HMIWI units. Upon one year after the effective date of U.S. EPA's approval of the 111(d)/129 State Plan revision for HMIWI units, designated facilities under paragraph 7.2.a.1 are no longer subject to the requirements of 40 CFR Part 60, Subpart Ce as promulgated on September 15, 1997, but are subject to the requirements of 40 CFR Part 60, Subpart Ce as amended on October 6, 2009.

7.3. Emissions Guidelines.

7.3.a. The owner or operator of an existing HMIWI unit shall comply with the following emissions limits as applicable:

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7.3.a.1. For a designated facility set forth in paragraph 7.2.a.1 subject to the emissions guidelines as promulgated on September 15, 1997, the requirements listed in Table 18-1A, except as provided in subdivision 7.3.b;

7.3.a.2. For a designated facility set forth in paragraph 7.2.a.1 subject to the emissions guidelines as amended on October 6, 2009, the requirements listed in Table 18-1B, except as provided in subdivision 7.3.b;

7.3.a.3. For a designated facility set forth in paragraph 7.2.a.2, the more stringent of the requirements listed in Table 18-1B and Table 1A of 40 CFR Part 60, Subpart Ec, as amended October 6, 2009.

7.3.b. The owner or operator of any small HMIWI unit constructed on or before June 20, 1996, which is located more than 50 miles from the boundary of the nearest Standard Metropolitan Statistical Area and which burns less than 2,000 pounds per week of hospital waste and medical/infectious waste shall comply with emissions limits in paragraphs 7.3.b.1 and 7.3.b.2, as applicable. The 2,000 lb/week limitation does not apply during performance tests.

7.3.b.1. For a designated facility under paragraph 7.2.a.1 subject to the emissions guidelines as promulgated on September 15, 1997, the requirements listed in Table 18-2A; and

7.3.b.2. For a designated facility under paragraph 7.2.a.1 subject to the emissions guidelines as amended on October 6, 2009, the requirements listed in Table 18-2B.

7.3.c. The owner or operator of any existing HMIWI unit shall comply with the following stack opacity requirements, as applicable:

7.3.c.1. For a designated facility under paragraph 7.2.a.1 subject to the emissions guidelines as promulgated on September 15, 1997, the requirements in 40 CFR §60.52c(b)(1); and

7.3.c.2. For a designated facility under paragraph 7.2.a.1 subject to the emissions guidelines as amended on October 6, 2009 and a designated facility under paragraph 7.2.a.2, the requirements in 40 CFR §60.52c(b)(2).

7.4. Operator Training and Qualification Guidelines. -- The owner or operator of an existing HMIWI unit shall comply with the operator training and qualification requirements specified in 40 CFR §60.53c:

7.4.a. For a designated facility under paragraph 7.2.a.1, by July 28, 2001, and

7.4.b. For a designated facility under paragraph 7.2.a.2, at the time of initial facility start-up.

7.5. Waste Management Guidelines. -- The owner or operator of an existing HMIWI unit shall comply with the waste management plan specified in 40 CFR §60.55c:

7.5.a. For a designated facility under paragraph 7.2.a.1, by July 28, 2001, and

7.5.b. For a designated facility under paragraph 7.2.a.2, no later than 60 days after the date of the

initial performance test under 40 CFR §60.56c(b).

7.6. Inspection Guidelines.

7.6.a. The owner or operator of each small HMIWI unit subject to the emissions limits under subdivision 7.3.b and each HMIWI unit subject to the emissions limits under paragraphs 7.3.a.2 and 7.3.a.3 shall perform an initial equipment inspection within one year after the date of U.S. EPA's approval of the 111(d)/129 State Plan revision for HMIWI units under 40 CFR Part 60, Subpart Ce requirements, as revised October 6, 2009. The initial equipment inspection shall include the following:

7.6.a.1. Inspection of all burners, pilot assemblies, and pilot sensing devices for proper operation: cleaning of pilot flame sensor, as necessary;

7.6.a.2. Ensuring proper adjustment of primary and secondary chamber combustion air, and adjust as necessary;

7.6.a.3. Inspection of hinges and door latches and lubrication as necessary;

7.6.a.4. Inspection of dampers, fans, and blowers for proper operation;

7.6.a.5. Inspection of HMIWI unit door and door gaskets for proper sealing;

7.6.a.6. Inspection of motors for proper operation;

7.6.a.7. Inspection of primary chamber refractory lining; cleaning and repairing or replacing lining as necessary;

7.6.a.8. Inspection of incinerator shell for corrosion and hot spots;

7.6.a.9. Inspection of secondary and tertiary chamber and stack, cleaning as necessary;

7.6.a.10. Inspection of mechanical loader, including limit switches, for proper operation, if applicable;

7.6.a.11. Visual inspection of waste bed (grates), and repairing or sealing, as appropriate;

7.6.a.12. For the burn cycle that follows the inspection, documentation that the incinerator is operating properly and making any necessary adjustments;

7.6.a.13. Inspection of air pollution control device(s) for proper operation, if applicable;

7.6.a.14. Inspection of waste heat boiler systems to ensure proper operation, if applicable;

7.6.a.15. Inspection of bypass stack components;

7.6.a.16. Ensuring proper calibration of thermocouples, sorbent feed systems and any other monitoring equipment; and

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7.6.a.17. Generally observing that the equipment is maintained in good operating condition.

7.6.b. Within 10 operating days following an equipment inspection, all necessary repairs shall be completed unless the owner or operator obtains written approval from the Secretary establishing a date whereby all necessary repairs of the designated facility shall be completed.

7.6.c. The owner or operator of each small HMIWI unit subject to the emissions limits under subdivision 7.3.b and each HMIWI unit subject to the emissions limits under paragraphs 7.3.a.2 and 7.3.a.3 shall perform an equipment inspection annually (no more than 12 months following the previous annual equipment inspection), as outlined in subdivision 7.6.a.

