DEP drops plan to finalize stream list

By Ken Ward Jr. kward@wvgazette.com

State regulators have dropped their plan to finalize a list of protected West Virginia streams, saying they don't want to pick a fight with lawmakers over the issue.

- Earlier this year, the Legislature declined to act on the list of more than 300 streams the state Department of Environmental Protection said deserved tougher pollution pro-

DEP Secretary Stephanie Timmermeyer said she planned to finalize the list anyway. Timmermeyer said the DEP had the legal authority to do so.

On Friday, Deputy DEP Secretary Randy Huffman said the agency now plans to start

A new list will be published in draft form. cept of the wate.

The DEP will accept public comments and officials said, then finalize the list. The resulting version bon Garvin, k will be submitted for legislative review durent the 2008 session.

"It was maybe a subversion of the leg-

islative process for us to just go out and file the rule," Huffman said. "It's a legislative process whether you agree or not."

deemed to qualify for "Tier 2.5" protection under West Virginia's water quality antidegradation policy.

Under that policy, clean streams are generally supposed to be kept that way. Streams on the Tier 2.5 list could not be degraded by more than 10 percent.

DEP officials had already whittled down the Tier 2.5 list and allowed three separate rounds of public comments. But lawmakers, at the urging of coal companies, timber operators and the Farm Bureau, were slashing dozens of streams from the list.

Originally, the DEP proposed Tier 2.5 protection for about 300 streams, about 4 percent of the waterways in the state, agency

Don Garvin, lobbyist for the West Virginia are Environmental Council, said the DEP's action would help regulated industries gut the stream list.

"It's going to be almost impossible to protect streams in this state," Garvin said. Huffman said he doesn't believe the DEP ever made a definite decision to move forward without legislative action on the stream.

"My understanding was that was an option that was on the table at the time," said Huffman, who is running the DEP while Timmerneyer is on maternity leave. "There

were a number of options there."

In a March 15 interview, Timmermeyer and DEP spokeswoman Jessica Greathouse said the agency planned to file the final rules, despite legislative inaction.

Timmermeyer cited several state Supreme Court decisions she said supported the DEP's

Under those rulings, she said, lawmakers can approve, reject or amend state agency rules, but she said the Legislature can't veto an agency rule by simply not acting on it at all.

e-mail or call 348-1702.

WEST VIRGINIA SECRETARY OF STATE BETTY IRELAND ADMINISTRATIVE LAW DIVISION

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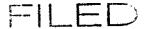
OFFICE WEST VIRGINIA SECRETARY OF STATE

NOTICE OF RULE MODIFICATION OF A PROPOSED RULE

AGENCY: WV Dept. of Enviro	nmental Protection, Div. of Air QualityTITLE NU	MBER:45
CITE AUTHORITY:	WV Code §22-5-4	
AMENDMENT TO AN EXISTING	G RULE: YES X NO	
IF YES, SERIES NUMBER OF RU	ULE BEING AMENDED:18	
TITLE OF RULE BEING	AMENDED: Control of Air Pollution From Combust	ion of Solid Waste
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IF NO, SERIES NUMBER OF RU	LE BEING PROPOSED:	
TITLE OF RULE BEING	PROPOSED:	
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THE ABOVE PROPOSED LEGISI REVIEW COMMITTEE, IS HE	LATIVE RULES, FOLLOWING REVIEW BY THE LEGI REBY MODIFIED AS A RESULT OF REVIEW AN REVIEW COMMITTEE. THE ATTACHED MODIFICA	ND COMMENT BY THE
	Authorized Signature	e

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Form #4



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TITLE 45 LEGISLATIVE RULE DEPARTMENT OF ENVIRONMENTAL PROTECTION SECRETARY OF STATE DIVISION OF AIR QUALITY

SERIES 18

TO PREVENT AND CONTROL EMISSIONS OF AIR POLLUTION FROM COMMERCIAL AND INDUSTRIAL COMBUSTION OF SOLID WASTE INCINERATION UNITS

§45-18-1. General.

