

City of Memphis Code Section 16-79 Nonprocess Emission Standards

For the purpose of enforcement of the nonprocess emission standards, Chapter 1200-3-6 of the Tennessee Air Pollution Control Regulations, as effective on June 30, 2003, is hereby adopted by reference as a portion of this Code. Such regulations shall become a part of this Code and shall have the same effect as if set out in full herein.

(Shelby County Ord. No. 9, adopted October 15, 1979. City of Memphis Ord. No. 4320, effective 6-7-95. Amended by City of Memphis Ord. No. 4636, effective 1-7-99. Amended by City of Memphis Ord. No. 4867, effective 7-18-01. Amended by City of Memphis Ord. No. 4981, effective January 28, 2003. Amended by City of Memphis Ord. 5041, effective April 5, 2004. Pursuant to T.C.A. 68-201-115.)

RULES
OF THE
TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
BUREAU OF ENVIRONMENT
DIVISION OF AIR POLLUTION CONTROL

CHAPTER 1200-3-6

NON-PROCESS EMISSION STANDARDS

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1200-3-6-.01 GENERAL NON-PROCESS EMISSIONS

- (1) No person shall cause, suffer, allow or permit emissions in excess of the standards in this Chapter.
- (2) In any county where one or more sources are emitting particulate at rates in conformity with applicable maximum allowable emission rates and the ambient air quality standard for particulate matter is being exceeded, the Board shall be responsible for setting an appropriate emission standard for each source contributing to the particulate matter in the ambient air of the area, at such value as the Board may consider necessary to achieve the desired air quality.

Certain areas in the state have been identified as needing additional control beyond that required by this Chapter. These areas and the additional control requirements are stated in Chapter 1200-3-19.

- (3) The owner or operator of an existing fuel burning installation proposing to make a modification of this source or to rebuild or replace it shall only take such action if it will result in the source meeting the maximum allowable emission standards for a new fuel burning installation.
- (4) As used in this Chapter, existing installations or equipment shall mean such as were under construction or in operation prior to April 3, 1972 and non-portable equipment which was not relocated more than 1.0 km from the previous position after November 6, 1988.
- (5) For the purpose of determining the applicable emission standards in this chapter, a change in fuel from natural gas, propane, butane and/or fuel oil to any of these herein named fuels and any required alterations to existing fuel burning equipment to accommodate these fuels shall not be considered a modification. This shall not apply to sources identified in Paragraph 1200-3-9-.01(4). However, the allowable emissions for the source will not change unless Best Available Control Technology is required.
- (6) Regardless of the specific emission standards contained in this Chapter, a new or modified non-process source locating in or significantly impacting upon a nonattainment area shall comply with the provisions of Paragraph 1200-3-9-.01(5) prior to receiving a construction permit.
- (7) Upon mutual agreement of the owner or operator of any air contaminant source and the Technical Secretary, an emission limit more restrictive than that otherwise specified in this Chapter may be established. The emission limit shall be stated as a special condition for any permit or order issued concerning the source. Violation of this agreed to, more stringent emission standard is grounds for revocation of the issued permit and/or other enforcement measures provided for in the Tennessee Air Quality Act.
- (8) Regardless of the specific emission standards contained in this chapter, all non-process sources identified in Paragraph 1200-3-9-.01(4) of these regulations shall comply with the standards set pursuant to Chapter 1200-3-9.

Authority: T.C.A. Section 68-201-105 and 4-5-202. Administrative History. Original Rule certified June 7, 1974. Amended: filed January 10, 1977; effective date February 9, 1977. Amendment filed May 17, 1978; June 16, 1978. Amendment filed February 5, 1979; effective March 21, 1979. Amendment filed May 7, 1979, June 21, 1979. Amendment filed September 21, 1988; effective November 6, 1988.

1200-3-6-.02 NON-PROCESS PARTICULATE EMISSION STANDARDS

(1) Existing Fuel Burning Equipment

The maximum hour allowable particulate emissions for a fuel burning installation commenced before April 3, 1972, shall be determined from the following equations:

$$E = 0.600 \quad \text{for } Q \text{ less than or equal to } 10.0 \times 10^6 \text{ Btu/hr}$$

$$E = 0.600(10/Q)^{0.2594} \quad \text{for } 10.0 \times 10^6 \text{ Btu/hr less than } Q \text{ less than } 10.0 \times 10^9 \text{ Btu/hr}$$

$$E = 0.100 \quad \text{for } Q \text{ greater than or equal to } 10.0 \times 10^9 \text{ Btu/hr}$$

Where:

E = allowable particulate emissions in lb per million Btu.

Q = total installation heat input in million Btu per hour.

(2) New Fuel Burning Equipment

(a) The maximum allowable particulate emissions for a fuel burning installation commenced on or after April 3, 1972, shall be determined from the equation:

$$E = 0.600 \quad \text{for } Q \text{ less than or equal to } 10.0 \times 10^6 \text{ Btu/hr}$$

$$E = 0.600(10/Q)^{0.5566} \quad \text{for } 10.0 \times 10^6 \text{ Btu/hr less than } Q \text{ less than } 250 \times 10^6 \text{ Btu/hr}$$

$$E = 0.100 \quad \text{for } Q \text{ greater than or equal to } 250 \times 10^6 \text{ Btu/hr}$$

Where:

E and Q are as defined in paragraph (1) above.

(b) Where only part of the fuel burning equipment in a fuel burning installation is constructed or modified on or after April 3, 1972, the maximum allowable particulate emissions is determined by the following equation:

$$E_t = (Q_x)(E_x) + (Q_y)(E_y)$$

Where:

E_t = Allowable particulate emission in lb/hr,

Q_x = total heat input for existing equipment in million Btu/hr,

E_x = allowable emissions for installation of size Q_x as determined by paragraph (1) above in lb per million Btu,

Q_y = total heat input for new equipment in million Btu/hr,

E_y = allowable emissions for installation of size Q_y as determined by subparagraph (a) above in lb per million Btu.

(c) In lieu of (a) above, the maximum allowable particulate emissions from any wood refuse boiler built after April 3, 1972, in which 3% or more of the total heat input is obtained from ammonium sulfite spent liquor, shall not exceed .24 pounds per million BTU heat input. This rule applies to that fuel burning equipment designed to burn wood and when the burning of wood provides at least 30% of the heat input of the unit. This rule does not apply to units burning coal.

(3) Incinerators

- (a) The maximum allowable particulate emissions from incinerators is 0.200 percent of the charging rate for incinerators with a 2000 pound per hour charging rate or less and 0.100 percent of the charging rate for incinerators with a charging rate greater than 2000 pounds per hour.
- (b) Reserved
- (4) (Repealed)
- (5) Relocated non-portable fuel burning equipment. The maximum allowable particulate emissions for nonportable fuel burning equipment which is relocated more than 1.0 km from the previous position after November 6, 1988 shall be the greater of the actual emissions at its previous site or the allowable emissions for new fuel burning equipment.

Authority: T.C.A. Section 68-201-105 and 4-5-202. Administrative History. Original Rule certified June 7, 1974. Amendment filed January 10, 1977; effective February 9, 1977. Amendment filed February 5, 1979; effective March 21, 1979. Amendment filed May 7, 1979; effective June 21, 1979. Amendment filed July 21, 1980; effective September 8, 1980. Amendment filed September 21, 1988; effective November 6, 1988.

1200-3-6-.03 GENERAL NON-PROCESS GASEOUS EMISSIONS.

- (1) No person shall cause, suffer, allow or permit gaseous emissions in excess of the standards in this Chapter.
- (2) Any person constructing or otherwise establishing a non-portable air contaminant source emitting gaseous air contaminants after April 3, 1972, or relocating an air contaminant source more than 1.0 km from the previous position after November 6, 1988, shall install and utilize the best equipment and technology currently available for controlling such gaseous emission.

Authority: T.C.A. Section 68-201-105 and 4-5-202. Administrative History. Original Rule certified June 7, 1974. Amendment filed June 21, 1979. Amendment filed September 21, 1988; effective November 6, 1988.

1200-3-6-.04 REPEALED

Authority: T.C.A. Section 68-201-105 and 4-5-202. Administrative History: Original Rule certified June 7, 1974.
Repealed: Filed May 15, 1979, effective June 29, 1979.