7.6.d. The owner or operator of each small HMIWI unit subject to the emissions limits under paragraph 7.3.b.2 and each HMIWI unit subject to the emissions limits under paragraphs 7.3.a.2 and 7.3.a.3 shall perform an initial air pollution control device inspection, as applicable, within one year following approval of the 111(d)/129 State Plan revision for HMIWI units under 40 CFR Part 60, Subpart C requirements, as revised October 6, 2009. The initial air pollution control device inspection shall include the following:

7.6.d.1. Inspect air pollution control device(s) for proper operation, if applicable;

7.6.d.2. Ensure proper calibration of thermocouples, sorbent feed systems, and any other monitoring equipment; and

7.6.d.3. Generally observe that the equipment is maintained in good operating condition.

7.6.e. Within 10 operating days following an air pollution control device inspection under subdivision 7.6.d, all necessary repairs shall be completed unless the owner or operator obtains written approval from the Secretary establishing a date whereby all necessary repairs of the designated facility shall be completed.

7.6.f. The owner or operator of each small HMIWI unit subject to the emissions limits under paragraph 7.3.b.2 and each HMIWI unit subject to the emissions limits under paragraphs 7.3.a.2 and 7.3.a.3 shall perform an air pollution control device inspection, as applicable, annually (no more than 12 months following the previous annual air pollution control device inspection), as outlined in subdivision 7.6.d.

7.7. Compliance, Performance Testing, and Monitoring Guidelines.

7.7.a. Except as provided in subdivision 7.7.b, the owner or operator of a HMIWI unit shall comply with the requirements for compliance and performance testing listed in 40 CFR §60.56c, with the following exclusions:

7.7.a.1. For a designated facility under paragraph 7.2.a.1 subject to the emissions limits in paragraph 7.3.a.1, the test methods listed in 40 CFR §§60.56c(b)(7) and (8), the fugitive emissions testing requirements under 40 CFR §§60.56c(b)(14) and (c)(3), the CO CEMS requirements under 40 CFR §60.56c(c)(4), and the compliance requirements for monitoring listed in 40 CFR §§60.56c(c)(5)(ii) through (v), (c)(6), (c)(7), (e)(6) through (10), (f)(7) through (10), (g)(6) through (10), and (h).

7.7.a.2. For a designated facility under paragraphs 7.2.a.1 and 7.2.a.2 subject to the emissions

limits in paragraphs 7.3.a.2 and 7.3.a.3, the annual fugitive emissions testing requirements under 40 CFR §60.56c(c)(3), the CO CEMS requirements under 40 CFR §60.56c(c)(4), and the compliance requirements for monitoring listed in 40 CFR §§60.56c(c)(5)(ii) through (v), (c)(6), (c)(7), (e)(6) through (10), (f)(7) through (10), and (g)(6) through (10). Sources subject to the emissions limits under paragraphs 7.3.a.2 and 7.3.a.3 may, however, elect to use CO CEMS as specified under 40 CFR §60.56c(c)(4) or bag leak detection systems as specified under 40 CFR §60.57c(h).

7.7.b. Except as provided in paragraphs 7.7.b.1 and 7.7.b.2, the owner or operator of a small HMIWI unit subject to the emissions limits under subdivision 7.3.b shall comply with the performance testing requirements listed in 40 CFR §60.56c. The 2,000 lb/week limitation under subdivision 7.3.b does not apply during performance tests.

7.7.b.1. For a designated facility under paragraph 7.2.a.1 subject to the emissions limits under paragraph 7.3.b.1, the test methods listed in 40 CFR §§60.56c(b)(7), (8), (12), (13) (Pb and Cd), and (14), the annual PM, CO, and HCl emissions testing requirements under 40 CFR §60.56c(c)(2), the annual fugitive emissions testing requirements under 40 CFR §60.56c(c)(3), the CO CEMS requirements under 40 CFR §60.56c(c)(4), and the compliance requirements for monitoring listed in 40 CFR §§60.56c(c)(5) through (7), and (d) through (k) do not apply.

7.7.b.2. For a designated facility under paragraph 7.2.a.2 subject to the emissions limits under paragraph 7.3.b.2, the annual fugitive emissions testing requirements under 40 CFR §60.56c(c)(3), the CO CEMS requirements under 40 CFR §60.56c(c)(4), and the compliance requirements for monitoring listed in 40 CFR §§60.56c(c)(5)(ii) through (v), (c)(6), (c)(7), (e)(6) through (10), (f)(7) through (10), and (g)(6) through (10) do not apply. Sources subject to the emissions limits under paragraph 7.3.b.2 may, however, elect to use CO CEMS as specified under 40 CFR §60.56c(c)(4) or bag leak detection systems as specified under 40 CFR §60.57c(h).

7.7.c. The owner or operator of a small HMIWI unit subject to the emissions limits under subdivision 7.3.b that is not equipped with an air pollution control device shall comply with the following compliance and performance testing requirements:

7.7.c.1. Establishment of maximum charge rate and minimum secondary chamber temperature as site-specific operating parameters during the initial performance test to determine compliance with applicable emission limits;

7.7.c.2. Following the date on which the initial performance test is completed or is required to be completed under 40 CFR §60.8, whichever date comes first, the small HMIWI unit shall not operate above the maximum charge rate or below the minimum secondary chamber temperature measured as 3-hour rolling averages (calculated each hour as the average of the previous 3 operating hours) at all times. Operating parameter limits do not apply during performance tests. Operation above the maximum charge rate or below the minimum secondary chamber temperature shall constitute a violation of the established operating parameter(s).