- 1.1. Scope. -- This rule establishes <u>and</u> <u>adopts</u> standards of performance and emission <u>standards</u> <u>guidelines pursuant to Sections 111 and 129 of the federal Clean Air Act</u> for commercial <u>the following categories of solid waste incineration units in West Virginia:</u>
- 1.1.a. Large municipal waste combustors subject to standards 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 standards promulgated by the U.S. EPA under 40 CFR Part 60, Subpart AAAA;
- 1.1.c. Hospital/ medical/ infectious waste incinerators subject to standards promulgated by the U.S. EPA under 40 CFR Part 60, Subparts Ce and Ec;
- 1.1.d. Commercial and industrial solid waste incineration (CISWI) units pursuant to Sections 111 and 129 of the federal Clean Air Act as amended in 1990 (CAA). subject to standards promulgated by the U.S. EPA under 40 CFR Part 60, Subparts CCCC and DDDD; and
- 1.1.e. Other solid waste incineration units subject to standards promulgated by the U.S. EPA under 40 CFR Part 60, Subpart EEEE.
- 1.2. This rule codifies general procedures and criteria to implement specific standards of performance and emission guidelines set forth in

- the Code of Federal Regulations and as listed in Tables 18-A and 18-B. The It is the intent of the Secretary to adopt hereby adopts these standards by reference. It is also the intent of the The Secretary to adopt also adopts associated reference methods, performance specifications and other test methods which are appended to these standards.
- 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 solid waste incineration units.
- 1.2. <u>1.4.</u> Authority. -- W.Va. Code §§22-5-1 ct seq §22-5-4.
 - 1.3. 1.5. Filing Date. -- April 16, 2002.
 - 1.4: 1.6. Effective Date. -- May 1, 2002.
- 1.5. 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 Subpart, Subparts Eb, Ec, AAAA, CCCC, EEEE, and specified portions of 40 CFR Part 60 Subpart, Subparts Ce and DDDD, effective July 1, 2000, as

amended by the Federal Register through June 1, 2001 2006.

- 1.8. Repealed provisions. -- The repealed provisions of 45CSR24 "To Prevent and Control Emissions from Hospital/ Medical/ Infectious Waste Incinerators" relating to federal standards and guidelines for emissions from hospital, medical and infectious waste incinerators have been revised to be consistent with 40 CFR Part 60, Subparts Ce and Ec, and are contained in this rule as of the effective date set forth in subsection 1.6.
- 1.9. Former Rules. -- This legislative rule amends 45CSR18 "To Prevent and Control Emissions from Commercial and Industrial Solid Waste Incineration Units" which was filed April 16, 2002, and which became effective May 1, 2002.

§45-18-2. Definitions.

- 2.1. Unless otherwise indicated, definitions of all terms used, but not defined in this subsection, shall have the meaning given to them in 40 CFR Part 60 Subparts CCCC and DDDD. Terms not defined therein shall have the meaning given to them in the federal Clean Air Act or in 40 CFR Part 60, Subparts A and B.
- 2.2. "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. "CFR" means the Code of Federal Regulations published by the Office of the Federal Register, National Archives and Records Service, General Services Administration.
- 2.6. "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.
- 2.7. "Clean Air Act" or 'CAA' means the federal Clean Air Act, as amended, 42 U.S.C. §7401 et seq.
- 2.3. 2.8. "Commercial and industrial solid waste incineration (CISWI) unit" or 'CISWI unit' means any combustion device unit that combusts commercial and or industrial waste as defined in this rule., 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-B applicable to air curtain incinerators burning commercial or industrial waste. The boundaries of a CISWI unit are defined as, While not all CISWI units will include all of the follow-

ing components, a CISWI unit includes, but is not limited to, the commercial or industrial solid waste fuel 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: (1) 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) the combustion unit bottom ash system. which ends at the truck loading station or similar equipment that transfers the ash to final disposal and. 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.