1200-3-6-.05 WOOD FIRED FUEL BURNING EQUIPMENT

- (1) Any wood fired fuel burning equipment commenced before March 1, 1978, must comply with the following emission standards shown below:
 - (a) 0.330 grains of particulate matter per standard dry cubic foot of exhaust gases, corrected to 12% carbon dioxide for fuel burning equipment up to and including 50 million Btu per hour heat input.
 - (b) 0.300 grains of particulate matter per standard dry cubic foot of exhaust gases, corrected to 12% carbon dioxide for fuel burning equipment of 100 million Btu per hour heat input or in excess thereof.
 - (c) The allowable emissions for wood-fired fuel burning equipment between 50 million and 100 million Btu per hour heat input is that determined by linear interpolation between the values in subparagraphs (a) and (b).
 - (d) 0.56 grains of particulate matter per dry standard cubic foot of exhaust gases, corrected to 12% carbon dioxide for fuel burning equipment up to and including 50 million Btu per hour heat input for counties identified in paragraph (8)(d) of this rule.
 - (e) The allowable for wood fired fuel burning equipment between 50 million and 100 million Btu per hour heat input is that determined by linear interpolation between the values in subparagraphs (d) and (b) for counties identified in paragraph (8)(d) of this rule.
- (2) Any wood fired fuel burning equipment commenced on or after March 1, 1978, must comply with the emission standards shown below:
 - (a) 0.330 grains of particulate matter per standard dry cubic foot of exhaust gases, corrected to 12% carbon dioxide for fuel burning equipment up to, and including 25 million Btu per hour heat input.
 - (b) 0.200 grains of particulate matter per standard dry cubic foot of exhaust gases, corrected to 12% carbon dioxide for fuel burning equipment of 100 million Btu per hour heat input or in excess thereof.
 - (c) The allowable emissions for wood-fired fuel burning equipment between 25 million and 100 million Btu per hour heat input is that determined by linear interpolation between the value in subparagraphs (a) and (b).
- (3) Wood as used in this rule means:
 - (a) Bark.
 - (b) Sawdust or other woody plant tissues (lignified xylem) mechanically reduced in size, but not chemically changed.
 - (c) Any combination of the materials in (a) and (b).
- (4) Any fuel burning installation with wood fired fuel burning equipment such that said wood fired fuel burning equipment has 100 million Btu heat input per hour or in excess thereof, shall install, calibrate, maintain and operate a photoelectric or any other type opacity monitor and recorder that has been approved by the Technical Secretary and is of the type referred to in Rule 1200-3-5-.05. This paragraph does not apply where the moisture content of the exhaust is so high that condensation occurs in the stack.
- (5) This rule only applies to that fuel burning equipment designed to burn wood and when the burning of wood provides at least 30% of the heat input of the unit. At other times the unit will revert to being regulated by Rule 1200-3-6-.02. This Rule 1200-3-6-.05 does not apply to units burning coal or liquid fuels other than fuel oils.
- (6) Where fuel burning equipment units in the same fuel burning installation are subject to this rule and are regulated by two different grain loading limits, an average weighted directly on the flow rates will determine the allowable emission limit.
- (7) When a wood fired fuel burning equipment is on a common stack with other air contaminant sources, then the

wood fired units shall be considered independent of the other air contaminant sources.

- (8) The applicability of this rule shall be as follows:
- (a) Paragraph (2) of this rule shall apply to all wood fired fuel burning equipment commenced on or after March 1, 1978 except for those units in Davidson, Hamilton, Knox, and Shelby counties.
 - (b) Paragraph (1) subparts (a) and (c) shall apply to all wood fired fuel burning equipment commenced on or after March 1, 1978 in Madison, Bedford, Hamblen and Coffee counties.
 - (c) Paragraph (1) subpart (b) shall apply to wood fired fuel burning equipment commenced before March 1, 1978 except for units in Davidson, Hamilton, Knox, and Shelby counties.
 - (d) Paragraphs (1)(d) and (1)(e) of this rule shall apply to all wood fired fuel burning equipment commenced before March 1, 1978 in Bradley, Claiborne, Cocke, Cumberland, Dickson, Fentress, Franklin, Gibson, Giles, Grainger, Greene, Henry, Jefferson, Lawrence, Loudon, Macon, Marion, Marshall, McMinn, Montgomery, Polk, Putnam, Rhea, Rutherford, Scott, Sevier, Sumner, Warren, Wayne, Weakley, White, Williamson, and Wilson counties whose emissions have been strategy tested and included in the State Implementation Plan. Any wood fired burning equipment which except for not having had its emissions strategy tested and included in the State Implementation Plan would be wood fired fuel burning equipment designated by the preceding sentence of this subparagraph shall be regulated by subparagraph (1)(a), (b), or (c) of this rule.
- (9) Except as mentioned in paragraph (8) of this rule, all existing wood-fired fuel burning equipment of 50 million Btu per hour heat input or less shall be regulated by Rule 1200-3-6-.02.

Authority: T.C.A. 68-201-105 and 4-5-202. Administrative History: Original Rule filed May 17, 1978; effective June 16, 1978. Amendment filed February 5, 1979; effective March 21, 1979. Amendment filed May 15, 1979; effective June 29, 1979. Amendment filed October 22, 1979; effective December 6, 1979. Amendment filed September 21, 1988; effective November 6, 1988.

1200-3-6-.06 COMMERCIAL AND INDUSTRIAL SOLID WASTE INCINERATION UNITS THAT COMMENCED CONSTRUCTION ON OR BEFORE NOVEMBER 30, 1999.

- (1) The owner or operator of each commercial and industrial solid waste incineration (CISWI) unit, as specified in 40 CFR 60.2550 for addressing in a state plan, must satisfy for that unit the standards and requirements specified for such units in 40 CFR 60 subpart DDDD. This includes, but is not necessarily limited to, compliance with the following:
 - (a) The increments of progress as specified in sections 60.2575 through 60.2615, with dates in Table 1 as follow:
 1. Increment 1-Submit final control plan (One year after rule-effective date)
 2. Increment 2-Final compliance December 1, 2005.
 - (b) The requirements for preparation and submittal to the technical secretary of a waste management plan as specified in sections 60.2620 through 60.2630.
 - (c) The requirements for insuring operator training and qualification as specified in sections 60.2635 through 60.2665.
 - (d) The emission limitations and operating limits specified in sections 60.2670 through 60.2685.
 - (e) The performance testing specified in sections 60.2690 and 60.2695.
 - (f) The initial and continuous compliance demonstration requirements specified in sections 60.2700 through 60.2725.
 - (g) The monitoring requirements specified in sections 60.2730 and 2735.
 - (h) The requirements for recordkeeping and reporting specified in sections 60.2740 through 60.2800.
 - (i) The requirement specified in section 60.2805 to apply for a major stationary source operating permit (according to the requirements of Paragraph 1200-3-9-.02(11)).
- (2) Notwithstanding any provisions in subpart DDDD specifying applicability, the provisions of this Rule 1200-3-6-.06 shall not apply to the burning of wood or wood waste, as defined in Paragraph 1200-3-6-.05(3) and Rule 1200-3-4-.02, respectively, solely for the disposition of such wood waste.
- (3) For the purpose of this rule, the term “Administrator” means the Technical Secretary. Other terms shall have the meanings specified in section 60.2875 except with respect to the applicability statement in Paragraph (2) above. Remaining terms shall have the meanings specified in this Division 1200-3.
- (4) Subpart DDDD-Emission Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incinerations Units that Commenced Construction on or Before November 30, 1999, published in the Federal Register/Vol. 65, No. 232/ Friday, December 1, 2000, as an addition to 40 CFR 60, is incorporated verbatim into Tennessee regulations as follows:

Subpart DDDD--Emissions Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units that Commenced Construction On or Before November 30, 1999

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Introduction

Sec. 60.2500 What is the purpose of this subpart?

This subpart establishes emission guidelines and compliance schedules for the control of emissions from commercial and industrial solid waste incineration (CISWI) units. The pollutants addressed by these emission guidelines are listed in Table 2 of this subpart. These emission guidelines are developed in accordance with sections 111(d) and 129 of the Clean Air Act and subpart B of this part.

Sec. 60.2505 Am I affected by this subpart?

(a) If you are the Administrator of an air quality program in a State or United States protectorate with one or more existing CISWI units that commenced construction on or before November 30, 1999, you must submit a State plan to U.S. Environmental Protection Agency (EPA) that implements the emission guidelines contained in this subpart.

(b) You must submit the State plan to EPA by December 3, 2001.

Sec. 60.2510 Is a State plan required for all States?

No. You are not required to submit a State plan if there are no existing CISWI units in your State, and you submit a negative declaration letter in place of the State plan.

Sec. 60.2515 What must I include in my State plan?

(a) You must include the nine items described in paragraphs (a)(1) through (9) of this section in your State plan.

(1) Inventory of affected CISWI units, including those that have ceased operation but have not been dismantled.

(2) Inventory of emissions from affected CISWI units in your State.

(3) Compliance schedules for each affected CISWI unit.

(4) Emission limitations, operator training and qualification requirements, a waste management plan, and operating limits for affected CISWI units that are at least as protective as the emission guidelines contained in this subpart.

(5) Performance testing, recordkeeping, and reporting requirements.

(6) Certification that the hearing on the State plan was held, a list of witnesses and their organizational affiliations, if any, appearing at the hearing, and a brief written summary of each presentation or written submission.

(7) Provision for State progress reports to EPA.

(8) Identification of enforceable State mechanisms that you selected for implementing the emission guidelines of this subpart.

(9) Demonstration of your State's legal authority to carry out the sections 111(d) and 129 State plan.

(b) Your State plan may deviate from the format and content of the emission guidelines contained in this subpart. However, if your State plan does deviate in content, you must demonstrate that your State plan is at least as protective as the emission guidelines contained in this subpart. Your State plan must address regulatory applicability, increments of progress for retrofit, operator training and qualification, a waste management plan, emission limitations, performance testing, operating limits, monitoring, recordkeeping and reporting, and air curtain incinerator requirements.

(c) You must follow the requirements of subpart B of this part (Adoption and Submittal of State Plans for Designated Facilities) in your State plan.

Sec. 60.2520 Is there an approval process for my State plan?

Yes. The EPA will review your State plan according to Sec. 60.27.

Sec. 60.2525 What if my State plan is not approvable?

If you do not submit an approvable State plan (or a negative declaration letter) by December 2, 2002, EPA will develop a Federal plan according to Sec. 60.27 to implement the emission guidelines contained in this subpart. Owners and operators of CISWI units not covered by an approved State plan must comply with the Federal plan. The Federal plan is an interim action and will be automatically withdrawn when your State plan is approved.

Sec. 60.2530 Is there an approval process for a negative declaration letter?