7.7.c.3. Operation above the maximum charge rate and below the minimum secondary chamber temperature (each measured on a 3-hour rolling average) simultaneously shall constitute a violation of the PM, CO and dioxin/ furan emission limits, except as provided in paragraph 7.7.c.4; and

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7.7.c.4. The owner or operator of a small HMIWI unit may conduct a repeat performance test within 30 days of violation of applicable operating parameter(s) to demonstrate that the small HMIWI unit is not in violation of the applicable emission limit(s). Repeat performance tests conducted pursuant to this paragraph must be conducted using the identical control device operating conditions that indicated a violation under paragraph 7.7.c.3;

7.7.d. The owner or operator of a HMIWI unit subject to the emissions limits under subdivisions 7.3.a and 7.3.b shall comply with the requirements for monitoring listed in 40 CFR §60.57c, except as provided for under subdivision 7.7.e.

7.7.e. The owner or operator of a small HMIWI unit subject to the emissions limits under subdivision 7.3.b that is not equipped with an air pollution control device shall comply with the following monitoring requirements:

7.7.e.1. Installation, calibration (to manufacturer's specifications), maintenance and operation of a device for measuring and recording the temperature of the secondary chamber on a continuous basis, the output of which shall be recorded, at a minimum once every minute throughout operation;

7.7.e.2. Installation, calibration (to manufacturer's specifications), maintenance and operation of a device which automatically measures and records the date, time, and weight of each charge fed into the HMIWI unit;

7.7.e.3. The owner or operator of a HMIWI unit shall obtain monitoring data at all times during HMIWI unit operation except during periods of monitoring equipment malfunction, calibration, or repair. At a minimum, valid monitoring data shall be obtained for 75 percent of the operating hours per day and for 90 percent of the operating hours per calendar quarter that the HMIWI unit is combusting hospital waste or medical/ infectious waste.

7.7.f. The owner or operator of a designated facility under paragraphs 7.2.a.1 or 7.2.a.2 subject to emissions limits under paragraphs 7.3.a.2, 7.3.a.3 or 7.3.b.2 may use the results of previous emissions tests to demonstrate compliance with the emissions limits, provided that the conditions in paragraphs 7.7.f.1 through 7.7.f.3 are met:

7.7.f.1. The designated facility's previous emissions tests must have been conducted using the applicable procedures and test methods listed in 40 CFR §60.56c(b). Previous emissions test results obtained using EPA-accepted voluntary consensus standards are also acceptable.

7.7.f.2. The HMIWI unit at the designated facility shall currently be operated in a manner (e.g., with charge rate, secondary chamber temperature, etc.) that would be expected to result in the same or lower emissions than observed during the previous emissions test(s), and the HMIWI unit may not have been modified such that emissions would be expected to exceed (notwithstanding normal test-to-test variability) the results from previous emissions test(s).

7.7.f.3. The previous emissions test(s) must have been conducted in 1996 or later.

7.8. Reporting and Recordkeeping Guidelines.

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7.8.a. Except as provided in paragraphs 7.8.a.1 and 7.8.a.2, the owner or operator of an existing HMIWI unit shall comply with the reporting and recordkeeping requirements listed in 40 CFR §§60.58c(b) through (g).

7.8.a.1. For a designated facility under paragraph 7.2.a.1 subject to emissions limits under paragraphs 7.3.a.1 or 7.3.b.1, excluding 40 CFR §§60.58c(b)(2)(ii) (fugitive emissions), (b)(2)(viii) (NO_x reagent), (b)(2)(xvii) (air pollution control device inspections), (b)(2)(xviii) (bag leak detection system alarms), (b)(2)(xix) (CO CEMS data), and (b)(7) (siting documentation).

7.8.a.2. For a designated facility under paragraphs 7.2.a.1 or 7.2.a.2 subject to emissions limits under paragraphs 7.3.a.2, 7.3.a.3 or 7.3.b.2, excluding 40 CFR §§60.58c(b)(2)(xviii) (bag leak detection system alarms), (b)(2)(xix) (CO CEMS data), and (b)(7) (siting documentation).

7.8.b. The owner or operator of each HMIWI unit subject to the emissions limits under subsection 7.3 shall:

7.8.b.1. As specified in subsection 7.6, maintain records of the annual equipment inspections that are required for each HMIWI unit subject to the emissions limits under paragraphs 7.3.a.2, 7.3.a.3 and subdivision 7.3.b, and the annual air pollution control device inspections that are required for each HMIWI unit subject to the emissions limits under paragraphs 7.3.a.2, 7.3.a.3 and 7.3.b.2, any required maintenance, and any repairs not completed within 10 days of an inspection or repair date approved by the Secretary; and

7.8.b.2. Submit an annual report containing information recorded under paragraph 7.8.b.1 no later than 60 days following the year in which data were collected. Subsequent reports shall be sent no later than 12 calendar months following the previous report (once the unit is subject to permitting requirements under 45CSR30, the owner or operator must submit these reports semiannually). The report shall be signed and certified in accordance with subdivision 7.8.c.

7.8.c. Where reports are required to be submitted to the Secretary under the terms of a permit issued pursuant to 45CSR13, 45CSR14, 45CSR19 or 45CSR30, the reports shall be signed and certified in accordance with the requirements of the applicable permitting rule. Where reports are required to be submitted to the Secretary under this rule, and no permit is in effect under 45CSR13, 45CSR14, 45CSR19 or 45CSR30, the report shall be signed by the facilities manager and shall contain a certification stating that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

7.9. Compliance Times.

7.9.a. Except as provided in subdivisions 7.9.b, 7.9.c and 7.9.d, on or after July 28, 2001, the owner or operator of any existing HMIWI unit subject to the requirements of 40 CFR Part 60, Subpart Ce as promulgated on September 15, 1997, shall be in compliance with all applicable provisions of this section.