- 2.4. 2.9. "Commercial and or industrial waste" means solid waste that is combusted at any commercial or industrial facility using controlled flame combustion in an enclosed device using controlled flame combustion without energy recovery, distinct operating unit: whose design 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 (including field-creeted, modular, and custom built incineration units operating with starved or excess air).
- 2.10. "Energy recovery" means the process of recovering thermal energy from combustion for useful purposes such as steam generation or process heating.
- 2.5. 2.11. "Existing" means CISWI units for which unit" means a CISWI unit that commenced construction commenced on or before November 30, 1999. If an owner or operator of a an existing CISWI unit makes changes that meet the defini-

tion 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 subsection 4.3 7.3 no longer apply to that unit. If the owner or operator of a an existing CISWI unit makes physical or operational changes to an existing CISWI the unit primarily to comply with the requirements of subsection 4.3 7.3, 40 CFR then Subpart CCCC does not apply to that unit. Such changes do not qualify as modifications or reconstructions under 40 CFR 60 Subpart CCCC.

- 2.12. "Existing HMIWI unit" means a HMIWI unit that commenced construction on or before June 20, 1996. Physical or operational changes made to an existing HMIWI unit solely for the purpose of complying with the requirements of subsection 6.3 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.
- 2.13. "Hospital/ medical/ infectious waste incinerator" or 'HMIWI unit' means any device that combusts any amount of hospital waste or medical/ infectious waste as defined in 40 CFR §60.51c.
- 2.14. "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.
- 2.15. "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.

- 2.16. "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)).
- 2.17. "Intermittent OSWI unit" means an OSWI unit that is designed to allow waste charging but not ash removal, during combustion.
- 2.18. "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.
- 2.19. "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)).
- 2.20. "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:
- 2.20.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;

- 2.20.b. <u>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;</u>
- 2.20.c. <u>Human blood and blood products</u> including:
 - 2.20.c.1. Liquid waste human blood;
 - 2.20.c.2. Products of blood;
- 2.20.c.3. Items saturated or dripping with human blood; or
- 2.20.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;
- 2.20.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;
- 2.20.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;
- 2.20.f. <u>Isolation wastes including biological waste and discarded materials contaminated</u> 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;

- 2.20.g. Unused sharps including the following unused, discarded sharps: hypodermic needles, suture needles, syringes and scalpel blades; and
- 2.20.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).
- 2.21. "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.
- 2.22. 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

<u>criteria further define municipal waste combustion</u> units:

- 2.22.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.
- 2.22.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:
- 2.22.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;
- 2.22.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
- 2.22.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.
- 2.23. "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.
- 2.23.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.
- 2.23.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:
- 2.23.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;
- 2.23.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
- 2.23.b.3. The combustor water system, which starts at the feed water pump and ends at the piping exiting the steam drum or superheater.

- 2.23.c. The municipal waste combustor unit does not include air pollution control equipment, the stack, water treatment equipment, or the turbine-generator set.
- 2.6: 2.24. "New2-means CISWI units unit" means a CISWI unit that for which construction 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, which are partially incorporated by reference in this rule. Such changes do not qualify as reconstruction or modification under 40 CFR Part 60, Subpart CCCC.
- 2.25. "New HMIWI unit" means a HMIWI unit that commenced construction after June 20, 1996 or for which modification is commenced after March 16, 1998. 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, which are partially incorporated by reference in this rule. 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.
- 2.26. "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.
- 2.27. "New SMWC unit" means a SMWC unit which commenced construction after August 30, 1999, or commenced reconstruction or modification after June 6, 2001.
- 2.28. "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.