No. The EPA has no formal review process for negative declaration letters. Once your negative declaration letter has been received, EPA will place a copy in the public docket and publish a notice in the Federal Register. If, at a later date, an existing CISWI unit is found in your State, the Federal plan implementing the emission guidelines contained in this subpart would automatically apply to that CISWI unit until your State plan is approved.

Sec. 60.2535 What compliance schedule must I include in my State plan?

(a) Your State plan must include compliance schedules that require CISWI units to achieve final compliance as expeditiously as practicable after approval of the State plan but not later than the earlier of the two dates specified in paragraphs (a)(1) and (2) of this section.

(1) December 1, 2005.

(2) Three years after the effective date of State plan approval.

(b) For compliance schedules more than 1 year following the effective date of State plan approval, State plans must include dates for enforceable increments of progress as specified in Sec. 60.2580.

Sec. 60.2540 Are there any State plan requirements for this subpart that apply instead of the requirements specified in subpart B?

Yes. Subpart B establishes general requirements for developing and processing section 111(d) plans. This subpart applies instead of the requirements in subpart B of this part for paragraphs (a) and (b) of this section:

(a) State plans developed to implement this subpart must be as protective as the emission guidelines contained in this subpart. State plans must require all CISWI units to comply by December 1, 2005 or 3 years after the effective date of State plan approval, whichever is sooner. This applies instead of the option for case-by-case less stringent emission standards and longer compliance schedules in Sec. 60.24(f).

(b) State plans developed to implement this subpart are required to include two increments of progress for the affected CISWI units. These two minimum increments are the final control plan submittal date and final compliance date in Sec. 60.21(h)(1) and (5). This applies instead of the requirement of Sec. 60.24(e)(1) that would require a State plan to include all five increments of progress for all CISWI units.

Sec. 60.2545 Does this subpart directly affect CISWI unit owners and operators in my State?

(a) No. This subpart does not directly affect CISWI unit owners and operators in your State. However, CISWI unit owners and operators must comply with the State plan you develop to implement the emission guidelines contained in this subpart. States may choose to incorporate the model rule text directly in their State plan.

(b) If you do not submit an approvable plan to implement and enforce the guidelines contained in this subpart by December 2, 2002, the EPA will implement and enforce a Federal plan, as provided in Sec. 60.2525, to ensure that each unit within your State reaches compliance with all the provisions of this subpart by December 1, 2005.

Applicability of State Plans

Sec. 60.2550 What CISWI units must I address in my State plan?

(a) Your State plan must address incineration units that meet all three criteria described in paragraphs (a)(1) through (3) of this section.

(1) Incineration units in your State that commenced construction on or before November 30, 1999.

(2) Incineration units that meet the definition of a CISWI unit as defined in Sec. 60.2875.

(3) Incineration units not exempt under Sec. 60.2555.

(b) If the owner or operator of a CISWI unit makes changes that meet the definition of modification or reconstruction on or after June 1, 2001, the CISWI unit becomes subject to subpart CCCC of this part and the State plan no longer applies to that unit.

(c) If the owner or operator of a CISWI unit makes physical or operational changes to an existing CISWI unit primarily to comply with your State plan, subpart CCCC of this part does not apply to that unit. Such changes do not qualify as modifications or reconstructions under subpart CCCC of this part.

Sec. 60.2555 What combustion units are exempt from my State plan?

This subpart exempts fifteen types of units described in paragraphs (a) through (o) of this section.

(a) Pathological waste incineration units. Incineration units burning 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, and/or chemotherapeutic waste as defined in Sec. 60.2875 are not subject to this subpart if you meet the two requirements specified in paragraphs (a)(1) and (2) of this section.

(1) Notify the Administrator that the unit meets these criteria.

(2) Keep records on a calendar quarter basis of the weight of pathological waste, low-level radioactive waste, and/or chemotherapeutic waste burned, and the weight of all other fuels and wastes burned in the unit.

(b) Agricultural waste incineration units. Incineration units burning 90 percent or more by weight (on a calendar quarter basis and excluding the weight of auxiliary fuel and combustion air) of agricultural wastes as defined in Sec. 60.2875 are not subject to this subpart if you meet the two requirements specified in paragraphs (b)(1) and (2) of this section.

(1) Notify the Administrator that the unit meets these criteria.

(2) Keep records on a calendar quarter basis of the weight of agricultural waste burned, and the weight of all other fuels and wastes burned in the unit.

(c) Municipal waste combustion units. Incineration units that meet either of the two criteria specified in paragraphs (c)(1) or (2) of this section.

(1) Are regulated under subpart Ea of this part (Standards of Performance for Municipal Waste Combustors); subpart Eb of this part (Standards of Performance for Municipal Waste Combustors for Which Construction is Commenced After September 20, 1994); subpart Cb of this part (Emission Guidelines and Compliance Time for Large Municipal Combustors that are Constructed on or Before September 20, 1994); subpart AAAA of this part (Standards of Performance for New Stationary Sources: Small Municipal Waste Combustion Units); or subpart BBBB of this part (Emission Guidelines for Existing Stationary Sources: Small Municipal Waste Combustion Units).

(2) Burn greater than 30 percent municipal solid waste or refuse-derived fuel, as defined in subpart Ea, subpart Eb,

subpart AAAA, and subpart BBBB, and that have the capacity to burn less than 35 tons (32 megagrams) per day of municipal solid waste or refuse-derived fuel, if you meet the two requirements in paragraphs (c)(2)(i) and (ii) of this section.

(i) Notify the Administrator that the unit meets these criteria.

(ii) Keep records on a calendar quarter basis of the weight of municipal solid waste burned, and the weight of all other fuels and wastes burned in the unit.

(d) Medical waste incineration units. Incineration units regulated under subpart Ec of this part (Standards of Performance for Hospital/ Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996) or subpart Ca of this part (Emission Guidelines and Compliance Times for Hospital/Medical/Infectious Waste Incinerators).

(e) Small power production facilities. Units that meet the three requirements specified in paragraphs (e)(1) through (3) of this section.

(1) The unit qualifies as a small power-production facility under section 3(17)(C) of the Federal Power Act (16 U.S.C. 796(17)(C)).

(2) The unit burns homogeneous waste (not including refuse-derived fuel) to produce electricity.

(3) You notify the Administrator that the unit meets all of these criteria.

(f) Cogeneration facilities. Units that meet the three requirements specified in paragraphs (f)(1) through (3) of this section.

(1) The unit qualifies as a cogeneration facility under section 3(18)(B) of the Federal Power Act (16 U.S.C. 796(18)(B)).

(2) The unit burns homogeneous waste (not including refuse-derived fuel) to produce electricity and steam or other forms of energy used for industrial, commercial, heating, or cooling purposes.

(3) You notify the Administrator that the unit meets all of these criteria.

(g) Hazardous waste combustion units. Units that meet either of the two criteria specified in paragraph (g)(1) or (2) of this section.

(1) Units for which you are required to get a permit under section 3005 of the Solid Waste Disposal Act.

(2) Units regulated under subpart EEE of 40 CFR part 63 (National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors).

(h) Materials recovery units. Units that combust waste for the primary purpose of recovering metals, such as primary and secondary smelters.

(i) Air curtain incinerators. Air curtain incinerators that burn only the materials listed in paragraphs (i)(1) through (3) of this section are only required to meet the requirements under "Air Curtain Incinerators" (Secs. 60.2810 through 60.2870).

(1) 100 percent wood waste.

(2) 100 percent clean lumber.

(3) 100 percent mixture of only wood waste, clean lumber, and/or yard waste.

(j) Cyclonic barrel burners. (See Sec. 60.2875)

(k) Rack, part, and drum reclamation units. (See Sec. 60.2875)

(l) Cement kilns. Kilns regulated under subpart LLL of part 63 of this chapter (National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry).

(m) Sewage sludge incinerators. Incineration units regulated under subpart O of this part (Standards of Performance for Sewage Treatment Plants).

(n) Chemical recovery units. Combustion units burning materials to recover chemical constituents or to produce chemical compounds where there is an existing commercial market for such recovered chemical constituents or compounds. The seven types of units described in paragraphs (n)(1) through (7) of this section are considered chemical recovery units.

(1) Units burning only pulping liquors (i.e., black liquor) that are reclaimed in a pulping liquor recovery process and reused in the pulping process.

(2) Units burning only spent sulfuric acid used to produce virgin sulfuric acid

(3) Units burning only wood or coal feedstock for the production of charcoal.

(4) Units burning only manufacturing byproduct streams/residues containing catalyst metals which are reclaimed and reused as catalysts or used to produce commercial grade catalysts.

(5) Units burning only coke to produce purified carbon monoxide that is used as an intermediate in the production of other chemical compounds.

(6) Units burning only hydrocarbon liquids or solids to produce hydrogen, carbon monoxide, synthesis gas, or other gases for use in other manufacturing processes.

(7) Units burning only photographic film to recover silver.

(o) Laboratory analysis units. Units that burn samples of materials for the purpose of chemical or physical analysis.

Sec. 60.2558 What if a chemical recovery unit is not listed in Sec. 60.2555(n)?

(a) If a chemical recovery unit is not listed in Sec. 60.2555(n), the owner or operator of the unit can petition the Administrator to add the unit to the list. The petition must contain the six items in paragraphs (a)(1) through (6) of this section.

(1) A description of the source of the materials being burned.

(2) A description of the composition of the materials being burned, highlighting the chemical constituents in these materials that are recovered.

(3) A description (including a process flow diagram) of the process in which the materials are burned, highlighting the type, design, and operation of the equipment used in this process.

(4) A description (including a process flow diagram) of the chemical constituent recovery process, highlighting the type, design, and operation of the equipment used in this process.