7.9.b. No later than November 28, 2000, the owner or operator of an existing HMIWI unit required to install air pollution control equipment shall submit a compliance plan and schedule subject to the approval of the Secretary that meets the following criteria:

7.9.b.1. No later than July 28, 2001, a facility that plans to install air pollution control equipment

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other than a dry scrubber followed by a fabric filter, a wet scrubber or dry scrubber followed by a fabric filter and a wet scrubber shall submit a petition for site specific operating parameters under 40 CFR §60.56c(i) to the Administrator and the Secretary;

7.9.b.2. No later than July 28, 2001, services of an architectural and engineering firm regarding air pollution device(s) shall be obtained;

7.9.b.3. No later than January 28, 2002, design drawings of an air pollution device(s) shall be ordered;

7.9.b.4. No later than January 28, 2002, air pollution device(s) shall be ordered;

7.9.b.5. No later than July 28, 2002, site preparation for installation of the air pollution device(s) shall be initiated;

7.9.b.6. No later than April 28, 2002, initial startup of the air pollution device(s) shall be conducted;

7.9.b.7. No later than April 28, 2002, initial compliance test(s) of the air pollution device(s) shall be conducted; and

7.9.b.8. No later than September 16, 2002, the owner or operator of an existing HMIWI unit shall not allow or cause to be allowed a HMIWI unit to be operated except in compliance with all applicable provisions of this section.

7.9.c. An owner or operator of an existing HMIWI unit who submits in writing to the Secretary a request for an extension to comply beyond the compliance dates under subdivision 7.9.b, shall submit to the Secretary no later than April 28, 2001, the following information:

7.9.c.1. An analysis to support the need for an extension, including an explanation of why a time period up to three years after July 28, 2000 is not sufficient time to comply with subdivision 7.9.b;

7.9.c.2. A demonstration of the feasibility to transport the waste offsite to a commercial medical waste treatment and disposal facility on a temporary or permanent basis; and

7.9.c.3. Measurable and enforceable incremental steps of progress to be taken towards compliance with the emission limits contained in Table 18-1A.

7.9.d. The owner or operator of an existing HMIWI unit will be notified in writing by the Secretary of his or her decision as to whether an extension shall be granted or denied. The owner or operator shall comply with one of the following:

7.9.d.1. If the request for extension is denied, the owner or operator shall submit a compliance plan in accordance with subdivision 7.9.b no later than 30 days after denial of the request for extension, or July 28, 2001, whichever is later; or

7.9.d.2. If the request for extension is granted, the owner or operator shall submit a compliance

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plan and schedule commensurate with the granted extension no later than 30 days after the date the request for extension has been granted.

7.9.e. Except as provided in subdivisions 7.9.f, 7.9.g and 7.9.h, one year after the effective date of U.S. EPA's approval of the 111(d)/129 State Plan revision for HMIWI units, the owner or operator of any existing HMIWI unit subject to the requirements of 40 CFR Part 60, Subpart Ce as promulgated on October 6, 2009, shall be in compliance with all applicable provisions of this section.

7.9.f. No later than 120 days after the effective date of U.S. EPA's approval of the 111(d)/129 State Plan revision for HMIWI units, the owner or operator of an existing HMIWI unit required to install air pollution control equipment shall submit an expeditious compliance plan and schedule subject to the approval of the Secretary that meets the following criteria:

7.9.f.1. No later than 12 months after the effective date of U.S. EPA's approval of the 111(d)/129 State Plan revision for HMIWI units, a facility that plans to install air pollution control equipment other than a dry scrubber followed by a fabric filter, a wet scrubber or dry scrubber followed by a fabric filter and a wet scrubber shall submit a petition for site specific operating parameters under 40 CFR §60.56c(i) to the Administrator and the Secretary;

7.9.f.2. No later than 12 months after the effective date of U.S. EPA's approval of the 111(d)/129 State Plan revision for HMIWI units, services of an architectural and engineering firm regarding air pollution device(s) shall be obtained;

7.9.f.3. No later than 18 months after the effective date of U.S. EPA's approval of the 111(d)/129 State Plan revision for HMIWI units, design drawings of an air pollution device(s) shall be ordered;

7.9.f.4. No later than 18 months after the effective date of U.S. EPA's approval of the 111(d)/129 State Plan revision for HMIWI units, air pollution device(s) shall be ordered;

7.9.f.5. No later than 18 months after the effective date of U.S. EPA's approval of the 111(d)/129 State Plan revision for HMIWI units, site preparation for installation of the air pollution device(s) shall be initiated;

7.9.f.6. No later than 30 months after the effective date of U.S. EPA's approval of the 111(d)/129 State Plan revision for HMIWI units, initial startup of the air pollution device(s) shall be conducted;

7.9.f.7. No later than 30 months after the effective date of U.S. EPA's approval of the 111(d)/129 State Plan revision for HMIWI units, initial compliance test(s) of the air pollution device(s) shall be conducted; and

7.9.f.8. No later than October 6, 2014, the owner or operator of an existing HMIWI unit shall not allow or cause to be allowed a HMIWI unit to be operated except in compliance with all applicable provisions of this section.

7.9.g. An owner or operator of an existing HMIWI unit who submits in writing to the Secretary a request for an extension to comply beyond the compliance dates under subdivision 7.9.f, shall submit to the Secretary no later than 9 months after the effective date of U.S. EPA's approval of the 111(d)/129 State Plan

revision for HMIWI units, the following information:

7.9.g.1. An analysis to support the need for an extension, including an explanation of why a time period up to three years after the effective date of U.S. EPA's approval of the 111(d)/129 State Plan revision for HMIWI units is sufficient time to comply with this section, while one year after the effective date of U.S. EPA's approval of the 111(d)/129 State Plan revision for HMIWI units is not sufficient;

7.9.g.2. A demonstration of the feasibility to transport the waste offsite to a commercial medical waste treatment and disposal facility on a temporary or permanent basis; and

7.9.g.3. Measurable and enforceable incremental steps of progress to be taken towards compliance with the emission limits contained in Table 18-1B.