- 2.29. "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:
- 2.29.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
- 2.29.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.
- 2.30. "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).
- 2.31. "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.
- 2.7. 2.32. "Secretary" means the secretary of the department of environmental protection

- Secretary of the Department of Environmental Protection or such other person to whom the secretary Secretary has delegated authority or duties pursuant to W.Va. Code §§22-1-6 or 22-1-8.
- 2.33. "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.
- 2.34. "Small rural HMIWI unit" shall mean an existing HMIWI unit which is located more than 50 miles from the boundary of the nearest Standard Metropolitan Statistical Area and which burns less than 2000 pounds per week of hospital waste and medical/ infectious waste. The 2000 pounds per week limitation does not apply during performance tests.
- 2.8. 2.35. "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 dicharges discharges which are point sources subject to permits under section 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) For purposes of this rule, the term "solid waste" does not include the waste burned in any of the fifteen (15) types of units described in 40 CFR §60.2020.
- 2.36. "Solid Waste Disposal Act" means the federal Solid Waste Disposal Act, as amended, 42 U.S.C. §6901 et seq.

- 2.37. "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.
- 2.38. "Standard Metropolitan Statistical Area" shall mean any areas listed in OMB Bulletin No. 93-17 entitled "Revised Statistical Definitions for Metropolitan Areas" dated June 30, 1993.
- 2.39. "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 refusederived fuel, as determined by the calculations in 40 CFR §60.2975.
- 2.40. "Waste heat recovery" means the process of recovering heat from the combustion flue gases outside of the combustion firebox by convective heat transfer only.

- 2.9. 2.41. "You", as used in 40 CFR Part 60 Subparts CCCC and DDDD, means the owner or operator of a CISWI unit.
- 2.42. 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. Exemptions. Adoption of Standards.

- 3.1. Combustion units exempt pursuant to 40 CFR §§60.2020 and 2555 shall be exempt from the requirements of this rule:
- from the requirements of this rule, provided that such incinerators are subject to the requirements of 45CSR6. The Secretary hereby adopts and incorporates by reference the provisions of 40 CFR Part 60, Subparts Eb, Ec, AAAA, CCCC, EEEE, the specific portions of 40 CFR Part 60 Subpart Ce identified in subsection 6.3, and the specific portions of 40 CFR Part 60 Subpart DDDD identified in subsection 7.3, 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, 2006.

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

- 4.1. No person shall construct or operate, or cause to be constructed or operated a new LMWC unit (as defined in subsection 2.23) 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, require-

ments 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 Small Municipal Waste Combustion Units.

- 5.1. No person shall construct or operate, or cause to be constructed or operated a new SMWC unit (as defined in subsection 2.22) 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, 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 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 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, requirements and provisions of 40 CFR Part 60 Subpart
 Ec, including any reference methods, performance
 specifications and other test methods associated
 with Subpart Ec.
- 6.3. Requirements for Existing HMIWI Units. -- The owner or operator of an existing HMIWI unit shall comply with the following specific applicable standards, requirements and provisions of 40 CFR Part 60 Subpart Ce, including any reference methods, performance specifications and other test methods associated with Subpart Ce:

- 6.3.a. Emission limits contained in Table 18-A:
- 6.3.b. Compliance schedule specified in subsections 12.1 through 12.4;
- 6.3.c. Operator training and qualification requirements specified in 40 CFR §60.53c;
- 6.3.d. Waste management plan specified in 40 CFR §60.55c;
- 6.3.e. Compliance and performance testing specified in 40 CFR §60.56c, excluding the fugitive emissions testing requirements under 40 CFR §\$60.56c(b)(12) and (c)(3);
- 6.3.f. Monitoring requirements 40 CFR §60.57c;
- 6.3.g. Reporting and recordkeeping requirements specified in 40 CFR §60.58c, excluding sections 40 CFR §\$60.58c(a), (b)(2)(ii), and (b)(7); and
- 6.3.h. Opacity requirements specified in 40 CFR §60.52c(b).
- 6.4. Requirements for Existing Small Rural HMIWI Units. -- The owner or operator of an existing small rural HMIWI unit shall comply with the following:
- 6.4.a. Emission limits contained in Table 18-A, under the Rural category;
- 6.4.b. Operator training and qualification requirements specified in 40 CFR §60.53c;
- 6.4.c. Waste management plan specified in 40 CFR §60.55c;
- 6.4.d. No later than July 28, 2001, an initial equipment inspection shall be conducted. Annual equipment inspections shall be conducted thereafter (no more than 12 months following the previous annual equipment inspection), as outlined in