(5) A description of the commercial markets for the recovered chemical constituents and their use.

(6) The composition of the recovered chemical constituents and the composition of these chemical constituents as they are bought and sold in commercial markets.

(b) Until the Administrator approves the petition, the incineration unit is covered by this subpart.

(c) If a petition is approved, the Administrator will amend Sec. 60.2555(n) to add the unit to the list of chemical recovery units.

Use of Model Rule

Sec. 60.2560 What is the “model rule” in this subpart?

(a) The model rule is the portion of these emission guidelines (Secs. 60.2575 through 60.2875) that addresses the regulatory requirements applicable to CISWI units. The model rule provides these requirements in regulation format. You must develop a State plan that is at least as protective as the model rule. You may use the model rule language as part of your State plan. Alternative language may be used in your State plan if you demonstrate that the alternative language is at least as protective as the model rule contained in this subpart.

(b) In the model rule of Secs. 60.2575 to 60.2875, "you" means the owner or operator of a CISWI unit.

Sec. 60.2565 How does the model rule relate to the required elements of my State plan?

Use the model rule to satisfy the State plan requirements specified in Sec. 60.2515(a)(4) and (5).

Sec. 60.2570 What are the principal components of the model rule?

The model rule contains the eleven major components listed in paragraphs (a) through (k) of this section.

- (a) Increments of progress toward compliance.
- (b) Waste management plan.
- (c) Operator training and qualification.
- (d) Emission limitations and operating limits.
- (e) Performance testing.
- (f) Initial compliance requirements.
- (g) Continuous compliance requirements.
- (h) Monitoring.
- (i) Recordkeeping and reporting.
- (j) Definitions.
- (k) Tables.

Model Rule--Increments of Progress

Sec. 60.2575 What are my requirements for meeting increments of progress and achieving final compliance?

If you plan to achieve compliance more than 1 year following the effective date of State plan approval, you must meet the two increments of progress specified in paragraphs (a) and (b) of this section.

- (a) Submit a final control plan.
- (b) Achieve final compliance.

Sec. 60.2580 When must I complete each increment of progress?

Table 1 of this subpart specifies compliance dates for each of the increments of progress.

Sec. 60.2585 What must I include in the notifications of achievement of increments of progress?

Your notification of achievement of increments of progress must include the three items specified in paragraphs (a) through (c) of this section.

- (a) Notification that the increment of progress has been achieved.
- (b) Any items required to be submitted with each increment of progress.
- (c) Signature of the owner or operator of the CISWI unit.

Sec. 60.2590 When must I submit the notifications of achievement of increments of progress?

Notifications for achieving increments of progress must be postmarked no later than 10 business days after the compliance date for the increment.

Sec. 60.2595 What if I do not meet an increment of progress?

If you fail to meet an increment of progress, you must submit a notification to the Administrator postmarked within 10 business days after the date for that increment of progress in Table 1 of this subpart. You must inform the Administrator that you did not meet the increment, and you must continue to submit reports each subsequent calendar month until the increment of progress is met.

Sec. 60.2600 How do I comply with the increment of progress for submittal of a control plan?

For your control plan increment of progress, you must satisfy the two requirements specified in paragraphs (a) and (b) of this section.

(a) Submit the final control plan that includes the five items described in paragraphs (a)(1) through (5) of this section.

(1) A description of the devices for air pollution control and process changes that you will use to comply with the emission limitations and other requirements of this subpart.

(2) The type(s) of waste to be burned.

(3) The maximum design waste burning capacity.

(4) The anticipated maximum charge rate.

(5) If applicable, the petition for site-specific operating limits under Sec. 60.2680.

(b) Maintain an onsite copy of the final control plan.

Sec. 60.2605 How do I comply with the increment of progress for achieving final compliance?

For the final compliance increment of progress, you must complete all process changes and retrofit construction of control devices, as specified in the final control plan, so that, if the affected CISWI unit is brought online, all necessary process changes and air pollution control devices would operate as designed.

Sec. 60.2610 What must I do if I close my CISWI unit and then restart it?

(a) If you close your CISWI unit but will restart it prior to the final compliance date in your State plan, you must meet the increments of progress specified in Sec. 60.2575.

(b) If you close your CISWI unit but will restart it after your final compliance date, you must complete emission control retrofits and meet the emission limitations and operating limits on the date your unit restarts operation.

Sec. 60.2615 What must I do if I plan to permanently close my CISWI unit and not restart it?

If you plan to close your CISWI unit rather than comply with the State plan, submit a closure notification, including the date of closure, to the Administrator by the date your final control plan is due.

Model Rule--Waste Management Plan

Sec. 60.2620 What is a waste management plan?

A waste management plan is a written plan that identifies both the feasibility and the methods used to reduce or separate certain components of solid waste from the waste stream in order to reduce or eliminate toxic emissions from incinerated waste.

Sec. 60.2625 When must I submit my waste management plan?

You must submit a waste management plan no later than the date specified in Table 1 of this subpart for submittal of the final control plan.

Sec. 60.2630 What should I include in my waste management plan?

A waste management plan must include consideration of the reduction or separation of waste-stream elements such as paper, cardboard, plastics, glass, batteries, or metals; or the use of recyclable materials. The plan must identify any additional waste management measures, and the source must implement those measures considered practical and feasible, based on the effectiveness of waste management measures already in place, the costs of additional measures, the emissions reductions expected to be achieved, and any other environmental or energy impacts they might have.

Model Rule--Operator Training and Qualification

Sec. 60.2635 What are the operator training and qualification requirements?

(a) No CISWI unit can be operated unless a fully trained and qualified CISWI unit operator is accessible, either at the facility or can be at the facility within 1 hour. The trained and qualified CISWI unit operator may operate the CISWI unit directly or be the direct supervisor of one or more other plant personnel who operate the unit. If all qualified CISWI unit operators are temporarily not accessible, you must follow the procedures in Sec. 60.2665.

(b) Operator training and qualification must be obtained through a State-approved program or by completing the requirements included in paragraph (c) of this section.

(c) Training must be obtained by completing an incinerator operator training course that includes, at a minimum, the three elements described in paragraphs (c)(1) through (3) of this section.

(1) Training on the eleven subjects listed in paragraphs (c)(1)(i) through (xi) of this section.

(i) Environmental concerns, including types of emissions.

(ii) Basic combustion principles, including products of combustion.

(iii) Operation of the specific type of incinerator to be used by the operator, including proper startup, waste charging, and shutdown procedures.

(iv) Combustion controls and monitoring.

(v) Operation of air pollution control equipment and factors affecting performance (if applicable).

(vi) Inspection and maintenance of the incinerator and air pollution control devices.

(vii) Actions to correct malfunctions or conditions that may lead to malfunction.

(viii) Bottom and fly ash characteristics and handling procedures.

(ix) Applicable Federal, State, and local regulations, including Occupational Safety and Health Administration workplace standards.

(x) Pollution prevention.

(xi) Waste management practices.

(2) An examination designed and administered by the instructor.

(3) Written material covering the training course topics that can serve as reference material following completion of the course.

Sec. 60.2640 When must the operator training course be completed?

The operator training course must be completed by the later of the three dates specified in paragraphs (a) through (c) of

this section.

(a) The final compliance date (Increment 2).

(b) Six months after CISWI unit startup.

(c) Six months after an employee assumes responsibility for operating the CISWI unit or assumes responsibility for supervising the operation of the CISWI unit.

Sec. 60.2645 How do I obtain my operator qualification?

(a) You must obtain operator qualification by completing a training course that satisfies the criteria under Sec. 60.2635(b).

(b) Qualification is valid from the date on which the training course is completed and the operator successfully passes the examination required under Sec. 60.2635(c)(2).

Sec. 60.2650 How do I maintain my operator qualification?

To maintain qualification, you must complete an annual review or refresher course covering, at a minimum, the five topics described in paragraphs (a) through (e) of this section.

(a) Update of regulations.

(b) Incinerator operation, including startup and shutdown procedures, waste charging and ash handling.

(c) Inspection and maintenance.

(d) Responses to malfunctions or conditions that may lead to malfunction.

(e) Discussion of operating problems encountered by attendees.

Sec. 60.2655 How do I renew my lapsed operator qualification?

You must renew a lapsed operator qualification by one of the two methods specified in paragraphs (a) and (b) of this section.

(a) For a lapse of less than 3 years, you must complete a standard annual refresher course described in Sec. 60.2650.

(b) For a lapse of 3 years or more, you must repeat the initial qualification requirements in Sec. 60.2645(a).

Sec. 60.2660 What site-specific documentation is required?

(a) Documentation must be available at the facility and readily accessible for all CISWI unit operators that addresses the ten topics described in paragraphs (a)(1) through (10) of this section. You must maintain this information and the training records required by paragraph (c) of this section in a manner that they can be readily accessed and are suitable for inspection upon request.

(1) Summary of the applicable standards under this subpart.

(2) Procedures for receiving, handling, and charging waste.

(3) Incinerator startup, shutdown, and malfunction procedures.

(4) Procedures for maintaining proper combustion air supply levels.

(5) Procedures for operating the incinerator and associated air pollution control systems within the standards established under this subpart.

(6) Monitoring procedures for demonstrating compliance with the incinerator operating limits.

(7) Reporting and recordkeeping procedures.

(8) The waste management plan required under Secs. 60.2620 through 60.2630.

(9) Procedures for handling ash.

(10) A list of the wastes burned during the performance test.

(b) You must establish a program for reviewing the information listed in paragraph (a) of this section with each incinerator operator.

(1) The initial review of the information listed in paragraph (a) of this section must be conducted by the later of the three dates specified in paragraphs (b)(1)(i) through (iii) of this section.