7.9.h. The owner or operator of an existing HMIWI unit will be notified in writing by the Secretary of his or her decision as to whether an extension shall be granted or denied. The owner or operator shall comply with one of the following:

7.9.h.1. If the request for extension is denied, the owner or operator shall submit a compliance plan in accordance with subdivision 7.9.f no later than 30 days after denial of the request for extension, or one year after the effective date of U.S. EPA's approval of the 111(d)/129 State Plan revision for HMIWI units whichever is later; or

7.9.h.2. If the request for extension is granted, the owner or operator shall submit a compliance plan and schedule commensurate with the granted extension no later than 30 days after the date the request for extension has been granted; and

7.9.h.3. On or before October 6, 2014, the owner or operator shall comply with the emissions guidelines as amended on October 6, 2009, and not allow or cause to be allowed a HMIWI unit to be operated except in compliance with all applicable provisions of this section.

§45-18-8. Requirements for New Commercial and Industrial Solid Waste Incinerators.

8.1. No person shall construct, reconstruct, modify, or operate, or cause to be constructed, reconstructed, modified, or operated a new CISWI unit which results in a violation of 40 CFR Part 60 Subpart CCCC, or this rule.

8.2. Requirements for New CISWI Units. -- The owner or operator of a new CISWI unit shall comply with all applicable standards of performance, requirements and provisions of 40 CFR Part 60 Subpart CCCC, including any reference methods, performance specifications and other test methods associated with Subpart CCCC.

§45-18-9. Requirements for Existing Commercial and Industrial Solid Waste Incinerators.

9.1. Requirements for Existing CISWI Units. -- The owner or operator of an existing CISWI unit shall comply with the applicable emission guidelines, compliance times, requirements and provisions of 40 CFR Part 60 Subpart DDDD contained in this section, including any reference methods, performance specifications and other test methods associated with Subpart DDDD.

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- 9.1.a. Emission limits contained in Table 18-C;
- 9.1.b. Compliance dates specified in subsection 9.2, including increments of progress toward compliance specified in that subsection and 40 CFR §§60.2575 through 60.2615;
- 9.1.c. Waste management plan requirements specified in 40 CFR §§60.2620 through 60.2630;
- 9.1.d. Operator training and qualification requirements specified in 40 CFR §§60.2635 through 60.2665;
- 9.1.e. Emission limitations and operating limits specified in 40 CFR §§60.2670 through 60.2685;
- 9.1.f. Performance testing requirements specified in 40 CFR §§60.2690 through 60.2695;
- 9.1.g. Initial compliance requirements in 40 CFR §§60.2700 through 60.2705;
- 9.1.h. Continuous compliance requirements specified in 40 CFR §§60.2710 through 60.2725;
- 9.1.i. Monitoring requirements specified in 40 CFR §§60.2730 through 60.2735;
- 9.1.j. Recordkeeping and reporting requirements specified in 40 CFR §§60.2740 through 60.2800;
and
- 9.1.k. Requirements for air curtain incinerators specified in 40 CFR §§60.2810 through 60.2870.

9.2. Compliance Times.

9.2.a. The Du Pont Washington Works CISWI unit in Wood County shall achieve final compliance with all applicable provisions of this rule by no later than September 30, 2003; the owner or operator of any other existing CISWI unit shall achieve final compliance with all applicable provisions of this section by no later than October 4, 2004.

§45-18-10. Requirements for New Other Solid Waste Incineration Units.

10.1. No person shall construct or operate, or cause to be constructed or operated a new OSWI unit which results in a violation of 40 CFR Part 60, Subpart EEEE or this rule.

10.2. Requirements for New OSWI Units. -- The owner or operator of a new OSWI unit shall comply with all applicable standards of performance, requirements and provisions of 40 CFR Part 60 Subpart EEEE, including any reference methods, performance specifications and other test methods associated with Subpart EEEE.

§45-18-11. Secretary.

11.1. Any and all references in 40 CFR Part 60 Subparts Ce, Eb, Ec, AAAA, CCCC, DDDD, and EEEE to the "Administrator" are amended to be the "Secretary" except in the following references which shall remain "Administrator":

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11.1.a. Where the federal regulations specifically provide that the Administrator shall retain authority and not transfer such authority to the Secretary;

11.1.b. Where provisions occur which refer to:

11.1.b.1. Alternate means of emission limitations;

11.1.b.2. Alternate control technologies;

11.1.b.3. Innovative technology waivers;

11.1.b.4. Alternate test methods;

11.1.b.5. Alternate monitoring methods;

11.1.b.6. Waivers/adjustments to recordkeeping and reporting; or

11.1.b.7. Applicability determinations;

11.1.c. Where the context of the regulation clearly requires otherwise;

11.1.d. The requirements of 40 CFR §60.56c(i) establishing operating parameters when using controls other than those listed in 40 CFR §60.56c(d);

11.1.e. Alternative methods of demonstrating compliance under 40 CFR §60.8; and

11.1.f. Performance test and data reduction waivers under 40 CFR §60.8(b).

§45-18-12. Permits.

12.1. On or before September 15, 2000, the owner or operator of existing HMIWI units shall operate pursuant to a Title V permit in accordance with the requirements of 45CSR30.

12.2. The owner or operator of a new HMIWI unit shall submit to the Secretary a complete application for a Title V permit in accordance with the requirements of 45CSR30 within twelve (12) months after commencing operation.

12.3. On or before December 1, 2003, the owner or operator of existing CISWI units shall operate pursuant to a CAA Title V permit in accordance with the requirements of 45CSR30.