- paragraphs 6.4.d.1 through 6.4.d.17. 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 an alternative repair schedule. All equipment inspections shall include the following:
- 6.4.d.1. <u>Inspection of all burners, pilot assemblies, and pilot sensing devices for proper operation: cleaning of pilot flame sensor, as necessary;</u>
- 6.4.d.2. Ensuring proper adjustment of primary and secondary chamber combustion air, and adjustment as necessary;
- <u>6.4.d.3.</u> Inspection of hinges and door latches and lubrication as necessary;
- 6.4.d.4. <u>Inspection of dampers, fans, and blowers for proper operation;</u>
- <u>6.4.d.5.</u> <u>Inspection of HMIWI unit</u> <u>door and door gaskets for proper sealing:</u>
- <u>6.4.d.6.</u> <u>Inspection of motors for proper operation:</u>
- <u>6.4.d.7.</u> <u>Inspection of primary chamber refractory lining; cleaning and repairing or replacing lining as necessary;</u>
- <u>6.4.d.8.</u> <u>Inspection of incinerator shell</u> <u>for corrosion and hot spots;</u>
- <u>6.4.d.9.</u> <u>Inspection of secondary and tertiary chamber and stack, cleaning as necessary;</u>
- 6.4.d.10. <u>Inspection of mechanical loader, including limit switches, for proper operation, if applicable;</u>
- <u>6.4.d.11. Visual inspection of waste bed</u> (grates), and repairing or sealing, as appropriate;
 - 6.4.d.12. For the burn cycle that follows

- the inspection, documentation that the incinerator is operating properly and making any necessary adjustments;
- 6.4.d.13. <u>Inspection of air pollution</u> control device(s) for proper operation, if applicable;
- <u>6.4.d.14.</u> <u>Inspection of waste heat boiler</u> <u>systems to ensure proper operation, if applicable;</u>
- <u>6.4.d.15.</u> <u>Inspection of bypass stack</u> <u>components:</u>
- 6.4.d.16. Ensuring proper calibration of thermocouples, sorbent feed systems and any other monitoring equipment; and
- 6.4.d.17. Generally observing that the equipment is maintained in good operating condition;
- 6.4.e. Compliance and performance testing in accordance with the following:
- 6.4.e.1. Testing requirements in 40 CFR §§60.56c(a), (b)(1) through (b)(9), (b)(11) (mercury only), and (c)(1). The 2000 pound per week limitation does not apply during performance tests;
- 6.4.e.2. 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:
- 6.4.e.3. 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 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 except during periods of startup, shutdown, and malfunction. Operating

parameter limits do not apply during performance tests;

- 6.4.e.4. Operation above the maximum charge rate or below the minimum secondary chamber temperature shall constitute a violation of the established operating parameter(s). 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 6.4.e.5; and
- 6.4.e.5. The owner or operator of a HMIWI unit may conduct a repeat performance test within 30 days of violation of applicable operating parameter(s) to demonstrate that the HMIWI unit is not in violation of the applicable emission limit(s). Repeat performance tests conducted pursuant to this section must be conducted using the identical opening parameters that indicated a violation under paragraph 6.4.e.4;
- <u>6.4.f.</u> Monitoring in accordance with the following:
- 6.4.f.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;
- 6.4.f.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;
- 6.4.f.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;
- 6.4.g. Maintenance of records of the annual equipment inspections, any required maintenance, and any repairs not completed within 10 days of an inspection or repair date approved by the Secretary;
- 6.4.h. Submission of an annual report containing information recorded under subdivision 6.4.g. 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 subsection 6.5; and
- 6.4.i. Opacity requirements specified in 40 CFR §60.52c(b).
- 6.5. 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 facility 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.

§45-18-7. Requirements for Commercial and Industrial Solid Waste Incinerators.