(i) The final compliance date (Increment 2).

(ii) Six months after CISWI unit startup.

(iii) Six months after being assigned to operate the CISWI unit.

(2) Subsequent annual reviews of the information listed in paragraph (a) of this section must be conducted no later than 12 months following the previous review.

(c) You must also maintain the information specified in paragraphs (c)(1) through (3) of this section.

(1) Records showing the names of CISWI unit operators who have completed review of the information in Sec. 60.2660(a) as required by Sec. 60.2660(b), including the date of the initial review and all subsequent annual reviews.

(2) Records showing the names of the CISWI operators who have completed the operator training requirements under Sec. 60.2635, met the criteria for qualification under Sec. 60.2645, and maintained or renewed their qualification under Sec. 60.2650 or Sec. 60.2655. Records must include documentation of training, the dates of the initial refresher training, and the dates of their qualification and all subsequent renewals of such qualifications.

(3) For each qualified operator, the phone and/or pager number at which they can be reached during operating hours.

Sec. 60.2665 What if all the qualified operators are temporarily not accessible?

If all qualified operators are temporarily not accessible (i.e., not at the facility and not able to be at the facility within 1 hour), you must meet one of the two criteria specified in paragraphs (a) and (b) of this section, depending on the length of time that a qualified operator is not accessible.

(a) When all qualified operators are not accessible for more than 8 hours, but less than 2 weeks, the CISWI unit may be operated by other plant personnel familiar with the operation of the CISWI unit who have completed a review of the information specified in Sec. 60.2660(a) within the past 12 months. However, you must record the period when all qualified operators were not accessible and include this deviation in the annual report as specified under Sec. 60.2770.

(b) When all qualified operators are not accessible for 2 weeks or more, you must take the two actions that are described in paragraphs (b)(1) and (2) of this section.

(1) Notify the Administrator of this deviation in writing within 10 days. In the notice, state what caused this deviation, what you are doing to ensure that a qualified operator is accessible, and when you anticipate that a qualified operator will be accessible.

(2) Submit a status report to the Administrator every 4 weeks outlining what you are doing to ensure that a qualified operator is accessible, stating when you anticipate that a qualified operator will be accessible and requesting approval from the Administrator to continue operation of the CISWI unit. You must submit the first status report 4 weeks after you notify the Administrator of the deviation under paragraph (b)(1) of this section. If the Administrator notifies you that your request to continue operation of the CISWI unit is disapproved, the CISWI unit may continue operation for 90 days, then must cease operation. Operation of the unit may resume if you meet the two requirements in paragraphs (b)(2)(i) and (ii) of this section.

(i) A qualified operator is accessible as required under Sec. 60.2635(a).

- (ii) You notify the Administrator that a qualified operator is accessible and that you are resuming operation.

Model Rule--Emission Limitations and Operating Limits

Sec. 60.2670 What emission limitations must I meet and by when?

You must meet the emission limitations specified in Table 2 of this subpart on the date the initial performance test is required or completed (whichever is earlier).

Sec. 60.2675 What operating limits must I meet and by when?

(a) If you use a wet scrubber to comply with the emission limitations, you must establish operating limits for four operating parameters (as specified in Table 3 of this subpart) as described in paragraphs (a)(1) through (4) of this section during the initial performance test.

(1) Maximum charge rate, calculated using one of the two different procedures in paragraph (a)(1)(i) or (ii), as appropriate.

(i) For continuous and intermittent units, maximum charge rate is 110 percent of the average charge rate measured during the most recent performance test demonstrating compliance with all applicable emission limitations.

(ii) For batch units, maximum charge rate is 110 percent of the daily charge rate measured during the most recent performance test demonstrating compliance with all applicable emission limitations.

(2) Minimum pressure drop across the wet scrubber, which is calculated as 90 percent of the average pressure drop across the wet scrubber measured during the most recent performance test demonstrating compliance with the particulate matter emission limitations; or minimum amperage to the wet scrubber, which is calculated as 90 percent of the average amperage to the wet scrubber measured during the most recent performance test demonstrating compliance with the particulate matter emission limitations.

(3) Minimum scrubber liquor flow rate, which is calculated as 90 percent of the average liquor flow rate at the inlet to the wet scrubber measured during the most recent performance test demonstrating compliance with all applicable emission limitations.

(4) Minimum scrubber liquor pH, which is calculated as 90 percent of the average liquor pH at the inlet to the wet scrubber measured during the most recent performance test demonstrating compliance with the HCl emission limitation.

(b) You must meet the operating limits established during the initial performance test on the date the initial performance test is required or completed (whichever is earlier).

(c) If you use a fabric filter to comply with the emission limitations, you must operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month period. In calculating this operating time percentage, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If you take longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by you to initiate corrective action.

Sec. 60.2680 What if I do not use a wet scrubber to comply with the emission limitations?

If you use an air pollution control device other than a wet scrubber, or limit emissions in some other manner, to comply with the emission limitations under Sec. 60.2670, you must petition the Administrator for specific operating limits to be established during the initial performance test and continuously monitored thereafter. You must not conduct the initial performance test until after the petition has been approved by the Administrator. Your petition must include the five items listed in paragraphs (a) through (e) of this section.

(a) Identification of the specific parameters you propose to use as additional operating limits.

(b) A discussion of the relationship between these parameters and regulated pollutants change with changes in these parameters, and how limits on these parameters will serve to limit emissions of regulated pollutants.

(c) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the operating limits on these parameters.

(d) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments.

(e) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

Sec. 60.2685 What happens during periods of startup, shutdown, and malfunction?

(a) The emission limitations and operating limits apply at all times except during CISWI unit startups, shutdowns, or malfunctions.

(b) Each malfunction must last no longer than 3 hours.

Model Rule--Performance Testing

Sec. 60.2690 How do I conduct the initial and annual performance test?

(a) All performance tests must consist of a minimum of three test runs conducted under conditions representative of normal operations.

(b) You must document that the waste burned during the performance test is representative of the waste burned under normal operating conditions by maintaining a log of the quantity of waste burned (as required in Sec. 60.2740(b)(1)) and the types of waste burned during the performance test.

(c) All performance tests must be conducted using the minimum run duration specified in Table 2 of this subpart.

(d) Method 1 of appendix A of this part must be used to select the sampling location and number of traverse points.

(e) Method 3A or 3B of appendix A of this part must be used for gas composition analysis, including measurement of oxygen concentration. Method 3A or 3B of appendix A of this part must be used simultaneously with each method.

(f) All pollutant concentrations, except for opacity, must be adjusted to 7 percent oxygen using Equation 1 of this section:

$$C_{adj} = C_{meas} (20.9-7)/(20.9-\%O_2) \text{ (Eq. 1)}$$

Where:

C_{adj} = pollutant concentration adjusted to 7 percent oxygen;

C_{meas} = pollutant concentration measured on a dry basis;

$(20.9-7)$ = 20.9 percent oxygen-7 percent oxygen (defined oxygen correction basis);

20.9 = oxygen concentration in air, percent; and

$\%O_2$ = oxygen concentration measured on a dry basis, percent.

(g) You must determine dioxins/furans toxic equivalency by following the procedures in paragraphs (g)(1) through (3) of this section.

(1) Measure the concentration of each dioxin/furan tetra- through octa-congener emitted using EPA Method 23.

(2) For each dioxin/furan congener measured in accordance with paragraph (g)(1) of this section, multiply the congener concentration by its corresponding toxic equivalency factor specified in Table 4 of this subpart.

(3) Sum the products calculated in accordance with paragraph (g)(2) of this section to obtain the total concentration of dioxins/furans emitted in terms of toxic equivalency.

Sec. 60.2695 How are the performance test data used?

You use results of performance tests to demonstrate compliance with the emission limitations in Table 2 of this subpart.

Model Rule--Initial Compliance Requirements

Sec. 60.2700 How do I demonstrate initial compliance with the emission limitations and establish the operating limits?

You must conduct an initial performance test, as required under Sec. 60.8, to determine compliance with the emission limitations in Table 2 of this subpart and to establish operating limits using the procedure in Sec. 60.2675 or Sec. 60.2680. The initial performance test must be conducted using the test methods listed in Table 2 of this subpart and the procedures in Sec. 60.2690.

Sec. 60.2705 By what date must I conduct the initial performance test?

The initial performance test must be conducted no later than 180 days after your final compliance date. Your final compliance date is specified in Table 1 of this subpart.

Model Rule--Continuous Compliance Requirements

Sec. 60.2710 How do I demonstrate continuous compliance with the emission limitations and the operating limits?

(a) You must conduct an annual performance test for particulate matter, hydrogen chloride, and opacity for each CISWI unit as required under Sec. 60.8 to determine compliance with the emission limitations. The annual performance test must be conducted using the test methods listed in Table 2 of this subpart and the procedures in Sec. 60.2690.

(b) You must continuously monitor the operating parameters specified in Sec. 60.2675 or established under Sec. 60.2680. Operation above the established maximum or below the established minimum operating limits constitutes a deviation from the established operating limits. Three-hour rolling average values are used to determine compliance (except for baghouse leak detection system alarms) unless a different averaging period is established under Sec. 60.2680. Operating limits do not apply during performance tests.

(c) You must only burn the same types of waste used to establish operating limits during the performance test.

Sec. 60.2715 By what date must I conduct the annual performance test?

You must conduct annual performance tests for particulate matter, hydrogen chloride, and opacity within 12 months following the initial performance test. Conduct subsequent annual performance tests within 12 months following the previous one.

Sec. 60.2720 May I conduct performance testing less often?