12.4. The owner or operator of a new CISWI unit shall submit to the Secretary a complete application for a Title V permit in accordance with the requirements of 45CSR30 within twelve (12) months after commencing operation, provided that a new CISWI unit may be required to apply for and obtain a Title V permit prior to this date, as specified in 40 CFR §60.2242(b).

12.5. The owner or operator of a new OSWI unit shall submit a complete application for a Title V permit in accordance with the requirements of 45CSR30 within twelve (12) months after commencing operation,

provided that a new OSWI unit may be required to apply for and obtain a Title V permit prior to this date, as specified in 40 CFR §60.2967(b).

12.6. Nothing contained in this rule shall be construed or inferred to mean that permit requirements in accordance with applicable rules shall be in any way limited or inapplicable, including but not limited to the permitting requirements under 45CSR13, 45CSR14, 45CSR19, 45CSR25 and 45CSR30.

§45-18-13. Recordkeeping, Reports and Testing.

13.1. The owner or operator of a LMWC unit, SMWC unit, HMIWI unit, CISWI unit, or OSWI unit subject to sections 7 or 9, 40 CFR Part 60, Subparts Eb, Ec, AAAA, CCCC or EEEE (as applicable) shall comply with all applicable recordkeeping and reporting requirements, reference methods, performance specifications and test methods associated with these subparts.

13.2. All notices, reports and other information required to be submitted to the Administrator pursuant to sections 7 or 9, 40 CFR Part 60, Subparts Eb, Ec, AAAA, CCCC and EEEE (as applicable) shall also be submitted to the Secretary.

§45-18-14. Exemptions.

14.1. The exemption provisions under 40 CFR Part 60 Subparts Eb, Ec, AAAA, CCCC and EEEE shall be incorporated in this rule.

14.2. Temporary air curtain incinerators approved by the Secretary under the requirements of 45CSR6 that are operated for the disposal of only on-site land clearing debris (as defined in 45CSR6) shall be exempt from the requirements of this rule.

14.3. Temporary incinerators approved by the Secretary under the requirements of 45CSR6 that are operated for the disposal of animal or poultry remains and related pathological waste shall be exempt from the requirements of this rule.

14.4. Pathological waste incineration units. -- Any institutional waste incineration unit, very small municipal waste combustion unit, incinerator or combustor shall be exempt from the requirements of this rule provided:

14.4.a. The unit burns 90 percent or more by weight (on a calendar quarter basis and excluding the weight of auxiliary fuel and combustion air) of pathological waste, low-level radioactive waste, or chemotherapeutic waste;

14.4.b. The owner or operator of the unit keeps records on a calendar quarter basis of the periods of time when only pathological waste, low-level radioactive waste or chemotherapeutic waste is incinerated;

14.4.c. The unit is subject to the requirements of 45CSR6 or 45CSR25; and

14.4.d. The owner or operator of the unit notifies the Administrator and the Secretary that the unit meets these criteria.

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14.5. Any incinerator or combustor subject to 40 CFR Part 60 Subparts Cb, E, Ea, O, WWW, BBBB, or FFFF shall be exempt from the requirements of this rule.

14.6. Any incinerator or combustor subject to 42 U.S.C. §6925, 45CSR25 and 33CSR20 shall be exempt from the requirements of this rule.

14.7. Any combustor subject to 40 CFR Part 63, Subpart EEE shall be exempt from the requirements of this rule.

§45-18-15. Effect of the Rule.

15.1. Nothing in this rule shall be construed to allow or permit the installation, establishment or construction of a new municipal or commercial solid waste facility utilizing incineration technology for the purpose of solid waste incineration in violation of W.Va. Code §22-15-19.

§45-18-16. Inconsistency Between Rules.

16.1. In the event of any inconsistency between this rule and any other rule of the West Virginia Department of Environmental Protection, the inconsistency shall be resolved by the determination of the Secretary and the determination shall be based upon the application of the more stringent provision, term, condition, method or rule.

TABLE 18-1A

Emissions Limits for Small, Medium, and Large HMIWI at Designated Facilities as Set Forth in 45CSR§18-7.2.a.1.

Pollutant	Units (7 percent oxygen, dry basis)	Emissions Limits			Averaging Time ¹	Compliance Method ²
		HMIWI Size				
		Small	Medium	Large		
Particulate matter	Milligrams per dry standard cubic meter (mg/dscm) (grains per dry standard cubic foot (gr/dscf))	115 (0.05)	69 (0.03)	34 (0.015)	3-run average (1-hour minimum sample time per run)	EPA Reference Method 5 of Appendix A-3 of 40 CFR Part 60, or EPA Reference Method 26A or 29 of Appendix A-8 of 40 CFR Part 60.
Carbon monoxide	Parts per million by volume (ppmv)	40	40	40	3-run average (1-hour minimum sample time per run)	EPA Reference Method 10 or 10B of Appendix A-4 of 40 CFR Part 60.
Dioxins/furans	Nanograms per dry standard cubic meter total dioxins/furans (ng/dscm) (grains per billion dry standard cubic feet (gr/10 ⁹ dscf)) or ng/dscm TEQ (gr/10 ⁹ dscf)	125 (55) or 2.3 (1.0)	125 (55) or 2.3 (1.0)	125 (55) or 2.3 (1.0)	3-run average (4-hour minimum sample time per run)	EPA Reference Method 23 of Appendix A-7 of 40 CFR Part 60.
Hydrogen chloride	ppmv	100 or 93%	100 or 93%	100 or 93%	3-run average (1-hour minimum sample time per run)	EPA Reference Method 26 or 26A of Appendix A-8 of 40 CFR Part 60.
Sulfur dioxide	ppmv	55	55	55	3-run average (1-hour minimum sample time per run)	EPA Reference Method 6 or 6C of Appendix A-4 of 40 CFR Part 60.
Nitrogen oxides	ppmv	250	250	250	3-run average (1-hour minimum sample time per run)	EPA Reference Method 7 or 7E of Appendix A-4 of 40 CFR Part 60.
Lead	mg/dscm (grains per thousand dry standard cubic feet (gr/10 ³ dscf))	1.2 (0.52) or 70%	1.2 (0.52) or 70%	1.2 (0.52) or 70%	3-run average (1-hour minimum sample time per run)	EPA Reference Method 29 of Appendix A-8 of 40 CFR Part 60.
Cadmium	mg/dscm (gr/10 ³ dscf)	0.16 (0.07) or 65%	0.16 (0.07) or 65%	0.16 (0.07) or 65%	3-run average (1-hour minimum sample time per run)	EPA Reference Method 29 of Appendix A-8 of 40 CFR Part 60.
Mercury	mg/dscm (gr/10 ³ dscf)	0.55 (0.24) or 85%	0.55 (0.24) or 85%	0.55 (0.24) or 85%	3-run average (1-hour minimum sample time per run)	EPA Reference Method 29 of Appendix A-8 of 40 CFR Part 60.