4.1. 7.1. No person may shall construct, reconstruct, modify, or operate, or cause to be constructed, reconstructed, modified, or operated

- a CISWI unit which results in a violation of <u>40</u> <u>CFR Part 60 Subpart CCCC</u>, specified portions of <u>Subpart DDDD</u>, or this rule.
- 4.2. 7.2. Each Requirements for New CISWI Units. -- The owner or operator of a new CISWI unit shall comply with all of the applicable standards, requirements and provisions of 40 CFR Part 60 Subpart CCCC, including any reference methods, performance specifications and other test methods associated with Subpart CCCC, effective July 1, 2000, as amended by the Federal Register through June 1, 2001.
- 4.3. 7.3. Each Requirements for Existing CISWI Units. -- The owner or operator of an existing CISWI unit shall comply with the following specific applicable standards, requirements and provisions of 40 CFR Part 60 Subpart DDDD, including any reference methods, performance specifications and other test methods associated with Subpart DDDD:
- 4.3.a. 7.3.a. Emission limits presented contained in Table † 18-B;
- 4.3.b. 7.3.b. Compliance dates specified in section 7 subsection 12.5, including increments of progress toward compliance specified in that section subsection and 40 CFR §§60.2575 through 60.2615;
- 4.3.c. 7.3.c. Waste management plan requirements specified in 40 CFR §§60.2620 through 60.2630;
- 4.3.d. 7.3.d. Operator training and qualification requirements specified in 40 CFR §§60.2635 through 60.2665;
- 4.3.e. 7.3.e. Emission limitations and operating limits specified in 40 CFR §§60.2670 through 60.2685;
- 4.3.f. 7.3.f. Performance testing requirements specified in 40 CFR §§60.2690 through 60.2695;

- 4.3.g. 7.3.g. Initial compliance requirements in 40 CFR §§60.2700 through 60.2705;
- 4.3.h. 7.3.h. Continuous compliance requirements specified in 40 CFR §§60.2710 through 60.2725;
- 4.3.i. 7.3.i. Monitoring requirements specified in 40 CFR §§60.2730 through 60.2735; and
- 4.3.j. 7.3.j. Recordkeeping and reporting requirements specified in 40 CFR §§60.2740 through 60.2800:; and
- 7.3.k. Requirements for air curtain incinerators specified in 40 CFR §§60.2810 through 60.2870.

§45-18-8. Requirements for Other Solid Waste Incineration Units.

- 8.1. 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.
- 8.2. Requirements for New OSWI Units. -The owner or operator of a new OSWI unit shall
 comply with all applicable standards, requirements and provisions of 40 CFR Part 60 Subpart
 EEEE, including any reference methods, performance specifications and other test methods
 associated with Subpart EEEE.

§45-18-5. §45-18-9. Secretary.

- 5.1. 9.1. Any and all references in 40 CFR Part 60 Subparts Ce, Eb, Ec, AAAA, CCCC, and DDDD, and EEEE to the "Administrator" are amended to be the "Secretary" except in the following references which shall remain "Administrator":
- 5.1.a. 9.1.a. Where the federal regulations specifically provide that the Administrator shall retain authority and not transfer such authority to

the State Secretary;

5.1.b. 9.1.b. Where provisions occur which refer to:

5.1.b.1. 9.1.b.1. alternate means of emission limitations limitations;

5:1.b.2. 9.1.b.2. alternate control technologies;

5.1.b.3. 9.1.b.3. innovative technology waivers;

5:1.b.4. 9.1.b.4. alternative alternate test methods;

5.1.b.5: 9.1.b.5. alternative alternate monitoring methods;

5.1.b.6. 9.1.b.6. waivers/adjustments to recordkeeping and reporting; or

5.1.b.7. 9.1.b.7. applicability determinations; or

5.1.c. 9.1.c. Where the context of the regulation clearly requires otherwise;

9.1.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); and

9.1.e. Alternative methods of demonstrating compliance under 40 CFR §60.8.