(a) You can test less often for a given pollutant if you have test data for at least 3 years, and all performance tests for the pollutant (particulate matter, hydrogen chloride, or opacity) over 3 consecutive years show that you comply with the emission limitation. In this case, you do not have to conduct a performance test for that pollutant for the next 2 years. You must conduct a performance test during the third year and no more than 36 months following the previous performance test.

(b) If your CISWI unit continues to meet the emission limitation for particulate matter, hydrogen chloride, or opacity, you may choose to conduct performance tests for these pollutants every third year, but each test must be within 36 months of the previous performance test.

(c) If a performance test shows a deviation from an emission limitation for particulate matter, hydrogen chloride, or opacity, you must conduct annual performance tests for that pollutant until all performance tests over a 3-year period show compliance.

Sec. 60.2725 May I conduct a repeat performance test to establish new operating limits?

(a) Yes. You may conduct a repeat performance test at any time to establish new values for the operating limits. The

Administrator may request a repeat performance test at any time.

(b) You must repeat the performance test if your feed stream is different than the feed streams used during any performance test used to demonstrate compliance.

Model Rule--Monitoring

Sec. 60.2730 What monitoring equipment must I install and what parameters must I monitor?

(a) If you are using a wet scrubber to comply with the emission limitation under Sec. 60.2670, you must install, calibrate (to manufacturers' specifications), maintain, and operate devices (or establish methods) for monitoring the value of the operating parameters used to determine compliance with the operating limits listed in Table 3 of this subpart. These devices (or methods) must measure and record the values for these operating parameters at the frequencies indicated in Table 3 of this subpart at all times except as specified in Sec. 60.2735(a).

(b) If you use a fabric filter to comply with the requirements of this subpart, you must install, calibrate, maintain, and continuously operate a bag leak detection system as specified in paragraphs (b)(1) through (8) of this section.

(1) You must install and operate a bag leak detection system for each exhaust stack of the fabric filter.

(2) Each bag leak detection system must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.

(3) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 milligrams per actual cubic meter or less.

(4) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.

(5) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.

(6) The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative particulate matter emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.

(7) For positive pressure fabric filter systems, a bag leak detection system must be installed in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.

(8) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(c) If you are using something other than a wet scrubber to comply with the emission limitations under Sec. 60.2670, you must install, calibrate (to the manufacturers' specifications), maintain, and operate the equipment necessary to monitor compliance with the site-specific operating limits established using the procedures in Sec. 60.2680.

Sec. 60.2735 Is there a minimum amount of monitoring data I must obtain?

(a) Except for monitoring malfunctions, associated repairs, and required quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments of the monitoring system), you must conduct monitoring at all times the CISWI unit is operating.

(b) Do not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or quality control activities for meeting the requirements of this subpart, including data averages and calculations. You must use all the data collected during all other periods in assessing compliance with the operating limits.

Model Rule--Recordkeeping and Reporting

Sec. 60.2740 What records must I keep?

You must maintain the 13 items (as applicable) as specified in paragraphs (a) through (m) of this section for a period of at least 5 years:

- (a) Calendar date of each record.
- (b) Records of the data described in paragraphs (b)(1) through (6) of this section:
 - (1) The CISWI unit charge dates, times, weights, and hourly charge rates.
 - (2) Liquor flow rate to the wet scrubber inlet every 15 minutes of operation, as applicable.
 - (3) Pressure drop across the wet scrubber system every 15 minutes of operation or amperage to the wet scrubber every 15 minutes of operation, as applicable.
 - (4) Liquor pH as introduced to the wet scrubber every 15 minutes of operation, as applicable.
 - (5) For affected CISWI units that establish operating limits for controls other than wet scrubbers under Sec. 60.2680, you must maintain data collected for all operating parameters used to determine compliance with the operating limits.
 - (6) If a fabric filter is used to comply with the emission limitations, you must record the date, time, and duration of each alarm and the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action taken. You must also record the percent of operating time during each 6-month period that the alarm sounds, calculated as specified in Sec. 60.2675(c).
- (c) Identification of calendar dates and times for which monitoring systems used to monitor operating limits were inoperative, inactive, malfunctioning, or out of control (except for downtime associated with zero and span and other routine calibration checks). Identify the operating parameters not measured, the duration, reasons for not obtaining the data, and a description of corrective actions taken.
- (d) Identification of calendar dates, times, and durations of malfunctions, and a description of the malfunction and the corrective action taken.
- (e) Identification of calendar dates and times for which data show a deviation from the operating limits in Table 3 of this subpart or a deviation from other operating limits established under Sec. 60.2680 with a description of the deviations, reasons for such deviations, and a description of corrective actions taken.
- (f) The results of the initial, annual, and any subsequent performance tests conducted to determine compliance with the emission limits and/or to establish operating limits, as applicable. Retain a copy of the complete test report including calculations.
- (g) Records showing the names of CISWI unit operators who have completed review of the information in Sec. 60.2660(a) as required by Sec. 60.2660(b), including the date of the initial review and all subsequent annual reviews.
- (h) Records showing the names of the CISWI operators who have completed the operator training requirements under Sec. 60.2635, met the criteria for qualification under Sec. 60.2645, and maintained or renewed their qualification under Sec. 60.2650 or Sec. 60.2655. Records must include documentation of training, the dates of the initial and refresher training, and the dates of their qualification and all subsequent renewals of such qualifications.
- (i) For each qualified operator, the phone and/or pager number at which they can be reached during operating hours.
- (j) Records of calibration of any monitoring devices as required under Sec. 60.2730.
- (k) Equipment vendor specifications and related operation and maintenance requirements for the incinerator, emission controls, and monitoring equipment.
- (l) The information listed in Sec. 60.2660(a).
- (m) On a daily basis, keep a log of the quantity of waste burned and the types of waste burned (always required).

Sec. 60.2745 Where and in what format must I keep my records?

All records must be available onsite in either paper copy or computer-readable format that can be printed upon request, unless an alternative format is approved by the Administrator.

Sec. 60.2750 What reports must I submit?

See Table 5 of this subpart for a summary of the reporting requirements.

Sec. 60.2755 When must I submit my waste management plan?

You must submit the waste management plan no later than the date specified in Table 1 of this subpart for submittal of the final control plan.

Sec. 60.2760 What information must I submit following my initial performance test?

You must submit the information specified in paragraphs (a) through (c) of this section no later than 60 days following the initial performance test. All reports must be signed by the facilities manager.

(a) The complete test report for the initial performance test results obtained under Sec. 60.2700, as applicable.

(b) The values for the site-specific operating limits established in Sec. 60.2675 or Sec. 60.2680.

(c) If you are using a fabric filter to comply with the emission limitations, documentation that a bag leak detection system has been installed and is being operated, calibrated, and maintained as required by Sec. 60.2730(b).

Sec. 60.2765 When must I submit my annual report?

You must submit an annual report no later than 12 months following the submission of the information in Sec. 60.2760. You must submit subsequent reports no more than 12 months following the previous report. (If the unit is subject to permitting requirements under title V of the Clean Air Act, you may be required by the permit to submit these reports more frequently.)

Sec. 60.2770 What information must I include in my annual report?

The annual report required under Sec. 60.2765 must include the ten items listed in paragraphs (a) through (j) of this section. If you have a deviation from the operating limits or the emission limitations, you must also submit deviation reports as specified in Secs. 60.2775, 60.2780, and 60.2785.

(a) Company name and address.

(b) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

(c) Date of report and beginning and ending dates of the reporting period.

(d) The values for the operating limits established pursuant to Sec. 60.2675 or Sec. 60.2680.

(e) If no deviation from any emission limitation or operating limit that applies to you has been reported, a statement that there was no deviation from the emission limitations or operating limits during the reporting period, and that no monitoring system used to determine compliance with the operating limits was inoperative, inactive, malfunctioning or out of control.

(f) The highest recorded 3-hour average and the lowest recorded 3-hour average, as applicable, for each operating parameter recorded for the calendar year being reported.

(g) Information recorded under Sec. 60.2740(b)(6) and (c) through (e) for the calendar year being reported.

(h) If a performance test was conducted during the reporting period, the results of that test.

(i) If you met the requirements of Sec. 60.2720(a) or (b), and did not conduct a performance test during the reporting period, you must state that you met the requirements of Sec. 60.2720(a) or (b), and, therefore, you were not required to conduct a performance test during the reporting period.

(j) Documentation of periods when all qualified CISWI unit operators were unavailable for more than 8 hours, but less

than 2 weeks.

Sec. 60.2775 What else must I report if I have a deviation from the operating limits or the emission limitations?

(a) You must submit a deviation report if any recorded 3-hour average parameter level is above the maximum operating limit or below the minimum operating limit established under this subpart, if the bag leak detection system alarm sounds for more than 5 percent of the operating time for the 6-month reporting period, or if a performance test was conducted that deviated from any emission limitation.

(b) The deviation report must be submitted by August 1 of that year for data collected during the first half of the calendar year (January 1 to June 30), and by February 1 of the following year for data you collected during the second half of the calendar year (July 1 to December 31).

Sec. 60.2780 What must I include in the deviation report?

In each report required under Sec. 60.2775, for any pollutant or parameter that deviated from the emission limitations or operating limits specified in this subpart, include the six items described in paragraphs (a) through (f) of this section.

(a) The calendar dates and times your unit deviated from the emission limitations or operating limit requirements.

(b) The averaged and recorded data for those dates.

(c) Duration and causes of each deviation from the emission limitations or operating limits and your corrective actions.

(d) A copy of the operating limit monitoring data during each deviation and any test report that documents the emission levels.