¹Except as allowed under 40 CFR §60.56c(c) for HMIWI equipped with CEMS.²Does not include CEMS and approved alternative non-EPA test methods allowed under 40 CFR §60.56c(b).

TABLE 18-1B

Emissions Limits for Small, Medium, and Large HMIWI at Designated Facilities as Set Forth in 45CSR§§18-7.2.a.1 and 7.2.a.2.

Pollutant	Units (7 percent oxygen, dry basis)	Emissions Limits			Averaging Time ¹	Compliance Method ²
		HMIWI Size				
		Small	Medium	Large		
Particulate matter	Milligrams per dry standard cubic meter (mg/dscm) (grains per dry standard cubic foot (gr/dscf))	66 (0.029)	46 (0.020)	25 (0.011)	3-run average (1-hour minimum sample time per run)	EPA Reference Method 5 of Appendix A-3 of 40 CFR Part 60, or EPA Reference Method 26A or 29 of Appendix A-8 of 40 CFR Part 60.
Carbon monoxide	Parts per million by volume (ppmv)	20	5.5	11	3-run average (1-hour minimum sample time per run)	EPA Reference Method 10 or 10B of Appendix A-4 of 40 CFR Part 60.
Dioxins/furans	Nanograms per dry standard cubic meter total dioxins/furans (ng/dscm) (grains per billion dry standard cubic feet (gr/10 ⁹ dscf)) or ng/dscm TEQ (gr/10 ⁹ dscf)	16 (7.0) or 0.013 (0.0057)	0.85 (0.37) or 0.020 (0.0087)	9.3 (4.1) or 0.054 (0.024)	3-run average (4-hour minimum sample time per run)	EPA Reference Method 23 of Appendix A-7 of 40 CFR Part 60.
Hydrogen chloride	ppmv	44	7.7	6.6	3-run average (1-hour minimum sample time per run)	EPA Reference Method 26 or 26A of Appendix A-8 of 40 CFR Part 60.
Sulfur dioxide	ppmv	4.2	4.2	9.0	3-run average (1-hour minimum sample time per run)	EPA Reference Method 6 or 6C of Appendix A-4 of 40 CFR Part 60.
Nitrogen oxides	ppmv	190	190	140	3-run average (1-hour minimum sample time per run)	EPA Reference Method 7 or 7E of Appendix A-4 of 40 CFR Part 60.
Lead	mg/dscm (grains per thousand dry standard cubic feet (gr/10 ³ dscf))	0.31 (0.14)	0.018 (0.0079)	0.036 (0.016)	3-run average (1-hour minimum sample time per run)	EPA Reference Method 29 of Appendix A-8 of 40 CFR Part 60.
Cadmium	mg/dscm (gr/10 ³ dscf)	0.017 (0.0074)	0.013 (0.0057)	0.0092 (0.0040)	3-run average (1-hour minimum sample time per run)	EPA Reference Method 29 of Appendix A-8 of 40 CFR Part 60.
Mercury	mg/dscm (gr/10 ³ dscf)	0.014 (0.0061)	0.025 (0.011)	0.018 (0.0079)	3-run average (1-hour minimum sample time per run)	EPA Reference Method 29 of Appendix A-8 of 40 CFR Part 60.

¹Except as allowed under 40 CFR §60.56c(c) for HMIWI equipped with CEMS.²Does not include CEMS and approved alternative non-EPA test methods allowed under 40 CFR §60.56c(b).

TABLE 18-2A
Emissions Limits for Small HMIWI Which Meet the Criteria Under 45CSR§18-7.3.b.1.

Pollutant	Units (7 percent oxygen, dry basis)	HMIWI Emissions Limits	Averaging Time¹	Compliance Method²
Particulate matter	mg/dscm (gr/dscf)	197 (0.086)	3-run average (1-hour minimum sample time per run)	EPA Reference Method 5 of Appendix A-3 of 40 CFR Part 60, or EPA Reference Method 26A or 29 of Appendix A-8 of 40 CFR Part 60.
Carbon monoxide	ppmv	40	3-run average (1-hour minimum sample time per run)	EPA Reference Method 10 or 10B of Appendix A-4 of 40 CFR Part 60.
Dioxins/furans	ng/dscm total dioxins/furans (gr/10 ⁹ dscf) or ng/dscm TEQ (gr/10 ⁹ dscf)	800 (350) or 15 (6.6)	3-run average (4-hour minimum sample time per run)	EPA Reference Method 23 of Appendix A-7 of 40 CFR Part 60.
Hydrogen chloride	ppmv	3,100	3-run average (1-hour minimum sample time per run)	EPA Reference Method 26 or 26A of Appendix A-8 of 40 CFR Part 60.
Sulfur dioxide	ppmv	55	3-run average (1-hour minimum sample time per run)	EPA Reference Method 6 or 6C of Appendix A-4 of 40 CFR Part 60.
Nitrogen oxides	ppmv	250	3-run average (1-hour minimum sample time per run)	EPA Reference Method 7 or 7E of Appendix A-4 of 40 CFR Part 60.
Lead	mg/dscm (gr/10 ³ dscf)	10 (4.4)	3-run average (1-hour minimum sample time per run)	EPA Reference Method 29 of Appendix A-8 of 40 CFR Part 60.
Cadmium	mg/dscm (gr/10 ³ dscf)	4 (1.7)	3-run average (1-hour minimum sample time per run)	EPA Reference Method 29 of Appendix A-8 of 40 CFR Part 60.
Mercury	mg/dscm (gr/10 ³ dscf)	7.5 (3.3)	3-run average (1-hour minimum sample time per run)	EPA Reference Method 29 of Appendix A-8 of 40 CFR Part 60.