§45-18-6. §45-18-10. Permits.

- 10.1. 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.
- 10.2. 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.

6:1. 10.3. On or before December 1, 2003, the owner or operator of existing CISWI units subject to this rule shall operate pursuant to a CAA Title V permit in accordance with the requirements of 45 CSR 30, provided that existing CISWI units may be required to apply for and obtain a Title V permit prior to that date as specified in 40 CFR §60.2805 45CSR30.

6.2. 10.4. New The owner or operator of a new CISWI units subject to this rule shall operate pursuant to a CAA Title V permit by December 1, 2003, or 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, whichever date is later, provided that a new CISWI unit may be required to apply for and obtain a Title V permit prior to either of those dates this date, as specified in 40 CFR §60.2242 §60.2242(b).

10.5. 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).

6.3. 10.6. 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 45 CSR 13, 45 CSR 14, and 45 CSR 19 45 CSR 13, 45 CSR 14, 45 CSR 19, 45 CSR 25 and 45 CSR 30.

§45-18-11. Recordkeeping, Reports and Testing.

11.1. The owner or operator of a LMWC unit,

- SMWC unit, HMIWI unit, CISWI unit, or OSWI unit subject to 40 CFR Part 60, Subparts Ce, Eb, Ec, AAAA, CCCC, DDDD or EEEE shall comply with all applicable recordkeeping and reporting requirements, reference methods, performance specifications and test methods associated with these subparts.
- 11.2. All notices, reports and other information required to be submitted to the Administrator pursuant to 40 CFR Part 60, Subparts Ce, Eb, Ec, AAAA, CCCC, DDDD and EEEE shall also be submitted to the Secretary.

§45-18-7. §45-18-12. Compliance Dates for Existing CISWI Units.

- 12.1. Existing HMIWI Units. -- Except as provided in subsections 12.2, 12.3, and 12.4, on or after July 28, 2001, the owner or operator of any existing HMIWI unit shall be in compliance with all applicable provisions of this rule.
- 12.2. 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:
- 12.2.a. No later than July 28, 2001, 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;
- 12.2.b. No later than July 28, 2001, services of an architectural and engineering firm regarding air pollution device(s) shall be obtained;
- 12.2.c. No later than January 28, 2002, design drawings of an air pollution device(s) shall be ordered;

- 12.2.d. No later than January 28, 2002, air pollution device(s) shall be ordered;
- 12.2.e. No later than July 28, 2002, site preparation for installation of the air pollution device(s) shall be initiated;
- 12.2.f. No later than April 28, 2002, initial startup of the air pollution device(s) shall be conducted;
- 12.2.g. No later than April 28, 2002, initial compliance test(s) of the air pollution device(s) shall be conducted; and
- 12.2.h. 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 rule.
- 12.3. 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 dates required by subsection 12.2, shall submit to the Secretary no later than April 28, 2001, the following information:
- 12.3.a. 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 subsection 12.2;
- 12.3.b. 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
- <u>12.3.c.</u> <u>Measurable and enforceable incremental steps of progress to be taken towards compliance with the emission limits contained in Table 18-A.</u>
- 12.4. 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:

- 12.4.a. If the request for extension is denied, the owner or operator shall submit a compliance plan in accordance with subsection 12.2 no later than 30 days after denial of the request for extension, or July 28, 2001, whichever is later; or
- 12.4.b. 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.
- 7.1. 12.5. One year after the effective date of U.S. EPA's approval of the 111(d)/129 State Plan for Commercial and Industrial Waste Incineration Units, Existing CISWI Units. The 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 units unit shall be in achieve final compliance with all of the applicable provisions of this rule, provided that existing CISWI units may comply with the following increments of progress:
- 7.1.a. A final control plan shall be submitted no later than one (1) year after the effective date of State Plan approval; and
- 7.1.b. Final compliance shall be achieved by a date not later than the earlier of:
- 7.1.b.1. December 1, 2005; or
- 7.1.b.2. Three (3) years after the effective date of State Plan approval by no later than October 4, 2004.