(e) The dates, times, number, duration, and causes for monitoring downtime incidents (other than downtime associated with zero, span, and other routine calibration checks).

(f) Whether each deviation occurred during a period of startup, shutdown, or malfunction, or during another period.

Sec. 60.2785 What else must I report if I have a deviation from the requirement to have a qualified operator accessible?

(a) If all qualified operators are not accessible for 2 weeks or more, you must take the two actions in paragraphs (a)(1) and (2) of this section.

(1) Submit a notification of the deviation within 10 days that includes the three items in paragraphs (a)(1)(i) through (iii) of this section.

(i) A statement of what caused the deviation.

(ii) A description of what you are doing to ensure that a qualified operator is accessible.

(iii) The date when you anticipate that a qualified operator will be available.

(2) Submit a status report to the Administrator every 4 weeks that includes the three items in paragraphs (a)(2)(i) through (iii) of this section.

(i) A description of what you are doing to ensure that a qualified operator is accessible.

(ii) The date when you anticipate that a qualified operator will be accessible.

(iii) Request approval from the Administrator to continue operation of the CISWI unit.

(b) If your unit was shut down by the Administrator, under the provisions of Sec. 60.2665(b)(2), due to a failure to provide an accessible qualified operator, you must notify the Administrator that you are resuming operation once a qualified operator is accessible.

Sec. 60.2790 Are there any other notifications or reports that I must submit?

Yes. You must submit notifications as provided by Sec. 60.7.

Sec. 60.2795 In what form can I submit my reports?

Submit initial, annual, and deviation reports electronically or in paper format, postmarked on or before the submittal due dates.

Sec. 60.2800 Can reporting dates be changed?

If the Administrator agrees, you may change the semiannual or annual reporting dates. See Sec. 60.19(c) for procedures to seek approval to change your reporting date.

Model Rule--Title V Operating Permits

Sec. 60.2805 Am I required to apply for and obtain a title V operating permit for my unit?

Yes. Each CISWI unit must operate pursuant to a permit issued under section 129(e) and title V of the Clean Air Act by the later of the two dates in paragraphs (a) and (b) of this section.

(a) Thirty-six months after December 1, 2000.

(b) The effective date of the title V permit program to which your unit is subject. If your unit is subject to title V as a result of some triggering requirement(s) other than this subpart (for example, being a major source), then your unit may be required to apply for and obtain a title V permit prior to the deadlines noted above. If more than one requirement triggers the requirement to apply for a title V permit, the 12-month timeframe for filing a title V application is triggered by the requirement which first causes the source to be subject to title V.

Model Rule--Air Curtain Incinerators

Sec. 60.2810 What is an air curtain incinerator?

(a) An air curtain incinerator operates by forcefully projecting a curtain of air across an open chamber or open 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.)

(b) Air curtain incinerators that burn only the materials listed in paragraphs (b)(1) through (3) of this section are only required to meet the requirements under "Air Curtain Incinerators" (Secs. 60.2810 through 60.2870).

(1) 100 percent wood waste.

(2) 100 percent clean lumber.

(3) 100 percent mixture of only wood waste, clean lumber, and/or yard waste.

Sec. 60.2815 What are my requirements for meeting increments of progress and achieving final compliance?

If you plan to achieve compliance more than 1 year following the effective date of State plan approval, you must meet the two increments of progress specified in paragraphs (a) and (b) of this section.

(a) Submit a final control plan.

(b) Achieve final compliance.

Sec. 60.2820 When must I complete each increment of progress?

Table 1 of this subpart specifies compliance dates for each of the increments of progress.

Sec. 60.2825 What must I include in the notifications of achievement of increments of progress?

Your notification of achievement of increments of progress must include the three items described in paragraphs (a) through (c) of this section.

- (a) Notification that the increment of progress has been achieved.
- (b) Any items required to be submitted with each increment of progress (see Sec. 60.2840).
- (c) Signature of the owner or operator of the incinerator.

Sec. 60.2830 When must I submit the notifications of achievement of increments of progress?

Notifications for achieving increments of progress must be postmarked no later than 10 business days after the compliance date for the increment.

Sec. 60.2835 What if I do not meet an increment of progress?

If you fail to meet an increment of progress, you must submit a notification to the Administrator postmarked within 10 business days after the date for that increment of progress in Table 1 of this subpart. You must inform the Administrator that you did not meet the increment, and you must continue to submit reports each subsequent calendar month until the increment of progress is met.

Sec. 60.2840 How do I comply with the increment of progress for submittal of a control plan?

For your control plan increment of progress, you must satisfy the two requirements specified in paragraphs (a) and (b) of this section.

- (a) Submit the final control plan, including a description of any devices for air pollution control and any process changes that you will use to comply with the emission limitations and other requirements of this subpart.
- (b) Maintain an onsite copy of the final control plan.

Sec. 60.2845 How do I comply with the increment of progress for achieving final compliance?

For the final compliance increment of progress, you must complete all process changes and retrofit construction of control devices, as specified in the final control plan, so that, if the affected incinerator is brought online, all necessary process changes and air pollution control devices would operate as designed. Sec. 60.2850 What must I do if I close my air curtain incinerator and then restart it?

- (a) If you close your incinerator but will reopen it prior to the final compliance date in your State plan, you must meet the increments of progress specified in Sec. 60.2815.
- (b) If you close your incinerator but will restart it after your final compliance date, you must complete emission control retrofits and meet the emission limitations on the date your incinerator restarts operation.

Sec. 60.2855 What must I do if I plan to permanently close my air curtain incinerator and not restart it?

If you plan to close your incinerator rather than comply with the State plan, submit a closure notification, including the date of closure, to the Administrator by the date your final control plan is due.

Sec. 60.2860 What are the emission limitations for air curtain incinerators?

- (a) After the date the initial stack test is required or completed (whichever is earlier), you must meet the limitations in paragraphs (a)(1) and (2) of this section.
 - (1) The opacity limitation is 10 percent (6-minute average), except as described in paragraph (a)(2) of this section.
 - (2) The opacity limitation is 35 percent (6-minute average) during the startup period that is within the first 30 minutes of operation.

(b) Except during malfunctions, the requirements of this subpart apply at all times, and each malfunction must not exceed 3 hours.

Sec. 60.2865 How must I monitor opacity for air curtain incinerators?

(a) Use Method 9 of appendix A of this part to determine compliance with the opacity limitation.

(b) Conduct an initial test for opacity as specified in Sec. 60.8 no later than 180 days after your final compliance date.

(c) After the initial test for opacity, conduct annual tests no more than 12 calendar months following the date of your previous test.

Sec. 60.2870 What are the recordkeeping and reporting requirements for air curtain incinerators?

(a) Keep records of results of all initial and annual opacity tests onsite in either paper copy or electronic format, unless the Administrator approves another format, for at least 5 years.

(b) Make all records available for submittal to the Administrator or for an inspector's onsite review.

(c) Submit an initial report no later than 60 days following the initial opacity test that includes the information specified in paragraphs (c) (1) and (2) of this section.

(1) The types of materials you plan to combust in your air curtain incinerator.

(2) The results (each 6-minute average) of the initial opacity tests.

(d) Submit annual opacity test results within 12 months following the previous report.

(e) Submit initial and annual opacity test reports as electronic or paper copy on or before the applicable submittal date and keep a copy onsite for a period of 5 years.

Model Rule--Definitions

Sec. 60.2875 What definitions must I know?

Terms used but not defined in this subpart are defined in the Clean Air Act and subparts A and B of this part.

Administrator means the Administrator of the U.S. Environmental Protection Agency or his/her authorized representative or Administrator of a State Air Pollution Control Agency.

Agricultural waste means vegetative agricultural materials such as nut and grain hulls and chaff (e.g., almond, walnut, peanut, rice, and wheat), bagasse, orchard prunings, corn stalks, coffee bean hulls and grounds, and other vegetative waste materials generated as a result of agricultural operations.

Air curtain incinerator means 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.)

Auxiliary fuel means natural gas, liquified petroleum gas, fuel oil, or diesel fuel.

Bag leak detection system means an instrument that is capable of monitoring particulate matter loadings in the exhaust of a fabric filter (i.e., baghouse) 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 principle to monitor relative particulate matter loadings.

Calendar quarter means three consecutive months (nonoverlapping) beginning on: January 1, April 1, July 1, or October 1.

Calendar year means 365 consecutive days starting on January 1 and ending on December 31.

Chemotherapeutic waste means waste material resulting from the production or use of antineoplastic agents used for the purpose of stopping or reversing the growth of malignant cells.

Clean lumber means wood or wood products that have been cut or shaped and include wet, air-dried, and kiln-dried wood products. Clean lumber does not include wood products that have been painted, pigment-stained, or pressure-treated by compounds such as chromate copper arsenate, pentachlorophenol, and creosote.

Commercial and industrial solid waste incineration (CISWI) unit means any combustion device that combusts commercial and industrial waste, as defined in this subpart. The boundaries of a CISWI unit are defined as, but not limited to, the commercial or industrial solid waste fuel feed system, grate system, flue gas system, and bottom ash. The CISWI unit does not include air pollution control equipment or the stack. The CISWI unit boundary starts at the commercial and industrial solid waste hopper (if applicable) and extends through two areas:

(1) The combustion unit flue gas system, which ends immediately after the last combustion chamber.

(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.

Commercial and industrial waste means solid waste combusted in an enclosed device using controlled flame combustion without energy recovery 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), or solid waste combusted in an air curtain incinerator without energy recovery that is a distinct operating unit of any commercial or industrial facility.