¹Except as allowed under 40 CFR §60.56c(c) for HMIWI equipped with CEMS.

²Does not include CEMS and approved alternative non-EPA test methods allowed under 40 CFR §60.56c(b).

TABLE 18-2B
Emissions Limits for Small HMIWI Which Meet the Criteria Under 45CSR§18-7.3.b.2.

Pollutant	Units (7 percent oxygen, dry basis)	HMIWI Emissions Limits	Averaging Time¹	Compliance Method²
Particulate matter	mg/dscm (gr/dscf)	87 (0.038)	3-run average (1-hour minimum sample time per run)	EPA Reference Method 5 of Appendix A-3 of 40 CFR Part 60, or EPA Reference Method 26A or 29 of Appendix A-8 of 40 CFR Part 60.
Carbon monoxide	ppmv	20	3-run average (1-hour minimum sample time per run)	EPA Reference Method 10 or 10B of Appendix A-4 of 40 CFR Part 60.
Dioxins/furans	ng/dscm total dioxins/furans (gr/10 ⁹ dscf) or ng/dscm TEQ (gr/10 ⁹ dscf)	240 (100) or 5.1 (2.2)	3-run average (4-hour minimum sample time per run)	EPA Reference Method 23 of Appendix A-7 of 40 CFR Part 60.
Hydrogen chloride	ppmv	810	3-run average (1-hour minimum sample time per run)	EPA Reference Method 26 or 26A of Appendix A-8 of 40 CFR Part 60.
Sulfur dioxide	ppmv	55	3-run average (1-hour minimum sample time per run)	EPA Reference Method 6 or 6C of Appendix A-4 of 40 CFR Part 60.
Nitrogen oxides	ppmv	130	3-run average (1-hour minimum sample time per run)	EPA Reference Method 7 or 7E of Appendix A-4 of 40 CFR Part 60.
Lead	mg/dscm (gr/10 ³ dscf)	0.50 (0.22)	3-run average (1-hour minimum sample time per run)	EPA Reference Method 29 of Appendix A-8 of 40 CFR Part 60.
Cadmium	mg/dscm (gr/10 ³ dscf)	0.11 (0.048)	3-run average (1-hour minimum sample time per run)	EPA Reference Method 29 of Appendix A-8 of 40 CFR Part 60.
Mercury	mg/dscm (gr/10 ³ dscf)	0.0051 (0.0022)	3-run average (1-hour minimum sample time per run)	EPA Reference Method 29 of Appendix A-8 of 40 CFR Part 60.

¹Except as allowed under 40 CFR §60.56c(c) for HMIWI equipped with CEMS.

²Does not include CEMS and approved alternative non-EPA test methods allowed under 40 CFR §60.56c(b).

TABLE 18-1C
Emission Limits for Existing Commercial and Industrial Solid Waste Incineration Units

Air Pollutant	Emission Limit^a	Averaging Time	Performance Test Methods
Cadmium	0.004 milligrams per dry standard cubic meter.	3-run average (1 hour minimum sample time per run).	Performance test (Method 29 of 40 CFR Part 60, Appendix A)
Carbon monoxide	157 parts per million by dry volume.	3-run average (1 hour minimum sample time per run).	Performance test (Method 10, 10A, or 10B, of 40 CFR Part 60, Appendix A)
Dioxins/furans (toxic equivalency basis)	0.41 nanograms per dry standard cubic meter.	3-run average (1 hour minimum sample time per run).	Performance test (Method 23 of 40 CFR Part 60, Appendix A)
Hydrogen chloride	62 parts per million by dry volume.	3-run average (1 hour minimum sample time per run).	Performance test (Method 26A of 40 CFR Part 60, Appendix A)
Lead	0.04 milligrams per dry standard cubic meter.	3-run average (1 hour minimum sample time per run).	Performance test (Method 29 of 40 CFR Part 60, Appendix A)
Mercury	0.47 milligrams per dry standard cubic meter.	3-run average (1 hour minimum sample time per run).	Performance test (Method 29 of 40 CFR Part 60, Appendix A)
Opacity	10 percent	6-minute averages	Performance test (Method 9 of 40 CFR Part 60, Appendix A)
Oxides of nitrogen	388 parts per million by dry volume.	3-run average (1 hour minimum sample time per run).	Performance test (Method 7, 7A, 7C, 7D, or 7E of 40 CFR Part 60, Appendix A)
Particulate matter	70 milligrams per dry standard cubic meter.	3-run average (1 hour minimum sample time per run).	Performance test (Method 5 or 29 of 40 CFR Part 60, Appendix A)
Sulfur dioxide	20 parts per million by dry volume.	3-run average (1 hour minimum sample time per run).	Performance test (Method 6 or 6C of 40 CFR Part 60, Appendix A)

^a All emission limitations (except for opacity) are measured at 7 percent oxygen, dry basis at standard conditions.