§45-18-13. Exemptions.

- 13.1. The exemption provisions under 40 CFR Part 60 Subparts Ce, Eb, Ec, AAAA, CCCC, DDDD and EEEE shall be incorporated in this rule.
- 13.2. Temporary air curtain incinerators approved by the Secretary under the requirements of 45CSR§6-4.8 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.
- 13.3. Temporary incinerators approved by the Secretary under the requirements of 45CSR§6-9.2 that are operated for the disposal of animal or poultry remains and related pathological waste shall be exempt from the requirements of this rule.
- 13.4. 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:
- 13.4.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;
- 13.4.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;
- 13.4.c. The unit is subject to the requirements of 45CSR6 or 45CSR25; and
- 13.4.d. The owner or operator of the unit notifies the Administrator and the Secretary that the unit meets these criteria.
- 13.5. Any incinerator or combustor subject to 40 CFR Part 60 Subparts Cb, E, Ea, O, BBBB, or FFFF shall be exempt from the requirements of this rule.

- 13.6. Any incinerator or combustor subject to 42 U.S.C. §6925, 45CSR25 and 33CSR20 shall be exempt from the requirements of this rule,
- 13.7. Any combustor subject to 40 CFR Part 63, Subpart EEE shall be exempt from the requirements of this rule.

§45-18-8 §45-18-14. Effect of the Rule.

8.1. 14.1. 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.

§45-18-9 §45-18-15. Inconsistency Between Rules.

9.1. 15.1. In the event of any inconsistency between this rule and any other existing rule of the West Virginia Department of Environmental Protection, such the inconsistency shall be resolved by the determination of the Secretary and such the determination shall be based upon the application of the more stringent provision, term, condition, method or rule.

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TABLE 18-A
Emission Limits for Existing Hospital/Medical/Infections Waste Incinerators

	Units		HMIWI Unit Size	nit Size	
Pollutant	(7% oxygen, dry basis)	<u>Small</u>	Medium	Large	Rural
Particulate Matter	mg/ dscm (gr/dscf)*	115 (0.05)	69 (0.03)	34 (0.015)	197 (0.086)
Carbon Monoxide	<u>opmv^b</u>	40	40	40	40
Dioxins/furans	ng/dscm total CCD/CDF (gr/10° dscf) or ng/dscm TEQ (gr/10° dscf)°	125 (55) or 2.3 (1.0)	125 (55) or 2.3 (1.0)	125 (55) or 2.3 (1.0)	800 (350) or 15 (6.6)
Hydrogen chloride	ppmv or percent reduction	100 or 93%	100 or 93%	100 or 93%	3100
Sulfur dioxide	<u>vmqq</u>	55	<u>55</u>	55	55
Nitrogen oxides	<u>vmqq</u>	250	<u>250</u>	250	250
<u>Lead</u>	mg/dscm (gr/103 dscf) or % reduction ^d	1.2 (0.52) or 70%	1.2 (0.52) or 70%	1.2 (0.52) or 70%	10 (4.4)
<u>Cadmium</u>	mg/dscm (gr/10 ³ dscf) or % reduction	0.16 (0.07) or 65 %	0.16 (0.07) or 65 %	0.16 (0.07) or 65 %	4 (1.7)
Mercury	mg/dscm (gr/103 dscf) or % reduction	0.55 (0.24) or 85%	0.55 (0.24) or 85%	0.55 (0.24) or 85%	7.5 (3.3)

^a milligrams per dry standard cubic meter (grains per dry standard cubic feet)

barts per million by volume

[°] nanograms per dry standard cubic meter total dioxins/furnas (grains per billion dry standard cubic feet) or nanograms per dry standard cubic meter TEQ (grains per billion dry standard cubic feet)

d milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet)

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Emission Limits for Existing Commercial and Industrial Solid Waste Incineration Units **TABLE 4 18-B**

Air Pollutant	Emission Limit	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.