Contained gaseous material means gases that are in a container when that container is combusted.

Cyclonic barrel burner means a combustion device for waste materials that is attached to a 55 gallon, open-head drum. The device consists of a lid, which fits onto and encloses the drum, and a blower that forces combustion air into the drum in a cyclonic manner to enhance the mixing of waste material and air.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation, operating limit, or operator qualification and accessibility requirements;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limitation, operating limit, or operator qualification and accessibility requirement in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Dioxins/furans means tetra-through octachlorinated dibenzo-p-dioxins and dibenzofurans.

Discard means, for purposes of this subpart and 40 CFR part 60, subpart DDDD, only, burned in an incineration unit without energy recovery.

Drum reclamation unit means a unit that burns residues out of drums (e.g., 55 gallon drums) so that the drums can be reused.

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

Fabric filter means an add-on air pollution control device used to capture particulate matter by filtering gas streams through filter media, also known as a baghouse.

Low-level radioactive waste means waste material which 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 by-product material as defined by the Atomic Energy Act of 1954 (42 U.S.C. 2014(e)(2)).

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.

Modification or modified CISWI unit means a CISWI unit you have changed later than June 1, 2001 and that meets one of two criteria:

(1) The cumulative cost of the changes over the life of the unit exceeds 50 percent of the original cost of building and installing the CISWI unit (not including the cost of land) updated to current costs (current dollars). To determine what systems are within the boundary of the CISWI unit used to calculate these costs, see the definition of CISWI unit.

(2) Any physical change in the CISWI unit or change in the method of operating it that increases the amount of any air pollutant emitted for which section 129 or section 111 of the Clean Air Act has established standards.

Part reclamation unit means a unit that burns coatings off parts (e.g., tools, equipment) so that the parts can be reconditioned and reused.

Particulate matter means total particulate matter emitted from CISWI units as measured by Method 5 or Method 29 of appendix A of this part.

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

Rack reclamation unit means a unit that burns the coatings off racks used to hold small items for application of a coating. The unit burns the coating overspray off the rack so the rack can be reused.

Reconstruction means rebuilding a CISWI unit and meeting two criteria:

(1) The reconstruction begins on or after June 1, 2001.

(2) The cumulative cost of the construction over the life of the incineration unit exceeds 50 percent of the original cost of building and installing the CISWI unit (not including land) updated to current costs (current dollars). To determine what systems are within the boundary of the CISWI unit used to calculate these costs, see the definition of CISWI unit.

Refuse-derived fuel means a type of municipal solid waste produced by processing municipal solid waste through shredding and size classification. This includes all classes of refuse-derived fuel including two fuels:

(1) Low-density fluff refuse-derived fuel through densified refuse-derived fuel.

(2) Pelletized refuse-derived fuel.

Shutdown means the period of time after all waste has been combusted in the primary chamber.

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). For purposes of this subpart and subpart CCCC, only, solid waste does not include the waste burned in the fifteen types of units described in Sec. 60.2555.

Standard conditions, when referring to units of measure, means a temperature of 68 deg.F (20 deg.C) and a pressure of 1 atmosphere (101.3 kilopascals).

Startup period means the period of time between the activation of the system and the first charge to the unit.

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

Wood waste means untreated wood and untreated wood products, including tree stumps (whole or chipped), trees, tree limbs (whole or chipped), bark, sawdust, chips, scraps, slabs, millings, and shavings. Wood waste does not include:

(1) Grass, grass clippings, bushes, shrubs, and clippings from bushes and shrubs from residential, commercial/retail, institutional, or industrial sources as part of maintaining yards or other private or public lands.

(2) Construction, renovation, or demolition wastes.

(3) Clean lumber.

Table 1 to Subpart DDDD--Model Rule--Increments of Progress and Compliance Schedules

Comply with these increments of progress	By these dates \a\
Increment 1--Submit final control plan	(Dates to be specified in State plan)
Increment 2--Final compliance	(Dates to be specified in State plan) \b\

\a\ Site-specific schedules can be used at the discretion of the State.

\b\ The date can be no later than 3 years after the effective date of State plan approval or December 1, 2005.

Table 2 to Subpart DDDD--Model Rule--Emission Limitations

For the air pollutant	You must meet this emission limitation \a\	Using this averaging time	And determining compliance using this method
Cadmium	0.004 milligrams per dry standard cubic meter	3-run average (1 hour minimum sample time per run)	Performance test (Method 29 of appendix A of this part)
Carbon monoxide	157 parts per million by volume	3-run average (1 hour minimum sample time per run)	Performance test (Method 10, 10A or 10B, of appendix A of this part)
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 appendix A of this part)
Hydrogen chloride	62 parts per million by dry volume	3-run average (1 hour minimum sample time per run)	Performance test (Method 26A of appendix A of this part)
Lead	0.04 milligrams per dry standard cubic meter	3-run average (1 hour minimum sample time per run)	Performance test (Method 29 of appendix A of this part)
Mercury	0.47 milligrams per dry standard cubic meter	3-run average (1 hour minimum sample time per run)	Performance test (Method 29 of appendix A of this part)
Opacity	10 percent	6-minute averages	Performance test (Method 9 of appendix A of this part)
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 appendix A of this part)
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 appendix A of this part)
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 appendix A of this part)

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

Table 3 to Subpart DDDD--Model Rule--Operating Limits for Wet Scrubbers

For these operating parameters	You must establish these operating limits	And monitor using these minimum frequencies		
		Data measurement	Data recording	Averaging time
Charge rate	Maximum charge rate	Continuous	Every hour	Daily (batch units) 3-hour rolling (continuous and intermittent units) \a\
Pressure drop across the wet scrubber or amperage to wet scrubber	Minimum pressure drop or amperage	Continuous	Every 15 minutes	3-hour rolling \a\
Scrubber liquor flow rate	Minimum flow rate	Continuous	Every 15 minutes	3-hour rolling \a\
Scrubber liquor pH	Minimum pH	Continuous	Every 15 minutes	3-hour rolling \a\

\a\ Calculated each hour as the average of the previous 3 operating hours.

Table 4 to Subpart DDDD--Model Rule--Toxic Equivalency Factors

Dioxin/furan congener	Toxic equivalency factor
2,3,7,8-tetrachlorinated dibenzo-p-dioxin	1
1,2,3,7,8-pentachlorinated dibenzo-p-dioxin	0.5
1,2,3,4,7,8-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,7,8,9-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,6,7,8-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,4,6,7,8-heptachlorinated dibenzo-p-dioxin	0.01
octachlorinated dibenzo-p-dioxin	0.001
2,3,7,8-tetrachlorinated dibenzofuran	0.1
2,3,4,7,8-pentachlorinated dibenzofuran	0.5
1,2,3,7,8-pentachlorinated dibenzofuran	0.05
1,2,3,4,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,6,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,7,8,9-hexachlorinated dibenzofuran	0.1
2,3,4,6,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,4,6,7,8-heptachlorinated dibenzofuran	0.01
1,2,3,4,7,8,9-heptachlorinated dibenzofuran	0.01
octachlorinated dibenzofuran	0.001

Table 5 to Subpart DDDD--Model Rule--Summary of Reporting Requirements \a

Report	Due date	Contents	Reference
Waste Management Plan	No later than the date specified in table 1 for submittal of the final control plan.	Waste management plan	Sec. 60.2755.
Initial Test Report	No later than 60 days following the initial performance test	Complete test report for the initial performance test. The values for the site-specific operating limits. Installation of bag leak detection systems for fabric filters.	Sec. 60.2760.
Annual Report	No later than 12 months following the submission of the initial test report. Subsequent reports are to be submitted no more than 12 months following the previous report.	Name and address. Statement and signature by responsible official. Date of report. Values for the operating limits. If no deviations or malfunctions were reported, a statement that no deviations occurred during the reporting period. Highest recorded 3-hour average and the lowest 3-hour average, as applicable, for each operating parameter recorded for the calendar year being reported. Information for deviations or malfunctions recorded under Sec. 60.2740(b)(6) and(c) through (e). If a performance test was conducted during the reporting period, the results of the test. If a performance test was not conducted during the reporting period, a statement that the requirements of Sec. 60.2155(a) or (b) were met. Documentation of periods when all qualified CISWI unit operators were unavailable for more than 8 hours but less than 2 weeks.	Secs. 60.2765 and 60.2770
Emission Limitation or Operating Limit Deviation Report	By August 1 of that year for data collected during the first half of the calendar year. By February 1 of the following year for data collected during the second half of the calendar year.	Dates and times of deviations. Averaged and recorded data for these dates. Duration and causes for each deviation and the corrective actions taken. Copy of operating limit monitoring data and any test reports. Dates, times, and causes for monitor downtime incidents. Whether each deviation occurred during a period of startup, shutdown or malfunction.	Secs. 60.2775 and 60.2780
Qualified Operator Deviation Notification	Within 10 days of deviation	Statement of cause of deviation. Description of efforts to have an accessible qualified operator. The date a qualified operator will be accessible.	Sec. 60.2785(a)(1)
Qualified Operator Deviation Status Report	Every 4 weeks following deviation	Description of efforts to have an accessible qualified operator. The date a qualified operator will be accessible. Request for approval to continue operation.	Sec. 60.2785(a)(2)
Qualified Operator Deviation And Notification of Resumed Operation	Prior to resuming operation	Notification that you are resuming operation	Sec. 60.2785(b)

\a\ This table is only a summary, see the referenced sections of the rule for the complete requirements.

Authority: T.C.A. §§68-201-105 and 4-5-202. Administrative History: Original rule filed January 17, 2003; effective April 1, 2003.

